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## MEMORANDUM

**DATE:** March 14, 2024

**TO:** Rhode Island Department of Administration

- **FROM:** Jeff Mehle, PE / Jim Bergeron, PE
- RE: Project Summary

I-195 Washington Bridge

Based on our review of the reports shared, and our understanding of the bridge design, deficiencies, and proposed action plan, we offer the following summary:

- Since the failed tie-rods were found, an in-depth inspection and review of the bridge was performed.
- At least 2 of the 12 tie-down rods installed at Pier 7 failed. These are the original bars installed in 1967. If all the tie-down rods had failed at one pier, the span would have become unstable and collapsed.
- The decision to close the bridge was the right and responsible decision.
- Multiple options for repairing and strengthening the bridge have been considered.
- Additional in-depth inspection and analysis identified more problems, and structural deficiencies that cannot be viably repaired.
- It is recommended to replace the bridge. The superstructure (deck and girders) and part or all of the substructure (piers and foundations) need to be replaced to meet current design code requirements and provide a bridge with a 100-year life cycle.
- The existing bridge demolition will be competitively bid. Additional analysis, shoring, and temporary strengthening are required to demo the bridge safely. Estimated completion for demo is March 2025.
- A design-build delivery is planned for the bridge replacement. With design-build, a construction company and design consultant team together to design and construct the project efficiently.
- Design-build delivery is often the quickest and most cost competitive option for projects of this magnitude.
- It is anticipated that the design-build schedule will be 18 to 24 months, and would overlap with the demolition of the existing bridge. The proposed schedule is shown below.

| 2024              |            |     |     |     |     | 2025 |       |        |       |      |      |     |      |     |     |     | 2026   |       |     |     |     |      |      |        |      |
|-------------------|------------|-----|-----|-----|-----|------|-------|--------|-------|------|------|-----|------|-----|-----|-----|--------|-------|-----|-----|-----|------|------|--------|------|
| Apr May June Jul  | y Aug Sept | Oct | Nov | Dec | Jan | Feb  | Mar   | Apr    | May   | June | July | Aug | Sept | Oct | Nov | Dec | Jan    | Feb   | Mar | Apr | May | June | July | Aug    | Sept |
| Emergency Contrac | t          |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
|                   | Demolition |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
| Demolition        |            |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
| procurement       |            |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
|                   |            |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
|                   |            |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
| Design-Build      | NTP        |     |     |     |     | D    | esign | -Build | Deliv | ery  |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
| procurement       |            |     |     |     |     |      |       |        |       |      |      |     |      |     |     |     |        |       |     |     |     |      |      |        |      |
|                   | Design     | -   |     |     |     | Co   | nstru | ction  | _     | *    |      |     |      |     |     | E   | arly F | inish |     |     |     |      | Late | Finish |      |

• Initial estimate for the bridge demolition and replacement is \$250 to \$300M. Schedule and cost estimates will be updated with the selection of the design-build team.

Reference to the previously submitted reports and report summaries should be made for additional information.