

June 7, 2026

Project No. 2022-028

Mr. Robert Rosa
Hoyt Land Surveying
1287 Washington Street
Weymouth, MA 02189

**Re: Review of Completed Seawall Repair at 93 Kimball Beach
Road, Hingham, MA**

Mr. Rosa:

You asked me to review the condition of the completed seawall repair at the referenced location. I understand there are some concerns about the finished product in terms of the project closing out. You have provided me with as-built plans for the project, based upon a detailed on-site survey, and photographs of the completed wall.

The repair was originally undertaken to correct significant structural deficiencies in the existing stone seawall assembly and ensure its long term stability. The original wall consisted of a mortared stone base founded at beach level that had been plastered with concrete to provide a uniform surface and to add some resistance to wave action. Portion of the base of the wall had been exposed and there was a jumble of rip rap emerging from the base of the on the southern end.

The proposed repair, detailed on the structural section we prepared, dated March 4, 2022, consisted of removal of +/-12" of the existing mortared stone cap, replacing it with a new reinforced concrete cap that is set to elevation 9.6', and installation of +/-500# rip rap stone in front of the wall bedded into a compacted stone base with Mirafi FW700 Geofabric set to +/- 12" below average beach elevation of 5.2'. The size of the rip rap stone was selected to provide a durable and stable wave break to dissipate energy and project the wall behind for the long term.

When the work was completed, it was observed that some of the rip rap stones finished out within less than 6" of the top of the concrete cap. Rip rap is a natural material that varies significantly in dimension and shape and it is difficult to create a precise profile with stones. I offered my view, based upon 30 years of work in this field, that the rip rap profile would settle as heavy seas and tidal action had its effect on the new installation. Fortunately, the rip rap has been stable. This is probably due to the nature of the storms experienced thus far and the geometry of the wall, which had a projecting shelf on the sea side.

The installer, in my view, did a good job of distributing the large stones in a compact area and did well to meet the intended 1 to 1 slope. The final extent roughly matched, and blended into, the existing rip rap profile to the south.

In my opinion, the installation was well-executed considering the materials involved. The resulting wall is attractive and appropriate for the location. Current photographs show that it is performing very well and should provide many years of service to the established shoreline and the properties located there. I am confident that the wall will weather as I intended and will not require any extraordinary maintenance in the resource area for many, many years.

If you have any questions regarding this report, or if you require additional information, please do not hesitate to call.

Very Truly Yours,

Robert M. Desrosiers, P.E., M. ASCE



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