



208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • Tel: 802-863-6225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • Tel: 603-442-9333
414 Union Street, Schenectady, NY 12305 • Tel: 518-630-9614

January 30, 2025

Denise Barnard, Chair
Richmond Friends of the Band Shell Committee
Town Of Richmond
Richmond, VT
DBBCuts@AOL.COM

Re: Richmond Band Shell
Structural Assessment

EV# 24623

Dear Denise & Committee Members:

This report is a preliminary structural assessment of the Richmond Band Shell located on the Town Green in Richmond and is based on our proposal dated December 10, 2024 and received executed on January 3, 2025.

Bob Neeld, PE met with you and John Linn of Hillside Design on November 21, 2024 to review the existing band shell. The focus of this assessment is to evaluate the existing structure and provide recommendations to stabilize and improve the building to allow it to be used for the next 50+ years.

We were provided with an article published in October of 2024 in the Times Ink that describes some of the construction in 1977 and highlights a robust reinforced concrete foundation with concrete piers connected by concrete grade beams. This article highlights the noble volunteer work that went into building this publicly accessible facility that has served the community for more than 40 years.

Observations and Discussion:

The band shell fills one half of the 30 foot diameter concrete stage/platform. The walls are framed with 8x8 timber posts and diagonal board sheathing. The roof is framed with 8x8 rafters emanating from each post and coming to a point at the ridge. A timber scissors truss that rises to about 23 feet above the platform forms the front face of the band shell, supporting the seven rafters.

The timber scissors truss is in poor condition. There is evidence of deterioration and the connections appear to be separating. We recommend replacing this truss.

The slab at the stage level is in poor condition with significant cracking and settling. There appears to be a low point at the center that collects surface water. During a January follow up visit, there was an ice puddle at this location. The slab appears to be about 4"-5" thick and rests on the exterior foundation wall. This slab should be replaced.

The timber post to foundation connection is not completely clear. The posts are offset from the concrete slightly and are supported on short cantilevered sections of steel channel. The channels sit on a short concrete pier of about 8-10" diameter. There is a steel strap bolted to the posts that appears to be embedded into the concrete or tied to the steel channel. The steel channels are only primed instead of painted for exterior exposure and are in fair condition.

It was reported that there have been cases of people trying to access the platform and having difficulty making the 15" step. The area should be accessible with a ramp at a maximum 1:12 slope with hand rails. It would also make sense to include steps.

The area where the band shell is located is within the 100 year flood plain as per FEMA Flood Hazards. The flood elevation appears to be less than a foot above the current stage floor. The area is raised above the rest of the park and the adjacent Bridge Street acts somewhat as a dam that prevents this area from getting high velocity water. It is unlikely that flood waters would significantly damage the structure.

Recommendations and Cost Opinion:

Slab replacement: \$60,000 to \$75,0000

- Demo and dispose of existing concrete slab
- Temporarily shore frame as needed
- Saw cut front end of concrete wall to allow new slab to pitch for drainage
- Investigate subsurface conditions and modify as needed
- Review embedded steel connections and repair/replace as needed
- Place new slab

Framing: \$90,000 to \$110,0000

- Remove existing truss and associated trim/roofing
- Temporarily shore roof framing
- Replace truss with engineered system
- Replace finishes.

Access \$10,000 to \$12,0000

- Add new concrete ramp with hand rail
- Add new wood stairs

Siding: \$5,000 to \$7,0000

- Scrape and paint
- Repair/replace deteriorated areas

Construction Cost Opinion:

Limitations:

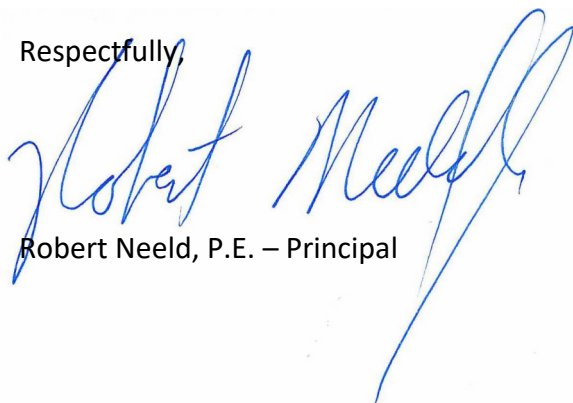
This report is a conditions assessment to identify the major areas of work required to stabilize the band shell and make steps toward financial planning, restoration, and re-use and is not intended to be used as a construction document for implementation of specific work.

Additional design, drawings, specifications and integration of project steps will be required to finalize recommendations and provide direction to contractors.

Opinions of Construction Cost provided herein are to be considered preliminary for planning purposes only. Since a final design has not been developed and we have no control over the costs or price of labor, equipment or materials, or over the selected contractor's method of pricing, it is understood that the opinions of cost provided are made based on experience and may differ from bid or actual costs.

Please let us know if you have further questions.

Respectfully,



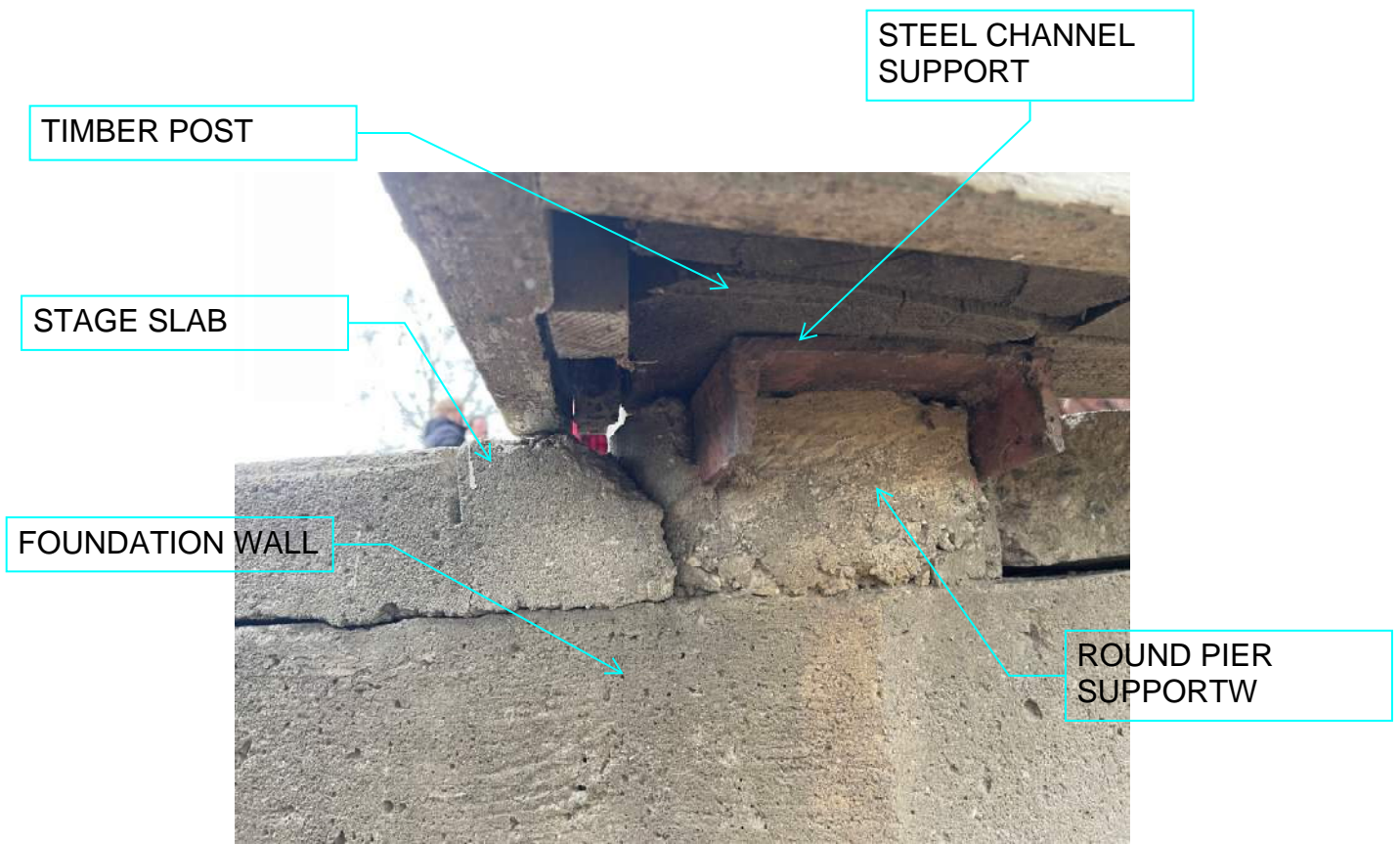
Robert Neeld, P.E. – Principal





TRUSS HEEL JOINT CONNECTION





POST SUPPORTS



TYPICAL HOLD
DOWN STRAP



PIER SUPPORT



TYPICAL RAFTER SUPPORT AT POSTS