



October 23, 2025

Thomas Fitzpatrick, Environmental Engineer
Rhode Island Coastal Resources Maintenance Council (RICRMC)
4808 Tower Hill Rd, Suite 3
Wakefield, RI 02879



Re: Chrones Shoreline Maintenance
25 Atlantic Avenue; Westerly, RI

Dear Thomas Fitzpatrick:

On behalf of our client, Chrones Family Revocable Trust, it is our pleasure to offer the enclosed maintenance application. The **Chrones Family Revocable Trust (Applicant)** would like to properly maintain the existing infrastructure along its shoreline located at **25 Atlantic Avenue in Westerly, Rhode Island (Site)**. The proposed maintenance will help protect the Applicant’s residence and reduce the frequency the shoreline needs to be reconstructed after storm events due to the improper sized stones that the shoreline is comprised of. Please see Attachment A for additional information.

Within each assembled packet please find the RICRMC application form along with the required attachments:

- › Attachment A Project Discussion
- › Attachment B Opinion Letter
- › Attachment C Site Photographs
- › Attachment D Project Plans
- › Attachment E Proof of Ownership

Please do not hesitate to contact the undersigned should you have any questions or require additional information to facilitate your review of the application.

Sincerely,

VHB

Elizabeth Escalera

Elizabeth Escalera, EIT
Waterfront Designer

cc: Chrones Family Revocable Trust
Attachments: Four (4) copies of RICRMC Maintenance Application
Check #0392876 (Application Fee)



Attachment A Project Discussion

Background

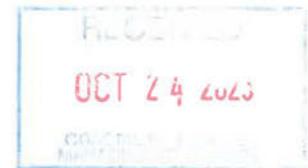
The site at 25 Atlantic Avenue in Westerly, Rhode Island is a residential property adjacent to Atlantic Beach. It is designated as Type 1 water type by the Rhode Island Coastal Resources Management Council (RICRMC). The site includes approximately four hundred feet of manmade/armored shoreline. The residence is located behind the revetment with a concrete patio between the residence and the revetment. Beach access is provided by a set of concrete stairs set within the armored shoreline that is located along the eastern side of the property.

Based on previous RICRMC permits, the site has had a revetment in place since 1938, when large boulders were hauled in and placed around the perimeter of the property. Over the years, stone material was added to maintain the revetment, including several previous permits issued by the RICRMC (1993, 1995, 1999, 2007, 2011, 2012, 2022). These permitted attempts by the former and current owners have proven to be futile due to the substantial wave climate and the limited size of the stone used. To make up for the lack of properly sized stone, the former owner incorporated concrete in locations to bind smaller stone together to prevent them from being shifted and/or dislodged by large waves. Unfortunately, the structure continues to be vulnerable to waves, and each restacking effort disturbs the beach, ultimately fails, and comes at a significant expense to the owner.

Recent Maintenance Design

The most recent maintenance proposed (RICRMC 2024-10-047) focused on reconstructing the perimeter shoreline (revetment) based on the design methodology developed by the US Army Corps of Engineers, as outlined in the Shore Protection Manual and Coastal Engineering Manual. The revetment was designed using the Coastal Engineering Design and Analysis System (CEDAS) software. The results of the design were provided in Table 2 with the project plans (provided below for convenience). The local wave climate was considered as a parameter in the design, including a 9.4-foot significant wave and a slope of 1V:1.5H for the exposed face of the revetment. For reference, the FEMA Flood Insurance Study for the Washington County region anticipates a wave in this area with a 1% annual chance (100-year flood) to have a significant wave height of 13.2 feet.

TABLE 2 PROPOSED REVETMENT STONE GRADATION TABLE				
ARMOR LAYER			BEDDING LAYER	
THICKNESS: 8.8FT			THICKNESS: 2.2FT	
% LESS BY WEIGHT	WEIGHT (LBS.)	DIAM. (FT.)	% LESS BY WEIGHT	DIAM. (IN.)
0 (MIN)	1320	2.3	0 (MIN)	4
15	4000	3.4	15	5
50	10567	4.5	50	6
85	26416	6.2	85	10
100 (MAX)	42266	7.2	100 (MAX)	12



As noted above, the design calls for armor stone to range in size between 2.3ft – 7.2ft in diameter (weighing between 1-13 tons) with toe stones to be 6.2ft in diameter or larger. Based on observations in the field while



planning the project, it was clear there was a portion of the visible armor stone that was undersized. Unfortunately, there was no way of knowing the true composition of the revetment beyond what was visible until equipment was mobilized, and portions of the structure were dismantled.

Plans and details of the patio were obtained from RICRMC that were part of prior regulatory applications/filings submitted by or on behalf of the former owner. According to those plans, a concrete wall was supposed to run along the perimeter of the patio, extending approximately 6-8 feet below the patio surface. While planning the project, Cherenzia Excavation was consulted. Due to the presence of a seawall behind the revetment, the reconstruction (removal and rebuilding) of the revetment was anticipated to be a straightforward process where portions of the revetment could be removed and rebuilt without concern of undermining the patio or residence.

Recent Maintenance Work

The most recent maintenance application (RICRMC 2024-10-047) included a restriction of no more than fifty (50) tons of armor stone no larger than 4.5 feet in diameter. The 50-ton restriction represents approximately 1.5% of the total structure by weight. The 4.5-foot restriction represents the mean size (50%) of the designed armor stone and is grossly undersized for the designed toe stone.

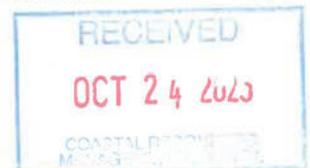
Cherenzia Excavation was hired to complete the project authorized by RICRMC 2024-10-047. During September and early October 2025, the eastern seventy (70) feet of revetment was rebuilt (STA 0+00 to 0+70). As part of that rebuilding effort, the existing structure was taken apart from STA 0+00 to 1+00, and smaller stone was set aside. The structure was rebuilt consistent with the project plans and details. To comply with the project plans and specifications, larger armor stones were imported totaling forty-two (42) tons to date. The weight of the imported stone represents approximately seven percent (7%) of the armor stone for the seventy (70) feet of reconstructed revetment by weight. Toe stone from STA 0+70 to 1+00 was also utilized in the reconstruction, meaning that reconstruction required additional stone for approximately 10% of the structure to build to the designed specifications.

Before replacing the revetment around the patio, Cherenzia Excavation opened sections of the revetment to confirm the presence of the seawall. At each location, no seawall was encountered. Without a wall around the perimeter of the patio, Cherenzia Excavation expressed concern that the removal of the revetment will make it difficult to control and restrict any excavations. An uncontrolled excavation will likely lead to the undermining of the patio and residence.

Proposed Maintenance Work

The applicant is seeking permission to maintain its existing infrastructure including the stone revetment, concrete patio and associated guard, and concrete stairs. All structures shall maintain their current footprint and elevations.

Stone revetment – The applicant is seeking relief from the stipulations asserted by RICRMC including the weight and size of armor stone to be imported. Reconstructing the revetment as proposed will reduce the likelihood of damage and future repairs to the revetment and residence. The reconstruction of the revetment shall continue to be consistent with the project plans and details previously authorized (RICRMC # 2024-10-047). To adhere to the designs, additional armor stone will need to be imported. Based on the recently completed revetment





reconstruction (STA 0+00 to 0+70), the balance of the work may require the import of 300-450 tons of suitably sized armor stones up to 7.2 feet in diameter. This weight represents approximately 7%-11% of the structure.

Concrete patio & guard – To allow work to proceed on the revetment maintenance adjacent to the patio, temporary shoring is required. The existing concrete patio and guard will need to be demolished. The applicant seeks permission to temporarily remove the concrete patio and guard, and temporarily install steel sheeting shore-parallel along the entire length of the patio. After the revetment is rebuilt, the area between the revetment and sheeting can be backfilled, the steel sheeting can be removed, and the concrete patio & guard can be rebuilt in-kind.

Concrete stairs – The applicant is seeking permission to rebuild the concrete stairs along the east side of the residence, four (4) feet wide, consistent with the former stairs. These stairs will be recast into the armored shoreline, in-kind, as described on the plans.

Permit History

CRMC File No	Description of Work Proposed
2024-10-047	Maintain stone revetment
2022-09-073	Restack existing stone on riprap revetment
2017-04-031	Repair the existing garage
2015-04-125	Repair/restore the storm damaged lawn area
2014-07-074	Install 150 +/- gas line
2012-11-182	SANDY: #0914 Reset/replace riprap that was displaced by storm Repair & replace concrete patio
2011-09-028	Repair seawall Replace deck from storm damage Irene
2007-10-103	Replace existing cesspool with a new DEM approved ISDS # 0736-1246
2007-05-115	Repair existing parking area
2004-04-123	Dwelling Alteration (2 12' Dormers Over Kitchen)
2003-09-024	Dwelling Alteration (Replace Roof Shingles, exterior)
1999-10-031	Seawall Repairs
1995-01-038	Seawall Repairs
1993-08-048	Dwelling Alteration (Addition)
1993-03-062	New Seawall





Attachment B Opinion Letter





Ursillo, Teitz & Ritch, Ltd.

Counsellors At Law

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(at South Main Street)
Providence, Rhode Island 02903-2918

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Admitted in RI*, MA†

October 23, 2025

Gus Kreuzkamp, PE
Director of Waterfront Engineering
RI-Environmental – VHB
gkrezkamp@vhb.com

Re: 25 Atlantic Avenue, Westerly, Plat 175, Lot 17

Dear Gus,

I have been retained by Cheryl & James Chrones, owners of a coastal property located at 25 Atlantic Avenue in Westerly, Rhode Island, and identified on the Westerly Tax Assessor's maps as Plat 175, Lot 17. On May 12, 2025, CRMC issued a maintenance assent for their property, M2024-10-047, to allow maintenance of an existing revetment. That assent included the following condition:

“A maximum of 50 tons of undersized stone may be exchanged with 50 tons of new stone not to exceed 4.5 feet in diameter. All undersized stone must be disposed of offsite. This is a one-time allowance and shall not be provided in future assents.”

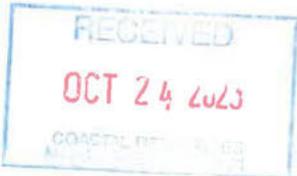
As you have explained to me, the 50-ton limitation is not sufficient to allow for proper maintenance of the revetment. You have prepared a new maintenance application to the CRMC seeking relief from this condition. In correspondence with Thomas Fitzpatrick at CRMC, he indicated to you that he would need to review this matter with senior staff, as he generally considers replacing stone in a revetment as constructing a new revetment, rather than maintenance of a revetment (which is prohibited in Type 1 waters).



I have been asked to provide a legal opinion regarding whether this project may exceed the 50-ton limit set forth in M2024-10-047 and still qualify as maintenance, rather than new construction. After discussing this matter extensively with you and Mr. & Mrs. Chrones and reviewing the application materials you have prepared, it is my opinion that the 50-ton limit may be exceeded in this project, and the project would still qualify as maintenance of the revetment.

The first relevant CRMC regulation is Rule 1.1.2(A)(83), which provides a definition of “maintenance of structures.” “Maintenance of structures” is defined as “the reconstructing or repairing to previously approved conditions and dimensions a damaged or deteriorated structure or facility. Maintenance includes only those activities that **do not significantly alter the assented design, purpose and size of the structure.**” (Emphasis added). The relevant limitation in this definition is that “maintenance” must not involve a significant alteration to the “design, purpose and size of the structure.” This definition does not turn on whether new materials are used in “reconstructing or repairing” the existing structure. Instead, this definition considers “reconstructing or repairing” to constitute “maintenance” so long as the “design, purpose and size of the structure” is not significantly altered.

After reviewing the plans you have prepared and discussing this matter with you, it is clear that the design, purpose, and size of the revetment will remain the same. Both before and after the maintenance activity, the revetment will remain a structure composed of layers of stone. Both before and after the maintenance activity, the revetment will serve to protect the residence on the Chrones’ property. Both before and after the maintenance activity, the width, height, and size of the revetment will remain the same. Therefore, under this general definition, the project qualifies as maintenance.

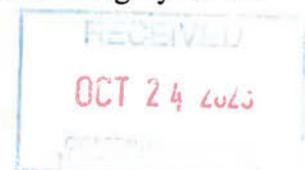


The next relevant regulation is Rule 1.3.1(G)(6) – “Maintenance and repair of shoreline protection.” In particular, subsection (b) of this rule provides:

“Maintenance and repair of existing structural shoreline protection shall be **the minimum that is required to maintain the functional viability or structural integrity**. In the case of riprap revetments, the addition of limited quantities of riprap armor stone to existing damaged revetments may be allowed as a maintenance activity provided that no impact to coastal resources or lateral access results. All maintenance shall be in accordance with the policies and standards of the Coastal Resources Management Program.” (Emphasis added).

The relevant limitation in this rule is that the repair must be “the minimum that is required to maintain the functional viability or structural integrity.” This rule does not flatly prohibit or limit the use of new material in a revetment, so long as the use of new material is the minimum necessary to maintain functional viability and structural integrity. As you have made clear to me in our conversations, and as is demonstrated in the application materials you have prepared, the 50-ton limit on new stone is below the minimum necessary to maintain the functional viability and structural integrity of the revetment. Further, it is made clear by your application materials and our discussion that you and the Chrones are proposing to use new stone beyond 50 tons only to the extent necessary to maintain the functional viability and the structural integrity of the revetment. Therefore, this application is properly considered maintenance, not new construction.

As you have explained, the former owners of this property did not have the revetment constructed to US Army Corps of Engineers (USACE) standards, resulting in undersized & non-angular stone in the existing revetment. The undersized stone has resulted in the lack of structural integrity in the revetment. The requested stone sizes in the maintenance application are justified by the USACE Coastal Engineering Manual standards, necessitating the importation of more than 50-tons of properly sized stones to ensure functional viability and structural integrity of the



revetment. As you know, CRMC regulations expressly incorporate USACE standards in revetment construction. Specifically, Rule 1.3.1(G)(5)(i) provides, “Riprap revetments shall be constructed of angular stone with a minimum unit weight of 165 lbs./cubic foot (such as granite). The size of stone shall be dependent upon the site's exposure to wave energy **in accordance with the US Army Corps of Engineers Coastal Engineering Manual.**” (Emphasis added).

The other relevant provisions of CRMC regulations are Rule 1.3.1(G), which sets forth design standards for shoreline protection structures, and Rule 1.3.1(N), which provides procedural and substantive requirements for maintenance generally. The application you have prepared complies with these rules. Further, no provision of these rules would limit either the use of new materials in maintenance generally, or the use of new stone in maintaining a revetment specifically. Accordingly, it is the legal opinion of this office that the application you have prepared is properly considered maintenance of the existing revetment at 25 Atlantic Avenue. Further, as you are only proposing to repair approximately 10% of the existing revetment, this maintenance activity does not require a new Council Assent, per Rule 1.3.1(G)(5)(i).

Please feel free to include this correspondence with your application materials. Further, if you or any staff member at CRMC have any further questions for me regarding this opinion, I would be happy to discuss it. Thank you for your consideration.

Truly yours,

/s/ Peter Skwirz, Esq.

Cc: Cheryl & James Chrones



Attachment C Site Photographs



Photo 1: Pre-existing revetment looking west.



Photo 2: Pre-existing revetment looking east.





Photo 3: Pre-existing connection between revetment and patio looking south.



Photo 4: Pre-existing revetment and property looking southwest, including concrete stairs.

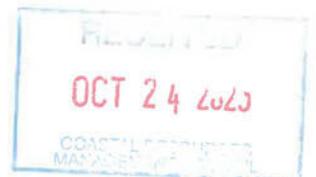
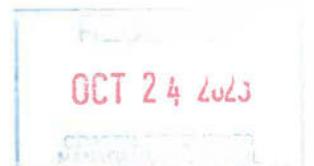




Photo 5: Eastern portion of revetment reconstructed consistent with project plans.



Photo 6: Location where concrete stairs to be cast-in-place.





Town of Westerly, R. I.

Town Assessor's Office 45 Broad St Westerly RI 02891

Tel (401) 348-2541 Fax (401) 348-2616

COASTAL RESOURCE MANAGEMENT COUNCIL
STEDMAN GOVERNMENT CENTER
TOWER HILL ROAD
WAKEFIELD, RI 02879

TO WHOM IT MAY CONCERN:

RECORDS AT THE ASSESSOR'S OFFICE, TOWN OF WESTERLY, RI, INDICATE THAT THE FOLLOWING OWN PROPERTY IN SAID TOWN:

NAME: Chrones Faamily Revocable Trust

ADDRESS:



PROPERTY LOCATION: 25 Atlantic Ave
WESTERLY, RI 02891

PLAT/LOT: 175/17

LAND EVIDENCE RECORDS: BOOK 2019 PAGE 8703

DATE OF ISSUE: September 26, 2024

SINCERELY,

DAVID B. THOMPSON
TOWN ASSESSOR

