



March 27, 2023

Mr. Johnnie Switzer  
Facility and Fleet Manager  
Town of Warrenton  
21 Main Street  
Warrenton, VA 20186

Re: Warrenton Horse Show Grandstand - Preliminary Engineering Report

Dear Johnnie:

Whitman, Requardt & Associates, LLP (WRA) is pleased to submit our proposal to furnish a Preliminary Engineering Report (PER) to the Town of Warrenton, herein referred to as the Town, for the evaluation of existing conditions at the Horse Show Grandstand.

### **BACKGROUND**

In March 2023, WRA was contacted by to Town to make initial observations of the Horse Show Grandstand located at 60 E Shirley Ave, Warrenton, VA 20186. The grandstand is believed to have been constructed in the 1920's. The grandstand has a wood superstructure with a metal roof, and bears primarily on exposed concrete piers on an unknown foundation system below grade. The grandstand is part of the Horse Show Grounds which contains two horse rinks, various miscellaneous structures, and a stream. The grounds currently belong to a private entity, but the Town is in discussions to purchase this property. The Town is planning for the facility to become a public park and would like to restore the grandstand due to its historic nature. For this initial task, the town has requested WRA to do a preliminary report to establish the condition of the grandstand for use for the public. The proposal is based on the emailed scope of work sent to WRA on 3/2/2023, an initial site visit on 3/8/23, and a meeting with the Town staff on 3/20/23.

This proposal is for a Preliminary Engineering Report which will include:

- Performing an additional site visit to gather additional information
- Structure Evaluation for the grandstand structure to be brought into a good state of repair for public use
- Preliminary recommendations for the complete replacement of the existing piers with new foundations
- Analysis of the seating area for current loading requirements and recommendations for repair and reinforcement.
- Analysis of the roof for wind uplift and recommendations for reinforcement.
- Recommendations for modifications to the grandstand to meet egress, OSHA, Americans with Disabilities Act (ADA), and Architectural Barriers Act (ABA) requirements

Our proposal is described further as follows:

### **SCOPE OF SERVICES TO BE PROVIDED BY WRA**

#### Project Meetings

WRA will attend one in-person meeting in the Town following the Draft submission and one virtual meeting following the Final submission of the Preliminary Engineering Report to discuss review comments.

#### Field Observations

WRA will perform one site visit to gather field data pertinent to the preliminary engineering report.

### Preliminary Engineering Report – Draft Submission

WRA will develop the draft preliminary engineering report to include the following:

- Summary of major structural issues with the grandstand structure.
- Summary of additional issues requiring structural work such as replacing and adding stairs for egress that must be addressed before opening the structure to the public.
- Analyze the grandstand structure for updated dead and live loading in the seating area, wind uplift on the overall structure, and loading on the concrete piers.
- Preliminary design concepts for the replacement of all the concrete piers of the grandstand. The new foundation concepts will be designed using the default soil properties as allowed by the International Building Code and by the local jurisdiction. The PER will include conceptual sketches of the new foundations.
- Recommendations for reinforcement or other modifications as required for the seating area. The wood members will be analyzed using conservative historical strengths for the wood framing.
- Recommendations for reinforcement or other modifications as required for the roof framing and other members to withstand wind loading. The wood members will be analyzed using conservative historical strengths for the wood framing.
- Recommendations for replacement or modification of existing egress and evaluation of the requirements for a second potential point of egress.
- Discuss American Disabilities Act requirement for existing grandstand structure.
- If aspects of the existing structure were found to be inadequate from the analysis, recommendations to perform additional services such as materials testing and geotechnical investigation for the next phase of the project.
- A planning level cost estimate for conceptual structural repairs of the substructure will be included.

### Preliminary Engineering Report – Final Submission

WRA will develop a final report submission to include all of the components listed in the Draft Preliminary Engineering Report with modifications to address review comments by the Town Project Manager.

### **ITEMS TO BE PROVIDED BY THE TOWN OF WARRENTON**

The Town will assist WRA by providing the following:

- Remove all items in the storage area below the grandstand seating area. No items should remain that would impair WRA from performing observations of the existing piers and wood framing members below the seating area.
- Coordinate with the current property owner and WRA a time and date to perform the site visit.
- The Town will arrange for and participate in meetings and site visits including the site visit for field observations and the submission review meetings.

### **SCOPE CLARIFICATIONS AND ASSUMPTIONS**

- WRA will provide non-destructive field investigation to confirm existing conditions of the area of work. This proposal assumes that authorization to access the areas to perform these services will be obtained through the Town.
- The structural field observations will be limited to the observations of the grandstand and related structural support elements.
- No drawings are available of the existing grandstand. WRA will perform a limited survey to determine dimensions of the structure and typical member sizes for our use in evaluation of the structure.
- Field observations will occur during normal business hours (8:00 a.m. to 5:00 p.m.)
- Observations will be limited to areas that are accessible. No testing or verification of concealed or below-grade conditions is included in the assessment.



- A planning level cost for conceptual structural repairs to the substructure will be developed. Detailed construction cost estimates are not included in this proposal.
- Investigation or testing for hazardous materials is not included in this proposal.
- The deliverables for this project are limited to the Preliminary Engineering Report which will include conceptual sketches. No CAD drawings or other construction documents are included in this proposal.
- The on-site management staff shall provide safe access and personnel to accompany WRA staff during all field work.
- Final design of structures and improvements for access ramp and sitework related to ADA access will be conducted under a separate task order.

### **DELIVERABLES**

Preliminary Engineering Report – Draft Submission  
WRA will provide (1) electronic copy of the draft report.

Preliminary Engineering Report – Final Submission  
WRA will provide (1) electronic copy of the final report.

### **SCHEDULE**

WRA proposes furnishing services as follows:

Site Visit for Field Observations	Within (3) weeks of Notice to Proceed
Preliminary Engineering Report – Draft Submission	Within (8) weeks after site visit
Preliminary Engineering Report – Final Submission	Within (3) weeks after receipt of review comments

### **FEE**

The estimated fee for the Preliminary Engineering Report is \$24,410.

Very truly yours,

Whitman, Requardt and Associates, LLP



Robert Allison, P.E.  
Vice President

Enclosures

cc: Dean Westman, P.E.



