ADDENDUM #3

RFP # 7553481  TITLE: DESIGN/BUILD SERVICES FOR THE RECONSTRUCTION OF BAKER PINES BR. #593

OPENING DATE AND TIME: AUGUST 30, 2017 – 11:30 A.M.

See attached revisions.

Lisa Hill
Chief Buyer
ADDENDUM NO. 3

Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. **Survey**

1. Replace the survey file “Baker Pines Bridge Survey.dwg” issued with the RFP with the survey file “Baker Pines Bridge Survey ADD3.dwg” included with Addendum #3. Survey notes and certification have been added to the file.

B. **RFP Part A: Instructions for Respondents**

1. Replace Pages 5(R-1), 6, and 12(R-1) with Pages 5(R-2), 6(R-1), and 12(R-2) attached to this Addendum #3. The Proposal Submission Date has been changed to August 30, 2017. Other Contract Dates have been updated accordingly. Additional requirements have been added to Section 2.3 “Project Milestone Schedule.”

2. Replace Pages 10 and 11 with Pages 10(R-1) and 11(R-1) and insert Page 10A attached to this Addendum #3. Section 3.1 “DBE and OJT Requirements” has been updated.

C. **RFP Part B: Technical Requirements**

1. Replace Pages 2 and 20 with Pages 2(R-1) and 20(R-1) attached to this Addendum #3. Text regarding NEPA documentation has been revised.

2. Replace Page 10 with Page 10(R-1) attached to this Addendum #3. The live load design criteria have been updated to include To All Consultants Memo 0298. The Accelerated Bridge Construction (ABC) requirements have been updated to permit field-cast concrete.

3. Replace Page 12 with Page 12(R-1) attached to this Addendum #3. Requirements for drainage pipe and structures have been updated.

4. Replace Page 14 with Page 14(R-1) attached to this Addendum #3. An acceptable cure time for deck closure pours has been added.
5. Replace Page 15 with Page 15(R-1) attached to this Addendum #3. Shoulder requirements for staged construction have been revised.

6. Replace Page 16 with Page 16(R-1) attached to this Addendum #3. Payment for additional concrete repairs has been clarified.

7. Replace Page 27 with Page 27(R-1) attached to this Addendum #3. Additional information regarding requirements for short-term closures of I-95 has been added. A winter-shutdown restriction has been added.

D. RFP Part D: Appendices/BTC Documents

1. Revise Job Specific Specification “THERMAL SPRAYED ZINC COATING FOR NEW STRUCTURAL STEEL” as noted in the attached version attached to this Addendum #3. The RI Contract Number has been updated.

2. Replace Job Specific Specification “PREFABRICATED BRIDGE UNITS” in its entirety with Job Specific Specification “PREFABRICATED BRIDGE UNITS” (R-1) attached to this Addendum #3. The RI Contract Number has been updated. Additional revisions have been made throughout the document.

3. Replace Base Technical Concept Plans, Sheet 8 with Sheet 8(R-1) attached to this Addendum #3. A note regarding requirements for drainage pipe and structures has been added.

4. Add the “Schedule of Participation by Disadvantaged Business Enterprises (DBE)” and “DBE Letter of Intent to Perform” forms, attached to this Addendum #3, to Appendix D of RFP Part D.

RI Department of Transportation
Administrator, Division of Project Management
Quality Control function is to assess and adjust design, production and construction so as to control the level of quality being produced in the Project. The purpose of QC is to measure those quality characteristics and to inspect those activities that affect the production at a time when corrective action can be taken to substantially decrease the likelihood that appreciable non-conforming material will be incorporated in the Project.

The Construction Acceptance Testing will be performed by RIDOT or their consultant. The Construction Independent Assurance will be performed by RIDOT staff.

2.2 Selection Process

Respondents are advised that the evaluation and selection of an APPARENT BEST VALUE RESPONDENT to provide the requested services will be done through a one-step procurement process defined as follows:

The RFP response requested will entail ONE (1) simultaneous submission including QUALIFICATIONS/TECHNICAL proposals along with a separately sealed envelope containing the PRICE PROPOSAL for RIDOT’s evaluation and final selection recommendation.

Submittals received must be in accordance with guidelines as outlined in this RFP and the State's General Conditions of Purchase which can be accessed online through the Rhode Island Vendor Information Program, or “RIVIP” as it is known at:

http://www.purchasing.ri.gov

All Respondents are advised to review all sections of this RFP thoroughly and to follow the instructions carefully. Failure to make a complete submission as described elsewhere herein may result in rejection of Bidder’s submission.

2.3 Project Milestone Schedule

RIDOT currently anticipates conducting this procurement in accordance with the following list of milestones. This schedule is subject to revision and RIDOT reserves the right to modify this schedule as it finds necessary, in its sole discretion.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertise RFP</td>
<td>May 31, 2017</td>
</tr>
<tr>
<td>Deadline for Questions &amp; Comments</td>
<td>July 19, August 21, 2017 @ Midnight</td>
</tr>
<tr>
<td>Proposal Submission Date</td>
<td>July 28, August 30, 2017 (11:30AM)</td>
</tr>
<tr>
<td>Evaluate Technical Proposals (Score and Rank)</td>
<td>September 6, October 6, 2017</td>
</tr>
<tr>
<td>Open Price Proposals</td>
<td>September 13, October 13, 2017 (Estimated)</td>
</tr>
<tr>
<td>Notice of Tentative Award</td>
<td>September 27, October 27, 2017 (Estimated)</td>
</tr>
<tr>
<td>Design-Build Contract Execution</td>
<td>October 18, November 17, 2017 (Estimated)</td>
</tr>
</tbody>
</table>
Notice to Proceed .............................................................. November 1 / December 1, 2017 (Estimated)
Substantial Completion ........................................................ September 27, 2019
Project Completion .............................................................. December 15, 2019

Certain activities that are not temperature dependent will be permitted during the winter shutdown period from March 15th to April 15th such as setting up traffic management configurations, bridge demolition, and utility relocations.

Lane closures on I-95 will not be permitted during the winter shutdown period. All I-95 travel and climbing lanes shall be reopened prior to the start of the winter shutdown period.

Respondents are on notice that any earlier completion date(s) identified by Respondent in response to this RFP will be deemed by RIDOT as the contractual completion date(s) for this Project.

2.4 Online Proposal Questions

There will be NO point of contact at RIDOT who will directly answer questions either in person, through e-mail, or by telephone.

Any pertinent questions subsequent to this solicitation must be posted at RIDOT’S “Bidding Opportunities” web page accessible at: http://www.dot.ri.gov/contracting/bids and follow the link to “?” to submit questions for this solicitation. Interested parties must disclose their name/company affiliation along with posted inquiry; responses to questions submitted for the subject Project will also be posted under the same questions menu.

A determination will be made by RIDOT, in coordination with the RIDOA/Division of Purchases, whether an addendum will be required. The Q & A Forum will disable SEVEN (7) FULL CALENDAR DAYS prior to the due date for this Project. Therefore, questions will not be accepted after Midnight on July 19 / August 21, 2017.

2.5 RFP Documents

All Plans, Special Provisions, Reports, etc. are provided for reference use only. The BTC was developed to represent RIDOT preferences and to establish the minimum baseline requirements that must be equaled or exceeded by the DB-Team. All DB-Teams acknowledge by receipt of such plans that they explicitly understand that while these plans have been advanced to the level shown by RIDOT, the DB-Team will be required to provide a final, complete project design that is stamped and sealed by its own designer of record, for review and approval by RIDOT and possible third parties. RIDOT makes no representations as to the accuracy or completeness of information contained in any documents not obtained from RIDOT, and will not be responsible in any way for a DB-Team’s reliance on or utilization of the contents of such documents. The DB-Team shall perform supplemental testing, data collection, survey, borings, etc. as necessary.
Services provided by the successful Respondent - and if applicable any sub-contracts generated through this Contract - shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The successful Respondent shall carry out applicable requirements of 49 C.F.R., Part 26, Participation of Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs, in the award and administration of DOT-assisted contracts. Failure by the successful Respondent to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the recipient deems appropriate.

**Joint Ventures** will be permitted, provided a Joint Venture Agreement is included in the QUALIFICATIONS/TECHNICAL proposal which clearly identifies the entities which comprise the Joint Venture and the Officers of the Joint Venture. Agreement documentation must also be included if Respondent is structured as a Corporation, Limited Liability Company, General Partnership, Limited Partnership or other form of organization.

Submissions in response to this solicitation are considered to be irrevocable for a period of not less than one hundred twenty (120) days following the established due date and may not be withdrawn without the express written permission of the State Purchasing Agent.

Responses misdirected to other State locations or which otherwise are not received by the State Division of Purchases by the established due date for any cause will be determined to be late and will not be considered.

The office clock, for the purpose of registering the arrival of a document, is in the reception area of the Department of Administration (DOA), Division of Purchases, One Capitol Hill, Providence, Rhode Island.

Respondents must possess a working familiarity with the guidelines outlined in the Rhode Island Standard Specifications for Road and Bridge Construction, amended May 2016, and subsequent revisions, which is currently available on-line @ www.dot.ri.gov., as well as all applicable RIDOT Department Policy Memos (DPMS) and RIDOT Memorandums To All Consultants (TACs).

Respondents are advised that all materials submitted to the State for consideration will be considered to be public records as defined in RI Gen Laws 38-2, without exception, and will be released for inspection immediately upon request once an award is made.

All costs associated with developing or submitting documents in response to this solicitation and/or in providing oral or written clarification of its content shall be borne by the Respondent. The State assumes no responsibility for these costs.

### 3.1 DBE and OJT Requirements

**Disadvantaged Business Enterprises (“DBE”) and Training.**

This Project has been assigned a total of FIVE PERCENT (5%) Disadvantaged Business Enterprise (DBE) participation goal for “construction qualifying work”, and FIVE PERCENT (5%) for “consultant qualifying work” with Rhode Island certified firms during design and construction of the project. DBE participation shall
consist of concerted efforts by the Respondent as part of its affirmative action responsibilities to include DBE Firms on Federal-Aid transportation projects. Hereafter, DBE refers to businesses owned or controlled by socially and economically disadvantaged person(s) as certified by the RIDO A Office of Diversity, Equity and Opportunity (ODEO). In order to comply with this requirement, the Respondent is required to complete the Schedule of Participation by Disadvantaged Business Enterprises (DBE) Form and provide completed DBE Letter(s) of Intent to Perform from each proposed DBE subcontractor along with a copy of the proposed subcontractor’s current RI state certification letter(s) to be INCLUDED IN THE TECHNICAL PROPOSAL. DBE certifications must be approved at the time of the TECHNICAL proposal submission to ensure DBE compliance and availability.

A list of current Rhode Island State certified DBE firms may be obtained through the State’s Minority Business Enterprise (MBE) Office website at www.mbe.ri.gov. Any questions should be directed to:

**RIDOT Office of Business and Community Resources**
Room 110, Two Capitol Hill
Providence, RI 02903
(401) 222-3260

**TRAINEES**

The D/B Team must also provide a written statement in the Technical Submission, by an authorized representative of the D/B Team, that the D/B Team will develop and maintain a continuous on-the-job-training (OJT) program achieving the required Training hours. If the Respondent is selected for the Project, they must possess a RIDOT approved OJT Program prior to award.

The Trainee hours for this Project are THREE THOUSAND (3,000) hours for reimbursement.

**DBE GOAL:** Respondents must provide a written statement, RIDOT’s Letter of Intent to Perform as a Subcontractor form, signed by authorized representatives of the Respondent, that Respondent is committed to meeting or exceeding a total of 5 PERCENT (5%) Disadvantaged Business Enterprise (DBE) participation goal for construction qualifying work, and 5 PERCENT (5%) for design qualifying work with Rhode Island
certified firms during design and construction of the Project. RFP documentation will require full disclosure of RI certified DBE Firm(s), assigned task(s), current certification and DBE contract cost, using the RIDOT DBE Utilization Plan to be submitted with Price Proposal. DBE participation shall consist of concerted efforts by the Respondent as part of its affirmative action responsibilities to include DBE Firms on Federal-Aid transportation projects. Hereafter, DBE refers to businesses owned or controlled by socially and economically disadvantaged person(s) as certified by the RIDOA for the RIDOT.

A list of current Rhode Island State certified DBE firms may be obtained through the State’s Minority Business Enterprise (MBE) Office website @ www.mbe.ri.gov. Any questions should be directed to:

RIDOT Office of Business and Community Resources
Room 110, Two Capitol Hill
Providence, RI 02903
(401) 222-3260

TRAINEES: The Respondent must also provide a written statement, RJDOT’s OJT Acknowledgement/Statement of Intent form signed by an authorized representative of the Respondent that the Respondent will develop and maintain a continuous on-the-job training (OJT) program achieving the required Training hours. If the Respondent is selected for the Project, they must provide a RIDOT approved OJT Plan before award.

The trainee hours for this project are based on 24 months for completion and 3000 hours for OJT reimbursement.

DBE Form Submission Instructions:

The Letter of Intent to Perform as a Subcontractor and the OJT Acknowledgement/Statement of Intent forms (WITHOUT dollar amounts) are to be submitted as part of the Qualifications/Technical Proposal. The DBE Utilization Plan is to be submitted with the Price Proposal only.

3.2 Insurance/Bonding

Bid Bond - In accordance with the State’s Amended Procurement Rules & General Conditions of Purchase, effective December 2011, cited under Section 12.102.06 “Proposal Guaranty” the separately submitted technical proposal will not be accepted or considered unless accompanied by a guaranty in the form of an original FIVE PERCENT (5%) BID BOND made payable to the State of Rhode Island. Bid bonds must be provided by surety companies licensed and authorized to conduct business in the State of Rhode Island. All surety companies must be listed with the Department of Treasury, Fiscal Services, Circular 570 (Latest revision published by the Federal Register).

Insurance – The Lead Designer must provide evidence of Professional Liability Insurance minimum $2 million, Valuable Papers Minimum $500,000; and Worker’s Compensation Insurance must also be provided by the DB-Team.
4.0 SUBMISSION REQUIREMENTS

This section describes specific information that must be included in the Qualifications/Technical and Price Proposals as well as format and submission requirements.

Respondent will simultaneously submit a two-part Proposal, with each part submitted in separately sealed packages:

The Qualifications/Technical Proposal will consist of the information required in Section 4.2 below and will be submitted in a sealed package separate from that submitted for the Price Proposal.

The Price Proposal will consist of the information required in Section 4.3 below and will be submitted in a sealed package separate from that submitted for the Qualifications/Technical Proposal. The Price Proposal will not be opened until the Qualifications/Technical Proposal has been evaluated and scored pursuant to Section 5.1 below.

4.1 Due Date, Time and Location

Upon review of the Request for Proposal, (RFP), requested documentation should be submitted to the Division of Purchases by the specified deadline to the address listed below. RIDOT requires that the QUALIFICATIONS/TECHNICAL PROPOSAL submission be submitted not only in hard copy form but also on CD-ROM. A clearly labeled CD ROM should be attached to the inside cover of each QUALIFICATIONS/TECHNICAL PROPOSAL (original and copies) submission. RIDOT requires that the electronic version of said QUALIFICATIONS/TECHNICAL PROPOSAL be submitted in Adobe PDF format.

QUALIFICATIONS/TECHNICAL PROPOSAL (“Original” plus FIVE (5) copies) and a separately sealed PRICE PROPOSAL (“Original” plus FIVE (5) copies) are to be submitted simultaneously. Requested submission documents are to be either mailed or hand delivered in a sealed package marked: BID #7553481 DESIGN/BUILD Services for the Superstructure Replacement of Bakers Pine Bridge (#059301), Richmond, RI by August 30, 2017 no later than 11:30 A.M. to:

BY COURIER OR MAIL:
RI Department of Administration
Division of Purchases (2nd floor)
One Capitol Hill
Providence, RI 02908-5855

NOTE: Proposals received after the above referenced due date and time will not be considered.

Besides the RIVIP Bidder Certification Form (all 3 pages), as required at the State level and obtained through the RIVIP website, RIDOT also requires that the following SEVEN (7) FORMS be completed by EACH DB-
• Vibrations shall be minimized to the greatest extent possible in order to protect existing adjacent structures. Any damage to existing structures shall be restored and/or repaired to the satisfaction of the Engineer at no additional cost to the State.

• The short stone wall at the east end of the North Abutment shall be protected from damage during construction. Any damage to existing structures shall be restored and/or repaired to the satisfaction of the Engineer at no additional cost to the State.

The DB-Team should note that the minimum pavement sections required by the RIDOT are provided on the BTC Plans. The DB-Team shall be responsible for final design and construction of the pavements for this Project in accordance with the Standard Specifications.

Reference should be made to the Contract Documents, including the RIDOT Standard Specifications for Road and Bridge Construction Amended May 2016, with all revisions (Standard Specifications), for provisions regarding required investigations and the identification, resolution and responsibility for differing site conditions.

The DB-Team will be responsible for providing quality assurance and a quality control plan for design, inspection, sampling and testing for all materials manufactured off-site, excluding the items listed below:

• Structural Steel Elements (beams and girders)
• Piping (concrete, steel, aluminum and high density polyethylene) for culverts, storm drains, and underdrains
• Pre-cast Concrete Drainage Structures
• Asphalt Concrete Mixtures
• Aggregate (dense and open graded mixes)

The Design Build Team will be responsible for providing Construction Quality Control at the Construction Contractor level and for providing a complete Quality Control and Quality Assurance program for all engineering and design. The Construction Quality Control function is to assess and adjust design, production and construction so as to control the level of quality being produced in the Project. The purpose of QC is to measure those quality characteristics and to inspect those activities that affect the production at a time when corrective action can be taken to substantially decrease the likelihood that appreciable non-conforming material will be incorporated in the Project.

RIDOT will not obtain any environmental permits prior to award. The DB-Team will be responsible for preparing all environmental permit applications required as part of their design and construction activities. RIDOT will review and request revisions as appropriate, and as Owner, is required to officially submit all complete applications to the respective regulatory agencies. **RIDOT has prepared and submitted a Categorical Exclusion (CE) Checklist to satisfy the NEPA requirements for this project. The CE will be issued for this project prior to the issuance of the Notice to Proceed for the DB Entity. RIDOT is processing this project as part of the EA being prepared for the "Rhode Works Toll Facilities—Design, Build, Operate and Maintain" Project to satisfy NEPA requirements. Documentation has been provided to the RIDOT team preparing the EA for inclusion in the EA based upon the BTC. Note that the NEPA process has not been completed at the time of the issuing of this RFP and that final design of all elements by the DB-Team cannot be completed until the NEPA review process has been completed by FHWA.** Any changes in scope or footprint proposed by the DB-Team that are acceptable to RIDOT may require additional environmental technical studies and analysis. The NEPA documentation (CE checklist) provided for the EA this project will be re-examined by RIDOT at each change in design phase (i.e. at the onset of final design, 75/90%, and PS&E) based on the D/B Team's design.

The DB-Team shall be responsible for submitting plans and obtaining all necessary environmental approvals and permits required to accomplish the work as noted in this RFP. The DB-Team shall be responsible for
beam cambers, etc. Additional survey shall be provided by DB-Team as necessary for construction and operation of the completed Project and shall be provided to RIDOT.

c. **Live Load** – The Design–Builder’s attention is directed to the following minimum live load design requirements of the Bridge Design Manual:

<table>
<thead>
<tr>
<th>Bridge Design Loading:</th>
<th>AASHTO HL 93 (In accordance with TAC 0298) Rhode Island legal load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Load deflection criteria:</td>
<td>L/1100</td>
</tr>
</tbody>
</table>

The minimum Inventory Rating Factor for the AASHTO HL 93 loading shall be 1.10.

d. **Wind Loads Exposure Criteria** – The wind pressures at various heights shall be determined in accordance with criteria as specified for the AASHTO LRFD “Suburban” category.

e. **Seismic Loading** – The DB-Team shall be aware that this structure is classified as a *Critical Bridge* per Section 3.6.4 of the RIDOT LRFD Bridge Design Manual. Seismic analysis shall conform to Section 3.6 of the RIDOT LRFD Bridge Design Manual and the latest edition of the AASHTO LRFD Bridge Design Specifications, including all interims.

In general, seismic retrofit work is limited to bearing design, superstructure to substructure connections, providing adequate longitudinal and lateral restraint for seismic forces at bearings and correcting deficiencies in support length. The intent is to not retrofit abutment foundations for seismic forces.

f. **Load Rating** – The DB-Team will be responsible for producing a load rating report for the new as-built bridge. The load rating reports shall be in accordance with the 2017 RIDOT Bridge Load Rating Guidelines, including all revisions. The minimum Inventory Rating Factor for the AASHTO HL 93 loading shall be 1.10.

g. **Clearance** – The proposed clearance shall be no less than that of the existing structure.

h. **Accelerated Bridge Construction (ABC)** – Upon RIDOT’s approval, DB-Team has the option of using ABC methods such as prefabricated components, Self-Propelled Modular Transport (SPMT) method, etc. The DB-Team is responsible for designing and detailing the ABC system in the contract plans. Any precast manufacturing plant furnishing precast prestressed bridge members or components shall be certified by the Precast Prestressed Concrete Institute plant certification program. The certification shall be as a minimum in the B3 category, except for draped strand bridge members in which case a category B4 certification will be required. The Manufacturer shall submit proof of certification prior to the start of production. The DB-Team will be permitted to use field-cast concrete components provided the requirements of the Prefabricated Bridge Units Job Specific Specification are met.

i. **Support of Excavation** – Any temporary or permanent support of excavation that is necessary to maintain the safety of the traveling public, the structural integrity of nearby structures including dams, or utilities, shall be considered critical and shall be designed and detailed in the plans. The DB-Team is responsible for designing and detailing the support of excavation in the set of contract plans. Excavation support systems may require approval from but not limited to RIDEM Wetlands Program, Water Quality Program, and/or ACOE. Consideration should be given to the excavation support systems with regards to the above regulations.
1. **Storage of Construction Material and/or Equipment**

   The DB-Team shall place all equipment and material in his yard or on site in a location approved by the Engineer.

   Storage of materials on State or Town property will require the approval of the Resident Engineer.

   Stockpiles shall be covered and must be located outside any areas of RIDEM jurisdiction including but not limited to wetlands and their associated buffers. Stockpile locations as shown on the approved RIDEM permit will be allowed. Any storage or stockpile of construction material and/or equipment on private property will be the DB-Team’s responsibility.

2. **Adjustment and Cleaning, and Repair of Drainage Pipes and Structures**

   The DB-Team shall be responsible for the adjustment of all drainage structures (catch basins, manholes, curb inlets, scuppers, etc.), within the limits of work, as necessary based upon the repaving of I-95 and Route 3. All structures shall be adjusted to temporary grades as required during construction and adjusted to final grade prior to the completion of each phase of construction and opening to traffic. Respondents shall assume that 40% of the drainage structures will also require reconstruction.

   The DB-Team shall flush, clean, inspect, repair, and reconstruct (as needed) any catch basins, manholes, pipes, and outfalls within the limits of work on Route 3 and I-95 as defined on the BTC Plans, and properly dispose of all debris associated with the cleaning and flushing. Cleaning and flushing of pipes and drainage structures shall be in accordance with RIDOT Standard Specification Section 708, the RIDOT Consent Decree, and the RIDEM Stormwater Design and Installation Standards Manual. Respondents shall assume that 40% of the drainage structures will require reconstruction.

3. **Work Hours**

   Work hours shall be in accordance with the Standard Specifications. Deviation from the standard work hours may be requested in writing at least 2 weeks in advance of the start date required.

4. **Geotechnical Investigation Plan**

   All geotechnical work shall be prepared in accordance with the criteria set forth in this Subsection by a Design Professional with a minimum of ten (10) years of geotechnical engineering experience in the State of Rhode Island. All design calculations and plans shall be prepared, checked, signed, and stamped by a Professional Engineer registered in the State of Rhode Island. DB-Team shall prepare a Geotechnical Investigation Plan and submit it to the RIDOT within 15 Calendar Days of NTP. The plan shall include the criteria or rationale used in developing the plan, and shall identify the locations of all field investigation sites, in-situ testing sites, and borings, together with their depths, sampling intervals, and a description of both the field and laboratory testing programs utilized. The plan shall also include a traffic control plan, a safety/hazard analysis plans, and a list of all permits required to perform the geotechnical investigation.

5. **Subsurface Investigation and Data Analysis**

   a. **General** – DB-Team shall be familiar with available geotechnical, geologic, seismic, hydrogeology, and soils literature, shall be familiar with the existing site conditions, both native and man-made, shall interpret the existing geotechnical data pertaining to the Project Site, and
2.4.3 Description of Structural and Geotechnical Elements

This Section covers the specific design and construction elements of new bridges, bridge replacements, and geotechnical components. The goal of the design and construction of all structural systems and components is to provide functionality, durability, constructability, ease of maintenance, safety, and aesthetics consistent with the context of the Project Site.

1. Bridge Elements

a. Decks

- Minimum bridge deck thickness shall be 7 ½ inches, and the preferred depth is 8 inches or greater. The deck shall be high-performance concrete (HP) with a cold sprayed-applied waterproofing system and a 3-inch Modified Class 9.5 HMA wearing surface. Open or filled grating decks and orthotropic decks will not be allowed.
- For deck construction, stay-in-place (SIP) forms shall be permitted in utility bays. All other bays require removable formwork. Proposed SIP form systems shall be approved by the RIDOT.
- A 7 day wet cure for the bridge deck closure pours will be acceptable for this project.

b. Deck Joints

- The joints at each abutment shall be placed behind the new backwalls per the RIDOT Bridge Design Standard Details.
- The DB-Team shall account for differential settlement across longitudinal deck joints caused by live traffic on adjacent sections of the superstructure while closure pours are curing.

c. Backwalls & Beam Seats

- The backwalls shall be rebuilt and shall accommodate the RIDOT “deck-over-backwall” detail shown in the RIDOT Bridge Design Standard Details.

d. Deck Drainage

- Deck drains on the bridge will not be allowed.
- Any changes to the existing drainage patterns, system or existing impervious areas shall require analysis and approval through application to RIDEM. Stormwater design shall be in accordance with the March 2015 Rhode Island Stormwater Design and Installation Standards Manual and shall meet the requirements set forth in the Stormwater Consent Decree included in Part D.

e. Utilities

- The existing structure does not carry any utilities. Relocation of any utilities in the area shall be coordinated with the Owner of the utilities and local authorities.

e. Bridge Removal

The existing superstructure, back wall, beam seats, and return wall parapets and endposts shall be demolished. The exterior faces of the abutment stems and return wall stems including the front
reinforcing mat shall be removed up to 6” from the existing front face. The demolition of these structures shall be in accordance with current RIDOT Standards and the following guidelines:

1) The DB-Team shall prepare a Bridge Demolition Plan which shall include the proposed methods of demolition for each stage of construction including equipment, tools, devices, etc. The demolition procedure and any necessary calculations and drawings shall bear the stamp of a Professional Engineer Registered in the State of Rhode Island certifying that all existing structural members are suitably braced and supported throughout the demolition process. The Demolition Plan shall be submitted to RIDOT for Review and Comment at least 21 calendar days prior to commencement of bridge demolition activities. Work shall not commence until RIDOT has given written approval of the Bridge Demolition Plan.

2) Disposal of rubble from demolition of the existing bridge in any Wetlands is prohibited. Demolition activities shall be performed in accordance with, but not limited to, the RIDEM Freshwater Wetlands Regulations, ACOE, RIDEM Hazardous Waste and/or Solid Waste Regulations and or approvals.

3) Submit a Demolition Plan to the RIDOT for Review and Comment at least 21 Calendar Days prior to commencement of bridge removal activities.

4) It is presumed that the existing steel beams may be coated with lead paint. The Contractor shall follow all federal and state regulations for the removal and disposal of the steel beams coated with lead paint.

5) The existing roadways below the bridges shall be protected with the use of temporary shielding and/or with temporary traffic detours. No debris shall be allowed to fall onto the roadways below.

f. Bridge Parapets & Median Barrier

- The existing bridge parapets and median barriers shall be removed, disposed of and replaced with new reinforced concrete barriers meeting TL-5 requirements, per the RIDOT Bridge Design Standard Details.

- The existing bridge end posts shall be removed, disposed of and replaced with new endposts meeting the requirements of the RIDOT Bridge Design Standard Details for High Volume – High Speed roadways.

g. Staged Construction

- Longitudinal phased construction joints and joints between PBUs will be permitted in the concrete deck slab. The construction joints shall contain shear keys and the reinforcement shall be continuous across the construction joints. The DB-Team shall account for differential settlement across longitudinal deck joints caused by live traffic on adjacent sections of the superstructure while closure pours are curing.

- Two 11 foot wide travel lanes in each travel direction are required to be maintained throughout the duration of construction. One foot minimum from the edge of the temporary travel lane to the edge of the temporary or permanent barrier or curb is required except as shown on the BTC Plans.
• There are brief periods where one lane of traffic in each direction will be allowed for lane and barrier shifts and other short-duration construction activities. See Section 2.11 for additional details.

h. Concrete Repair

There are areas of deteriorated concrete throughout the structure in need of repair including spalled, hollow sounding, and/or cracked concrete. These areas include but are not limited to:

- The abutment stems
- The return wall stems

It is proposed to remove the entire front faces of these components to a depth of 6”, including the front reinforcing mat, and recast these faces with an additional 12” thickness beyond the existing abutment/wall faces. Concrete substructure repairs shall be coordinated with the beam seat and backwall replacements. The areas of the substructure to be replaced shall be clearly defined from the areas to be repaired so as to have no overlap.

All exposed concrete surfaces shall be cleaned in accordance with RIDOT Standard Specification Sections 820.0200 & 820.0300. Cleaning shall occur prior to any concrete repairs.

Should additional areas of concrete to remain and requiring repair be uncovered during construction, the following procedure shall be followed:

- The DB-Team is to fully inspect and document the extent of all deteriorated concrete areas.
- The DB-Team is to develop details for repair of all deteriorated areas.
- The DB-Team is to fully sound and mark out all deteriorated areas that are to be repaired.
- Prior to beginning the concrete repairs the RIDOT Engineer shall approve all marked out areas to be repaired.
- The DB-Team shall repair the approved areas to the satisfaction of RIDOT.

Payment for additional concrete repairs will be made on a “Force Account” basis in accordance with Section 109.04a of the Standard Specifications.

Per the BTC Plans, the DB-Team shall include additional reinforcing and drilled-and-grouted dowels in proposed sections of concrete and replace any heavily deteriorated and unsuitable existing reinforcing proposed to remain.

2. Foundation Design

It is anticipated that the existing foundations will be retained. The information in this section is provided should the DB-Team elect to provide a design with foundation modifications.

Foundation and geotechnical design for Structures shall follow RIDOT Standards and the RIDOT Bridge Manual and shall provide a seismic liquefaction potential design for all foundations. Differential settlement shall not exceed 0.5” within a pier or abutment, or between adjacent piers or abutments. Downdrag shall be investigated and included in the design.
specifically requests such documents. Receipt of submittals for temporary work by RIDOT shall in no way constitute approval of the planned work or acceptance of any liability by RIDOT.

The DB-Team shall obtain all necessary approvals for shop and working drawings. Said approvals, along with copies of all approved drawings, shall be provided to RIDOT one (1) Business Day prior to the start of any Work detailed by those drawings. No changes shall be made by the DB-Team in any approved shop or working drawing after it has been approved.

e. **As-Constructed Plans & Calculations Submission:** At the completion of the Project the DB-Team shall submit As-Constructed/As-Built Plans and Specifications to RIDOT for the Project records. The Plans and Specifications shall include all field modifications and changes undertaken during construction.

Included in this submission package shall be the Final Bridge Calculation Book that incorporates As-Constructed/As-Built modifications. An electronic copy and a hard copy stamped by a Professional Engineer registered in the state of Rhode Island shall be submitted to RIDOT.

f. **As-Constructed Load Rating Report:** The DB-Team shall submit to the RIDOT a load-rating analysis and report incorporating the final rehabilitation repairs. The load-rating shall be completed in accordance with the RIDOT Bridge Load Rating Guidelines, Revision No. 2, March 2017.

Load Rating Reports shall constitute Project Records and shall be prepared by, signed by, and stamped with the seal of a Design Professional Engineer registered in the State of Rhode Island.

g. **Geotechnical** – As applicable, DB-Team shall prepare design calculations and Plans of all geotechnical elements associated with Soil slopes, fill / embankments, retaining walls, bridges, and hydraulic design as required by the design and as specified in this Section. The design calculations and Plans shall be signed and stamped by a Design Professional Engineer registered in the State of Rhode Island and submitted to RIDOT for Review and Comment.

2.5 **Lump Sum Breakdown/Major Items List**

Refer to Part C – Price Proposal for a listing of Major Items associated with the Lump Sum payment items.

2.6 Environmental

2.6.1 **NEPA Compliance/Environmental Documentation**

The DB-Team shall be aware that RIDOT is currently in the process of obtaining the required NEPA approvals under the "Rhode Works Toll Facilities Design, Build, Operate and Maintain" Project for each separate Toll Point and that these are not complete at this time. Tolling point number 9 is associated with this Project. RIDOT must follow the design-build regulations as they pertain to NEPA found under CFR 636.109. No commitment can be made to any alternative under consideration/evaluation in the NEPA process, including the no-build. Prior to completion of the NEPA process, the Contractor may complete preliminary design except they cannot proceed with any activity that is classified as final design. Please reference FHWA Order 6640.1A FHWA Policy on Permissible Project-Related Design Activities during the NEPA Process. It is anticipated that NEPA clearance will be granted in February 2018 for this project. The proposed DB-Team schedule must reflect this milestone. RIDOT has prepared and submitted a CE Checklist on behalf of FHWA for this project to satisfy NEPA requirements. The CE will be issued prior to the issuance of the Notice to Proceed for the D/B Team. (See Part A Section 2.3 for Schedule Milestones). Final design activities may commence upon the issuance of the Notice to Proceed.
PART B – PROJECT TECHNICAL REQUIREMENTS

- Temporary median crossovers should be located to provide the maximum advance warning to the driver based on the vertical and horizontal alignment of the site. The driver should have adequate sight distance in advance of the crossover.

- Desirably, temporary median crossovers should not be located within horizontal curves.

- The crossover shall be designed to allow for proper run off, satisfy drainage requirements and allow smooth transition from the roadway to the median crossover.

- Advance signing, pavement markings and other traffic control devices shall be utilized to guide drivers to the crossovers.

- The temporary median crossovers shall not be used for transporting materials for the project.

The DB-Team shall be responsible for the design, submission, construction, maintenance, removal and restoration work related to the crossovers. All traffic control devices shall be removed from the crossover when no longer required.

2.11 Transportation Management Plan

The DB-Team shall develop and incorporate a Transportation Management Plan (“TMP”) in accordance with the RIDOT requirements. The TMP documents shall clearly show how traffic will be managed during the various phases of construction of the Project and will include Temporary Traffic Control (TTC) plans and TTC strategies. The DB-Team shall coordinate all work in accordance with the TMP. The TMP shall incorporate and address all of the requirements of DPM 450.05 – Work Zone Safety and Mobility.

2.11.1 Temporary Traffic Control Plans

It is anticipated that the work will be conducted in phases. Two lanes of traffic shall be maintained on I-95 Northbound except for short term lane closures during off peak periods. One lane of traffic shall be maintained on I-95 Southbound at all times. A travel lane in each direction with pedestrian accommodations shall be maintained along Route 3 except for short term closures with approval from RIDOT and the Town of Richmond.

The following travel lane restrictions, at a minimum, are allowed (More extensive lane restrictions may be allowed in combination with alternate ABC methods that occur over a shorter duration. RIDOT approval will be required):

I-95 Northbound and Southbound

- Maintain a minimum of two travel lanes in each direction 6:00AM - 9:00PM, Monday through Friday;
- Maintain a minimum of two travel lanes in each direction from 9:00PM Friday through 9:00PM Sunday;
- Maintain a minimum of one travel lane in each direction 9:00PM - 6:00AM, Sunday through Thursday.

These restrictions allow short term closures of two lanes in each direction during the overnight hours Sunday through Thursday (one 11’ minimum width lane maintained in each direction). No lane closures will be permitted on I-95 during the winter shutdown period.

More extensive lane restrictions may be allowed in combination with alternate ABC methods that occur over a shorter duration. RIDOT approval will be required. Such restriction/schedule changes incorporated in Technical Proposals will be considered as part of the Technical Proposal Evaluation. The DB-Team shall be responsible for any additional traffic studies, coordination with and approvals from other impacted State and Local agencies and officials, and all other additional work introduced as a result of the proposed change.

Route 3 (Coordination and approvals required from the Town of Richmond)
JOB SPECIFIC

SECTION 827

THERMAL SPRAYED ZINC COATING FOR NEW STRUCTURAL STEEL

Unless modified elsewhere in the Contract Documents, Section 827 of the Rhode Island Standard Specifications for Road and Bridge is revised as follows:

Add the following subsection 827.03.2 d Thermal Sprayed Zinc Sealer:

d. Thermal Sprayed Zinc Sealer. Apply the sealer to the TSC as soon as possible after the Engineer has accepted the TSC and no later than 8 hours after the thermal spray application. If more than 8 hours elapses, provide written recommendations from the TSC supplier and sealer manufacturer that indicate what steps must be taken to remove the oxidation from the thermal sprayed surface prior to sealer application. Do not implement the steps without written approval from the Engineer. Any corrective work shall be performed at the Contractor’s sole expense. Top coating of the sealed TSC, if required, will be in accordance with Section 825 unless otherwise specified.
Replace Job Specific Specification “PREFABRICATED BRIDGE UNITS” of the RFP in its entirety with the following “PREFABRICATED BRIDGE UNITS” (R-1) Job Specific Specification.

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JOB SPECIFIC

PREFABRICATED BRIDGE UNITS

Prefabricated Bridge Units (PBUs) Shop Drawings:

Shop drawings shall be prepared for all prefabricated bridge units (PBUs). The shop drawings shall generally be in accordance with the requirements of the Standard Specifications for the corresponding materials and the following:

A. Show complete details of each PBU, including fabrication tolerances.

B. Show locations and details of all lifting devices and hardware, including supporting calculations, type, and amount of any additional reinforcing required for lifting. Design all lifting devices based on the no cracking criteria in Chapter 8 of the latest edition of the PCI Design Handbook. Coordinate lifting devices with the Assembly Plan as described in this Job Specific Specification.

C. List required properties of all materials, including minimum concrete compressive strength required prior to handling the PBUs.

D. The Assembly Plan shall be prepared by and stamped by a Professional Engineer, registered in the State of Rhode Island.

E. The DB-Team shall not order materials or begin work until receiving final approval of the shop drawings.

F. RIDOT will reject any elements fabricated before receiving written approval of the shop drawings, or any elements that deviate from the approved drawings.
**Tolerances:**

The following tolerances are required for the prefabricated bridge units (PBU). All applicable tolerances should be shown on the applicable PBU shop drawings:

<table>
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<th>PBU Tolerances</th>
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<tbody>
<tr>
<td>A  LENGTH</td>
<td>± $\frac{1}{4}$&quot;</td>
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<tr>
<td>B  WIDTH (OVERALL)</td>
<td>± $\frac{1}{4}$&quot;</td>
</tr>
<tr>
<td>C  DEPTH (OVERALL)</td>
<td>SEE STANDARD SPECS</td>
</tr>
<tr>
<td>D  VARIATION FROM SPECIFIED PLAN END SQUARENESS OR SKEW</td>
<td>± $\frac{1}{2}$&quot;</td>
</tr>
<tr>
<td>E  CENTER TO CENTER GIRDER SPACING</td>
<td>PER AASHTO STANDARDS</td>
</tr>
<tr>
<td>F  SWEEP OVER MEMBER LENGTH</td>
<td>PER AASHTO STANDARDS</td>
</tr>
<tr>
<td>G  LOCATION OF PROTRUDING REINFORCEMENT (MEASURED FROM COMMON REFERENCE POINT)</td>
<td>± $\frac{1}{2}$&quot;</td>
</tr>
<tr>
<td>H  LOCAL SMOOTHNESS OF ANY SURFACE</td>
<td>SEE STANDARD SPECS</td>
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</table>
**PBU Deck Fabrication:**

Deck fabrication shall be in accordance with the applicable provisions of Sections 809 and 814 of the RIDOT Standard Specifications and the RFP.

**Quality Control:**

In order to ensure a consistent level of quality, the following criteria shall be incorporated into the PBU QC Plan:

A. The precast portion of reinforced concrete deck on top of the girder pairs shall be fabricated by a RIDOT & PCI certified precast concrete facility. Alternately, other locations may be utilized provided the DB-Team demonstrates to the satisfaction of the Engineer that Quality Control measures equivalent to those required of a RIDOT & PCI certified precast concrete facility will be provided at the proposed location.

B. To ensure proper fit in the field and deck cross slope, the Fabricator shall cast the deck with the girders set to the relative proposed bridge seat geometry (elevations, horizontal locations, and skew). The Fabricator shall dry fit all elements of the superstructure that comprise a span prior to shipment to ensure that the elements can be properly erected in the field and that no pre-adjustments to the bridge seat elevations are required.

C. The Fabricator shall permanently mark each PBU prior to shipping to ensure proper placement in the field.

D. The DB-Team shall prevent cracking or damage of precast elements during handling and storage.

E. If damage occurs replace defects and breakage of precast elements as outlined below:
   1. Members that sustain damage or surface defects during fabrication, handling, storage, hauling, or erection shall be documented in a Non-Conformance report in accordance with the QC Plan and are subject to review or rejection.
   2. Obtain approval before performing repairs.
   3. Repair work must reestablish the elements’ structural integrity, durability, and aesthetics to the satisfaction of the Engineer. Repair procedures shall be in conformance with the applicable provisions of the PCI Bridge Member Repair Guidelines,
   4. Determine the cause when damage occurs and take corrective action.
   5. Failure to take corrective action, leading to similar repetitive damage, can be cause for rejection of the damaged element.
   6. Cracks that extend to the nearest reinforcement plane and fine surface cracks that do not extend to the nearest reinforcement plane but are numerous or extensive are subject to review and rejection.
   7. Full depth cracking and breakage greater than one foot are cause for rejection.

F. Construct PBUs to the dimensions shown on the plans and tolerances shown in the Special Provisions. Ensure any deficiencies are known to prevent cumulating tolerance issues in the field.
G. The plant shall document all test results. The quality control file will contain at least the following information:

1. Element identification
2. Date and time of cast
3. QC concrete cylinder test results
4. Quantity of used concrete and the batch printout
5. Form-stripping date and repairs if applicable
6. Location/number of blockouts and lifting inserts
7. Temperature and moisture of curing period
8. Document lifting device details, requirements, and inserts

In order to ensure a consistent level of quality, the following criteria shall be incorporated into the CIP Deck Closure Pour QC Plan and, if necessary, the Field-Cast QC Plan:

A pre-placement meeting shall be held between the DB-Team and the Engineer at least 2 weeks prior to the start of any concrete placement for the deck slab. The DB-Team and the Engineer shall review all aspects of the proposed placement and curing plan, as documented in the approved Placement and Curing Plan, including, but not limited to, the following:

- Equipment proposed for use and for back-up;
- Planned workforce and assigned tasks of each designated position, based on experience and expertise;
- Proposed construction techniques;
- Safety considerations;
- Concrete mix design;
- Admixtures and performance data; dosage rates shall be as approved;
- Proposed placement rate, provisions for adverse weather, curing and loading schedules;
- Curing Practices to be employed as well as the workforce designated to the curing process;
- Delivery / conveyance equipment;
- Traffic control.
- Concrete cylinder testing quantity and frequency

No concrete shall be placed until the Engineer approves all aspects of the proposed placement. Modifications must be submitted in writing to the Engineer for approval.

**Lifting Devices:**

The DB-Team shall design and detail lifting locations for each of the prefabricated bridge units (PBUs). The DB-Team will provide the spacing and location of the lifting devices and submit plans and handling stress calculations to the Engineer of Record for approval prior to construction of the precast element.

The following general criteria should be followed for designing the elements:

- Use four point picks. Assume that only two diagonal lift points are engaged at any one time unless it can be demonstrated that a four point pick will result in an even distribution of load.
• If element stresses are excessive with a four-point pick, an eight-point pick may be used.

• Any lifting hardware left in place must have 2½” top cover and 1” bottom cover after installation.

Lifting devices shall be removable below the top surface of the precast deck after placement. Any divot or void at the lifting device locations will have a heavy broom finish. After placement of PBU in final position, fill divots or voids in with structural non-shrink grout. Place grout high and grind to final elevation.

**Threaded Inserts:**

Threaded inserts are permissible on the underside of the PBUs to facilitate forming of the closure pours. Threaded inserts shall be hot dip galvanized or be made of stainless steel. The number of threaded inserts shall be minimized and the inserts shall not come in contact with the reinforcing steel.

**Handling and Storage:**

The DB-Team is responsible for the handling and storage of the precast bridge units (PBUs) in such a manner that does not cause undue stress on the element. Stresses shall not exceed the allowable values specified in the AASHTO LRFD Bridge Specifications.

Submit a handling and storage plan to the Engineer of Record for review prior to the construction of any element. Concrete elements must not be exposed to temperatures below 40 degrees Fahrenheit until the concrete curing is complete and a minimum 7 days has elapsed after casting has been completed.

All precast elements shall be inspected at the prefabrication facility or alternate precasting location and any defective elements shall be repaired in accordance with the applicable provisions of the PCI Bridge Member Repair Guidelines prior to shipping. Replace any elements that are rejected based on the following criteria:

The following general criteria will be cause for rejection:

• Broken corners that cannot be properly repaired.

• Significant dimensional deformities.

• Elements that are fabricated outside of the specified tolerances.

**PREFABRICATED BRIDGE UNIT INSTALLATION**

**Assembly Plans:**

The Assembly Plan is a construction procedure document prepared and submitted by the DB-Team prior to the start of work that details the means to which the Contractor/Erector will install the bridge superstructure by clearly identifying all stages of the construction. It includes all materials and their requirements to install the bridge superstructure. The Assembly Plan shall be prepared by and stamped by a Professional Engineer, registered in the State of Rhode Island, with working knowledge of the Contractor/Erector’s equipment, approved shop drawings, and materials to build the project.
The following list details the minimum criteria that should be included in the Assembly Plan:

A. A detailed schedule showing the sequence of operations that the Contractor/Erector will follow. The schedule shall include all traffic control related requirements, as well as a timeline for installation of all major elements of the bridge superstructure accounting for the installation of temporary works and cure times of closure pour.

B. Calculations that support the schedule outlined above should be included verifying that the selected materials have adequate interim strength to proceed from one step to another. Final material strengths are not normally required until the bridge is opened to vehicular traffic. The minimum factor of safety of two (2) will be required for the interim strength of grouts in between precast elements before construction is allowed to proceed to subsequent steps. The factor of safety is applied to the service loads that are supported by the elements and materials during various stages of construction. The required strength of materials for subsequent construction stages shall also be calculated and the material strength verified.

C. The DB-Team is responsible for determining the center of gravity for all PBUs. These elements may require special lifting hardware to allow for installation in the correct position as indicated on the plans.

D. Include a work area plan, depicting items such as utilities within the immediate vicinity of the work, drainage structures, etc. The DB-Team is required to coordinate the various Subcontractors that will need to occupy the same area and ensure that there are no conflicts.

E. Include details of all equipment that will be employed for the construction of the bridge superstructure.

F. Include details of all equipment to be used to lift elements including cranes, excavators, lifting slings, sling hooks, and jacks. Include crane locations, operation radii, and lifting calculations. It is anticipated that the DB-Team will use the Fabricator’s lifting inserts, but this needs to be coordinated prior to approval of the precast shop drawings. Follow Chapter 8 of the latest edition of the PCI Design Handbook for handling and erection bracing requirements.

G. The DB-Team is required to provide field survey to determine that the PBUs are placed within the horizontal and vertical tolerances stated on the plans and/or the special provisions.

H. Include procedures for controlling tolerance limits both horizontal and vertical.

I. The DB-Team is solely responsible for testing of closure pour concrete placed in the field to proceed with construction. RIDOT will test concrete cylinders for acceptance purposes only.

J. Include methods of forming closure pours.
Quality Control for Installation of PBUs

The field personnel shall have knowledge of and follow the approved Assembly Plan. If changes are warranted due to varying site conditions, resubmit the plan for review and approval.

Establish working points, working lines, and benchmark elevations prior to placement of all elements. The DB-Team is responsible for field survey as necessary to complete the work. RIDOT reserves the right to perform additional independent survey. This survey does not relieve the DB-Team from performing survey for the construction. If discrepancies are found, the DB-Team may be required to verify previous survey data.

Place elements in the sequence and according to the methods outlined in the Assembly Plan. Ensure that the PBU is in the proper horizontal and vertical location and is properly seated on all four bearing locations prior to releasing from the crane and setting the next unit. The connection plates for the cross frames between PBU’s are shop drilled on one side only. This allows for some tolerance in setting the PBU’s. The Contractor/Erector shall field drill the remaining connection plate after the PBU’s have been placed within the acceptable tolerances.

Check the condition of the receiving bonding surface prior to connecting PBUs and take any necessary measures to remove items such as dust, rust, and debris to provide the satisfactory bonding required between the existing concrete surfaces and the precast concrete elements. Saturate surface dry (SSD) all surfaces receiving closure pour concrete. Form, place reinforcing, and place HP closure pour concrete in accordance with the Standard Specifications and approved QC Plan.

Provisions for Uneven Bearing of PBU:

In the event that setting the PBU’s results in uneven bearing contact, the following methods should be employed to correct this gap:

1. Uneven bearing is defined as a gap greater than 1/8” between the top of the elastomeric bearing and the bottom of the sole plate when the PBU is under its own self weight (i.e. the rear of the bearing is in contact, but the front of the bearing has a gap greater than 1/8”)

2. The bearing location and dimension of the gap should be noted.

3. The bearing area below the adjacent bearing on the same substructure unit and the bearing on the opposite end of the span along the same girder line as the affected bearing shall be ground down ½ of the total gap dimension.

Example:

PBU exhibits ½” gap at the NE elastomeric bearing between the sole plate and the top of the elastomeric bearing. Therefore, the PBU would be raised and properly supported. The elastomeric bearings would be set aside and the bridge seats below the NW and SE bearings would be ground down ¼”. The PBU would then be reset and the gap would be rechecked.

Note: ½” of sacrificial concrete shall be included at all bearing locations for grinding purposes.
SCHEDULE OF PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES (DBE)

PROJECT:

NAME OF PROPOSER: ______________________________

<table>
<thead>
<tr>
<th>Name, Address and Phone Number of DBE</th>
<th>Name of Activity</th>
<th>(a) DBE Contractor Activity Amount</th>
<th>(b) DBE Other Business Amount</th>
<th>(c) Total Amount Eligible for Credit</th>
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Total [price for design services] [price for construction services]  DBE Subtotal $ $ $ 

DBE Percentage of Total: % %

Column (a) must be at least one-half of the DBE percentage goal.

SIGNATURE: ____________________________  Date: ___________  Tel. No.: _______________

NAME AND TITLE (PRINT): ____________________________________________
DBE Letter of Intent to Perform

PROJECT: RIC No. 2017-DB-023
Design / Build Services for the Superstructure Replacement of Baker Pines Bridge

NAME OF PROPOSER: ________________________________

FROM: ____________________________________________
(Disadvantaged Business Enterprise)

TO: _______________________________________________
(Name of Contractor)

1. My company is currently certified as a Disadvantaged Business Enterprise (DBE) by the State Rhode Island. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and RIDOT.

3. My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval: (a) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on-site work; (b) a list of equipment owned or leased by my firm for use on the project; and (c) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include for each project the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intends to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

________________________________________________  ________________
DBE Signature                        Date