7/22/2026

What The Coastal Community Association Has Done With This Effort: As a result of numerous questions and conflicting opinions about the St Joseph Peninsula beach nourishment and breakwaters project, the CCA undertook an effort to gain the facts that we hope can help answer questions, rebut any incorrect rumors, and generally raise awareness. To accomplish that we did research based on the readily available sources like those made available during the public comment period and the bidding process. After compiling that information, we met with the County and confirmed and further bolstered our understanding. What follows below is a summary of that effort

What We Believe Caused So Many To Be Confused And Concerned?

Most people have never looked at the materials put out to explain the project (for example during the public comment period). Even for those who have viewed that documentation, the answers are difficult to find given their highly technical and detailed nature. We found that the answers to the questions were in the documents if you knew where to look, but it wasn't easy to find them.

Level Setting: Before we cover what we found, please review the project scope and goals that are listed below.

What Is The Scope Of The Current Project?

- Covers roughly 1.1 miles of the south Cape from the stump hole to before Scallop Cove
- Approximately 830,000 cubic yards of sand added to restore the coastline
- Installation of 8 offshore submerged breakwaters

Project Goals and Design:

- **Wave reduction:** The eight submerged breakwater barriers are projected to cut incoming wave energy by 60% to 80%
- **Sand retention:** This reduced wave energy is projected to slow down long-term shoreline loss and protect a 1.1 mile stretch of the newly nourished beach near the stump hole
- **Infrastructure protection:** This in turn is projected to safeguard local assets like Cape San Blas Road as well as homes from storm damage and collapse

Key Questions We Answered:

1. Has the contractor deviated from the original plan? For additional context, most people were under the impression that the breakwaters were supposed to be submerged, not buried in sand.

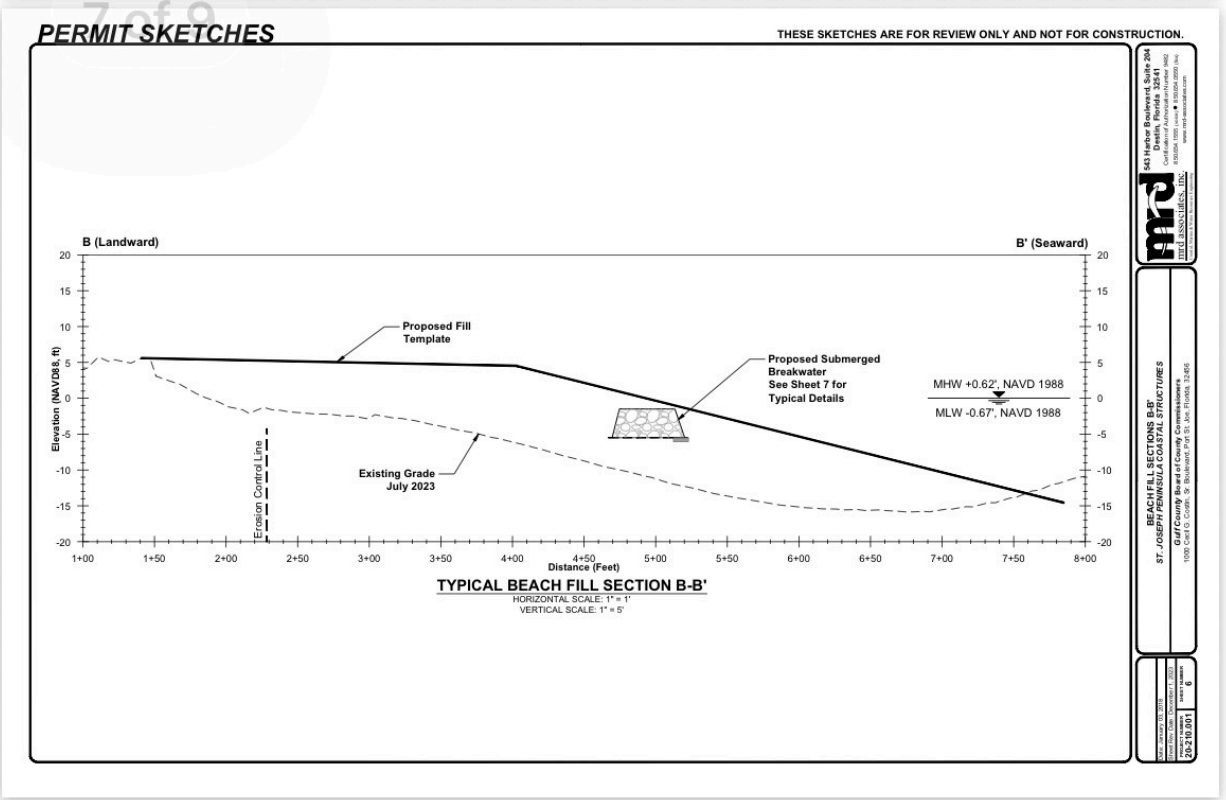
Response:

<u>Regarding the question of deviating from the plan:</u>

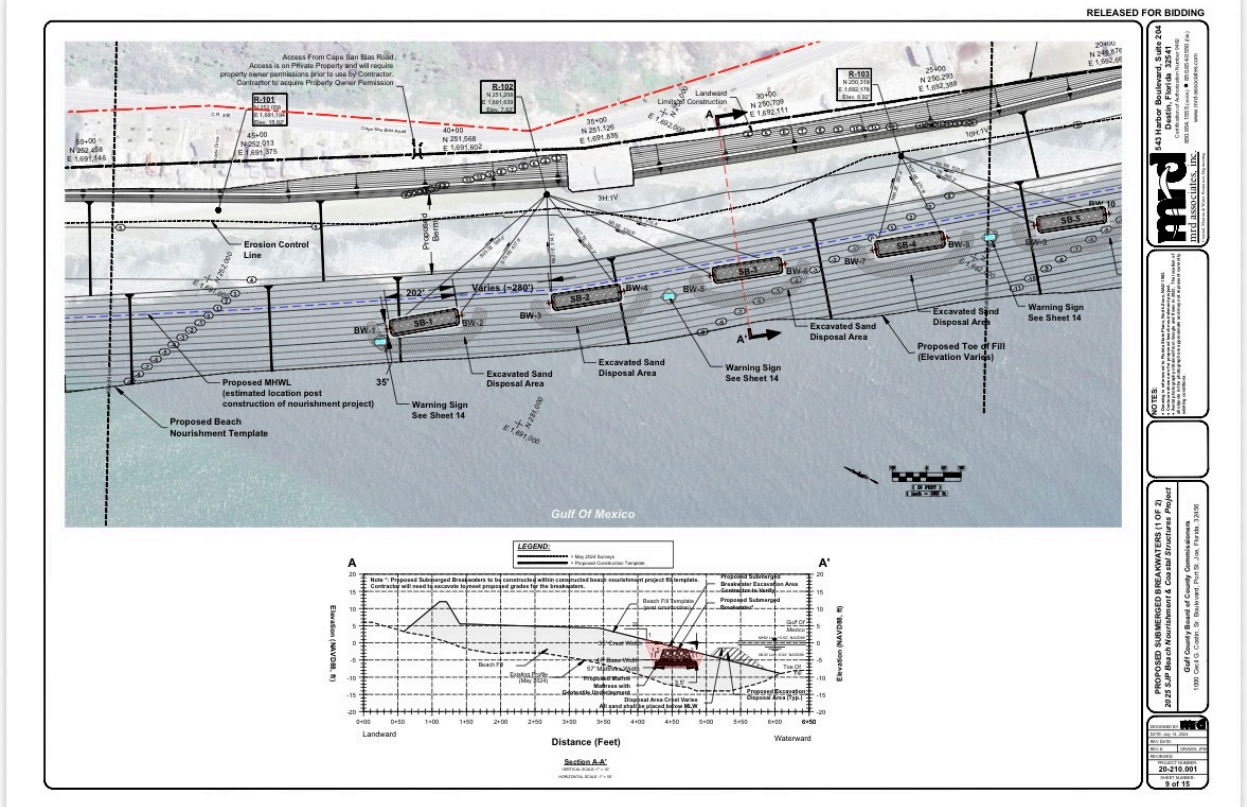
At every step of the process from adding sand to beach to the last breakwater built, Gulf County receives "as-built" assessments that verify the work is completed according to the specifications of the contract.

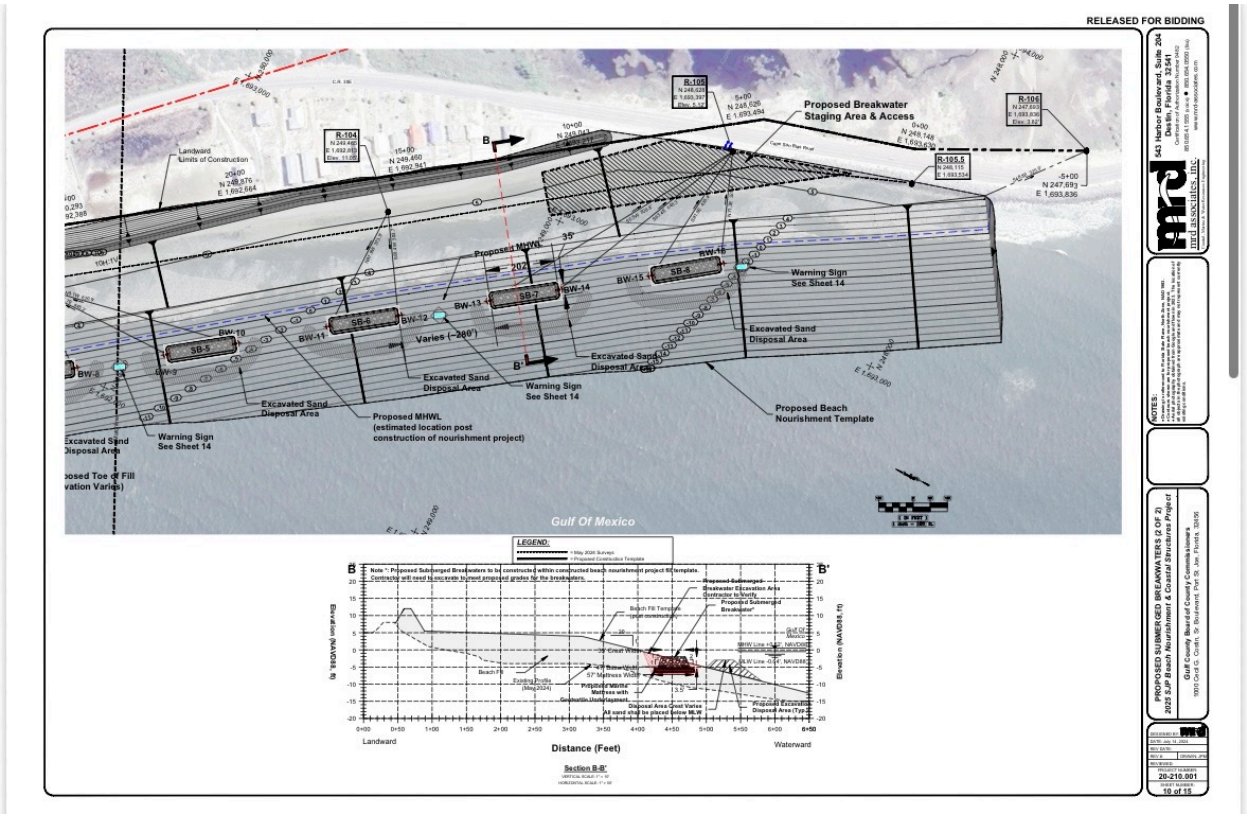
<u>Regarding buried vs. submerged breakwaters</u>

Documents shared with the public and used during the bidding process show that the breakwaters would be buried in the sand. This approach was used because the permits would not be issued for barges to do the work during turtle season to protect the turtles.



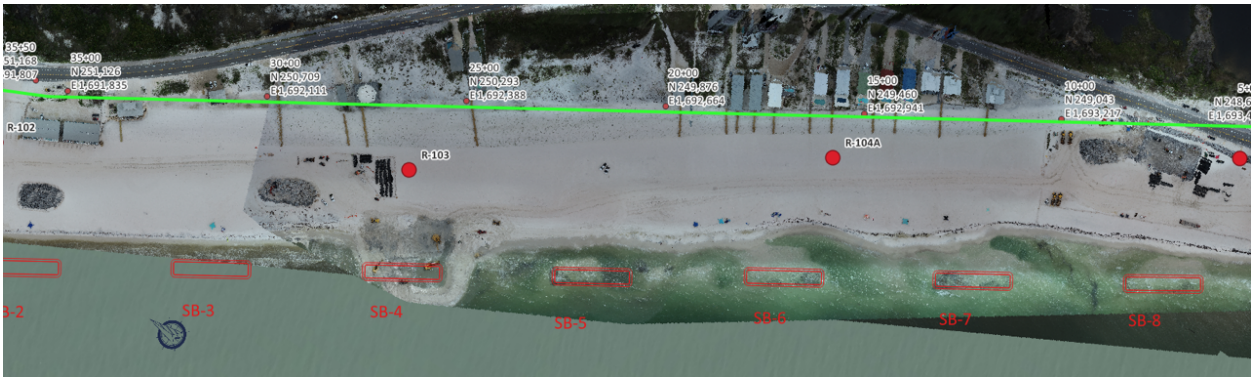
Regarding buried vs. submerged breakwaters (continued)
A deeper level of this documentation is included in the bidding document where the "Excavated sand disposal area" is indicated for each of the breakwaters





Regarding buried vs. submerged breakwaters (continued)

We were also given an arial shot of the construction of SB-4 that shows all of the breakwaters are in water (likely at high tide). Notice the wrack line of debris on the beach. Breakwaters 5, 6, 7 and 8 are complete, but currently covered in sand. See below for more detail on that.



2. Regarding the buried breakwaters, will those be left as is and allow erosion to eventually uncover them, or will they be graded to be exposed?

Response:
The breakwaters will naturally become visible under water with erosion, likely by the time the project is complete. Given that the amount of sand added is greater in the south, these will likely be the last to be visible. Note: I have personally spoken to a vacationer who confirmed that at low tide you can see the actual rocks of what I believe to be the northern part of breakwater 4.

3. Some residents have expressed concern that the breakwaters, once exposed, will break apart and scatter like the smaller rocks that were placed at the stump hole (and scattered across CSB Rd during Hurricane Michael). Can you provide some insight into the thresholds and or standards that were applied in the engineering plan to ease their concerns?

Gulf County Response:
The Gulf County Assistant Administrator responded candidly that all bets are off in a Hurricane Michael scenario. These are designed to reduce erosion, not withstand hurricanes. In addition, he reached out the contractor (MRD) for additional information on this issue and their response is included below.

MRD (contractor) response:
That's a difficult question to answer with any certainty as you know there are a lot of complex factors that can influence the stability of the rock during a storm. They were designed to remain stable for up to a 5-foot wave (significant wave height) under normal conditions and up to 5 feet of scour around the structures. With a storm event, the water depth above the submerged breakwaters can increase with an incoming storm surge, raising the water level above the structure which should allow the rock to remain stable as the surge/water depth increases. However, the submerged structures during a storm event allow more wave energy to pass over them. So it depends on the level of the storm surge which can affect wave generation and allow larger waves to impact the structures. The Contractor has also compacted and interlocked the rock pretty well which helps with stability as I have seen them roll excavators and articulating dump trucks across the top of the completed breakwaters. Recent armor stone deliveries have also been increasing in size with larger stone being consistently delivered over the specified rock size, which will also increase the stability and resistance to damage during a storm event.

The honest answer is I can't say with any certainty what that storm level is. To add to the above discussion, the primary focus of the numerical modeling was to determine how best to keep the sand landward of these structures, since they are submerged which reduces their effectiveness, during average conditions. We did model storm scenarios but that was looking at changes in the beach topography and not damage to the structures specifically.

My best guess is that they remain stable up to a tropical storm event, possibly a more severe event depending on the level of storm surge, duration of winds and waves, and what condition the beach is in prior to a storm event (i.e. is it still wide or has it been severally eroded, summer profile vs winter profile, etc.) as that will affect the level of scour around the structures, which also impacts stability.

Coastal Community Association of Gulf County
1934 State Rd 30 A, Port St. Joe, FL 32456
Email: sunsetbaymg@gmail.com