



Middle Harbor Enhancement Area Beach Enhancement Alternatives Overview

August 2021

Design and Target Habitats for MHEA



US Army Corps
of Engineers®
San Francisco District



PORT OF OAKLAND



US Army Corps
of Engineers®
San Francisco District

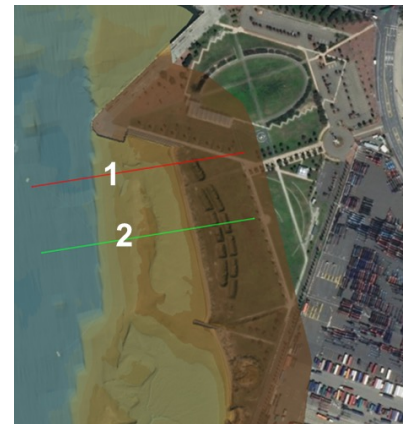
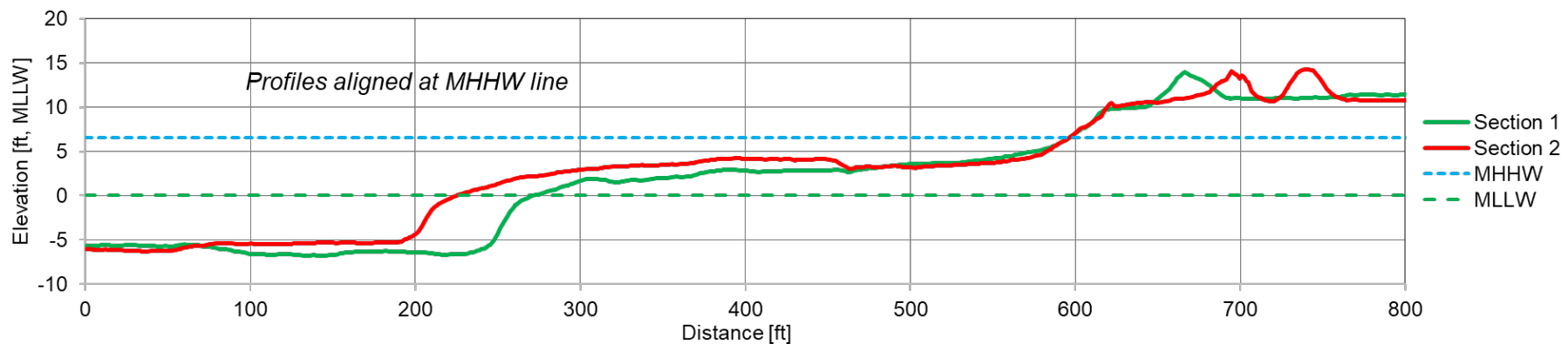
Timeline



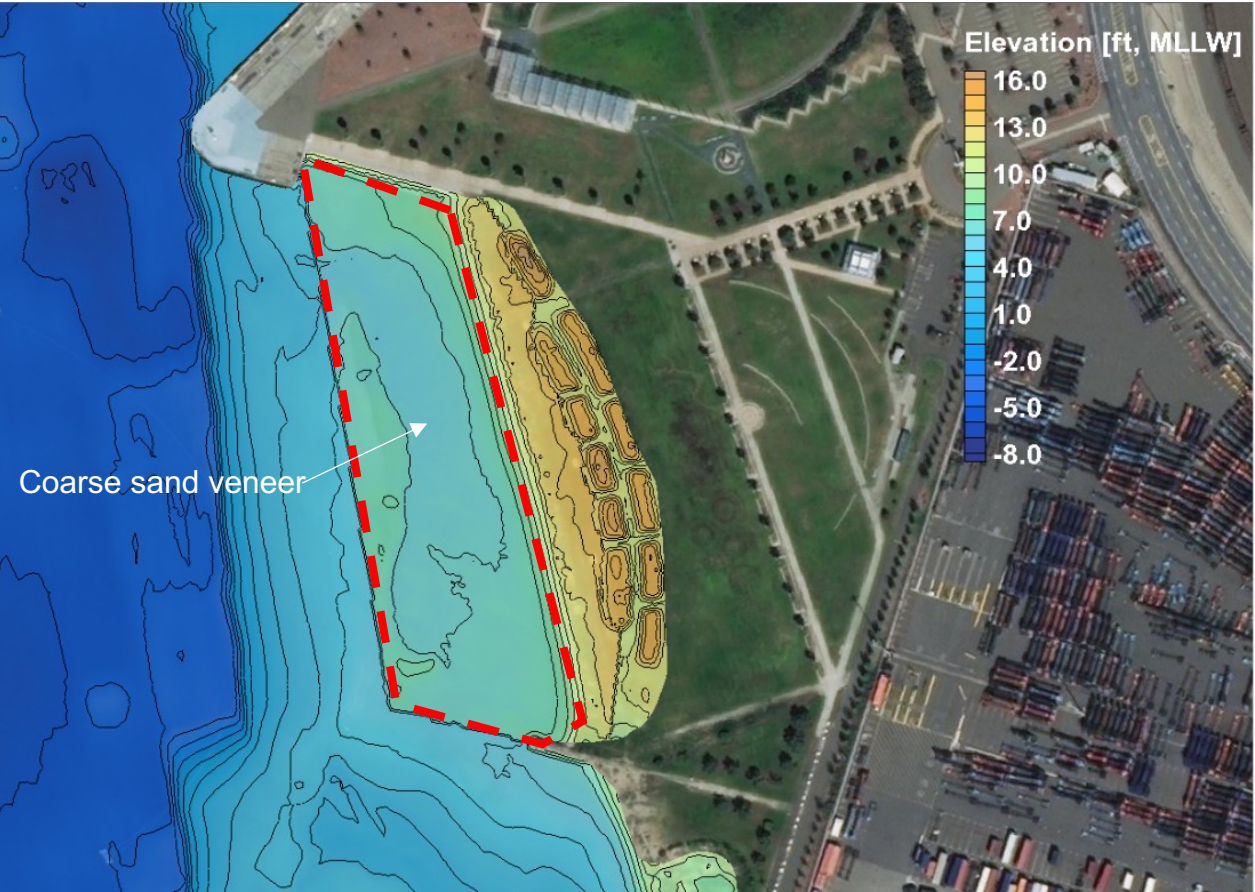
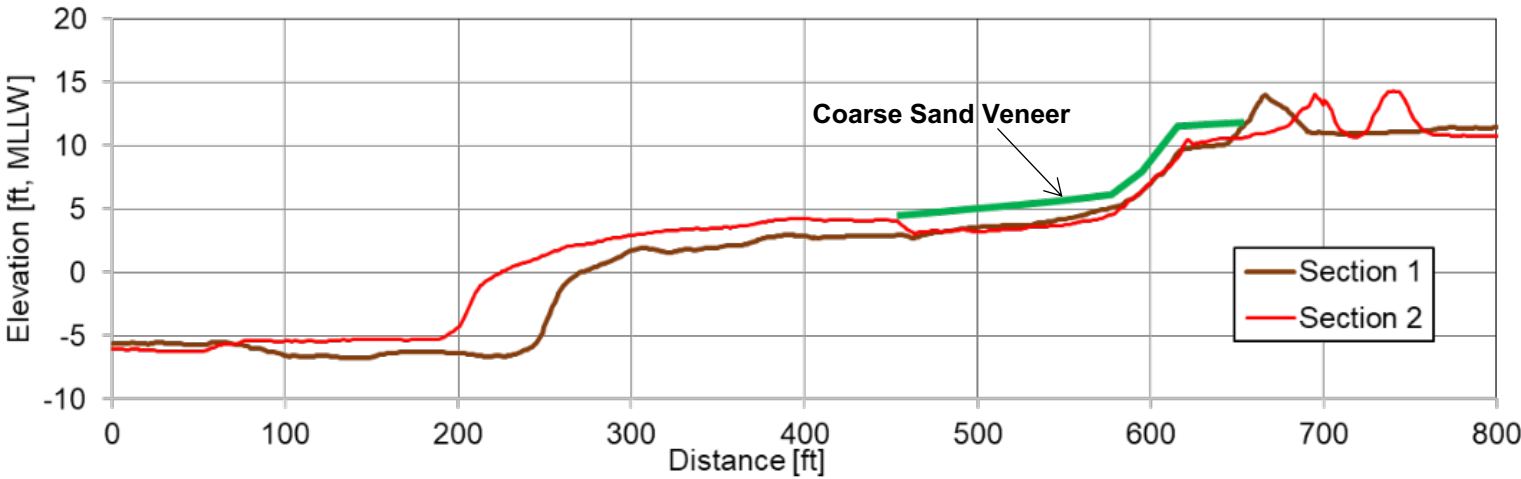
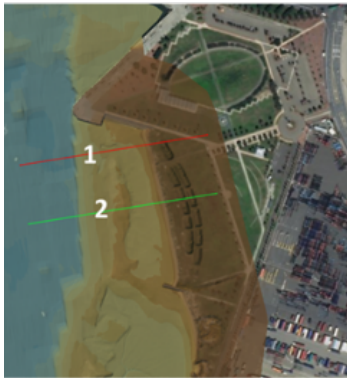
- November 2018 – Bay Conservation and Development Commission (BCDC) request for remedial action
- November 2019 – One day design workshop was held with Technical Advisory Committee (TAC)
- April 2020 – Draft designs
- August 2021 – Public outreach

Existing Beach Area

- Natural sorting has shaped the existing beach configuration.
- Sandy upper beach (Merritt Sands) and a mix of sand and Bay Mud on the flat lower slope.
- This configuration is similar to natural East Bay beaches.



Alternative 1



Alternative 1 Visualization



Image of Angel Island Coarse Sand from Albany Beach

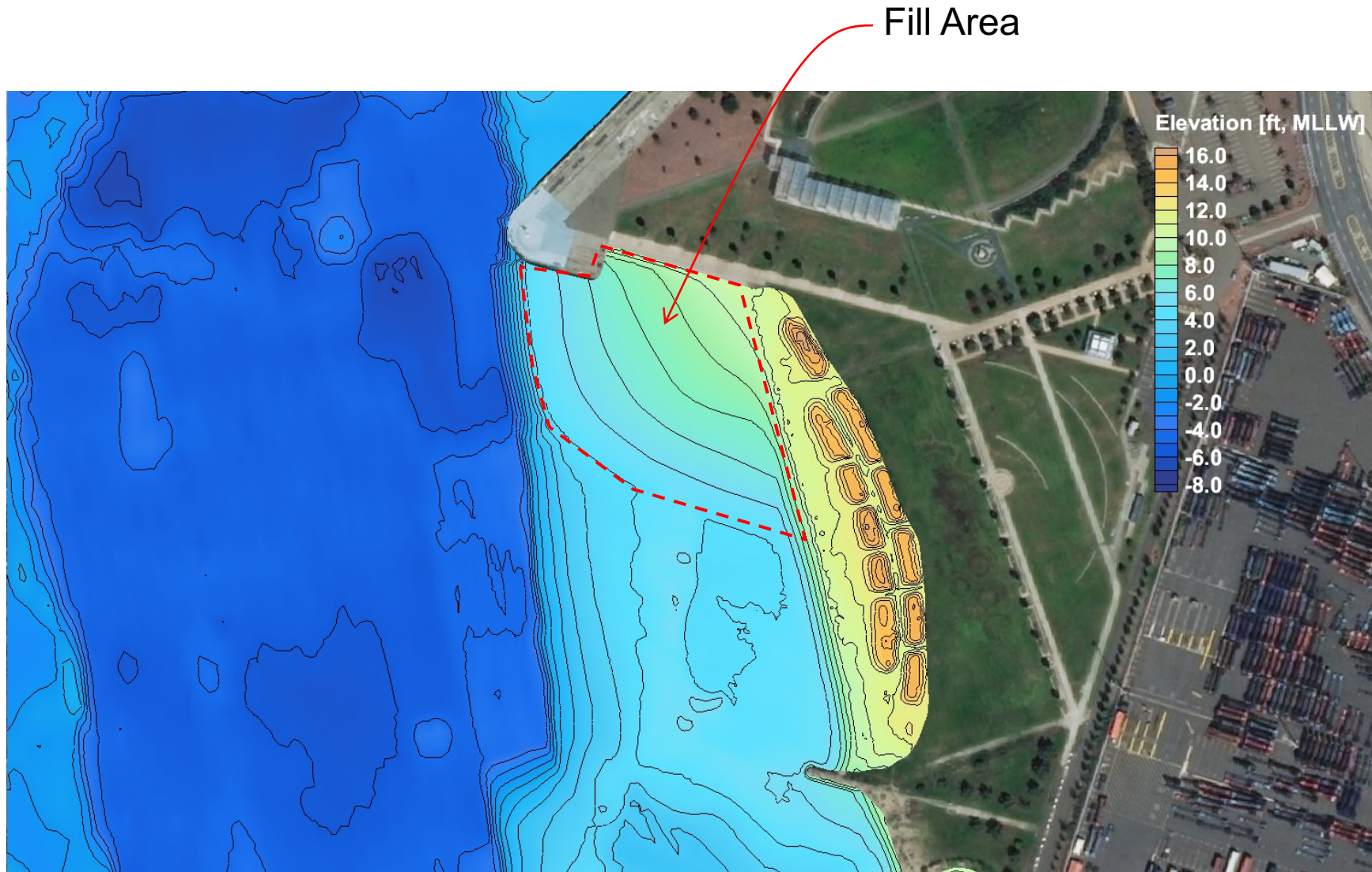
Alternative 1 Visualization



Image of Angel Island Coarse Sand from Albany Beach



Alternative 2



Alternative 2 Visualization



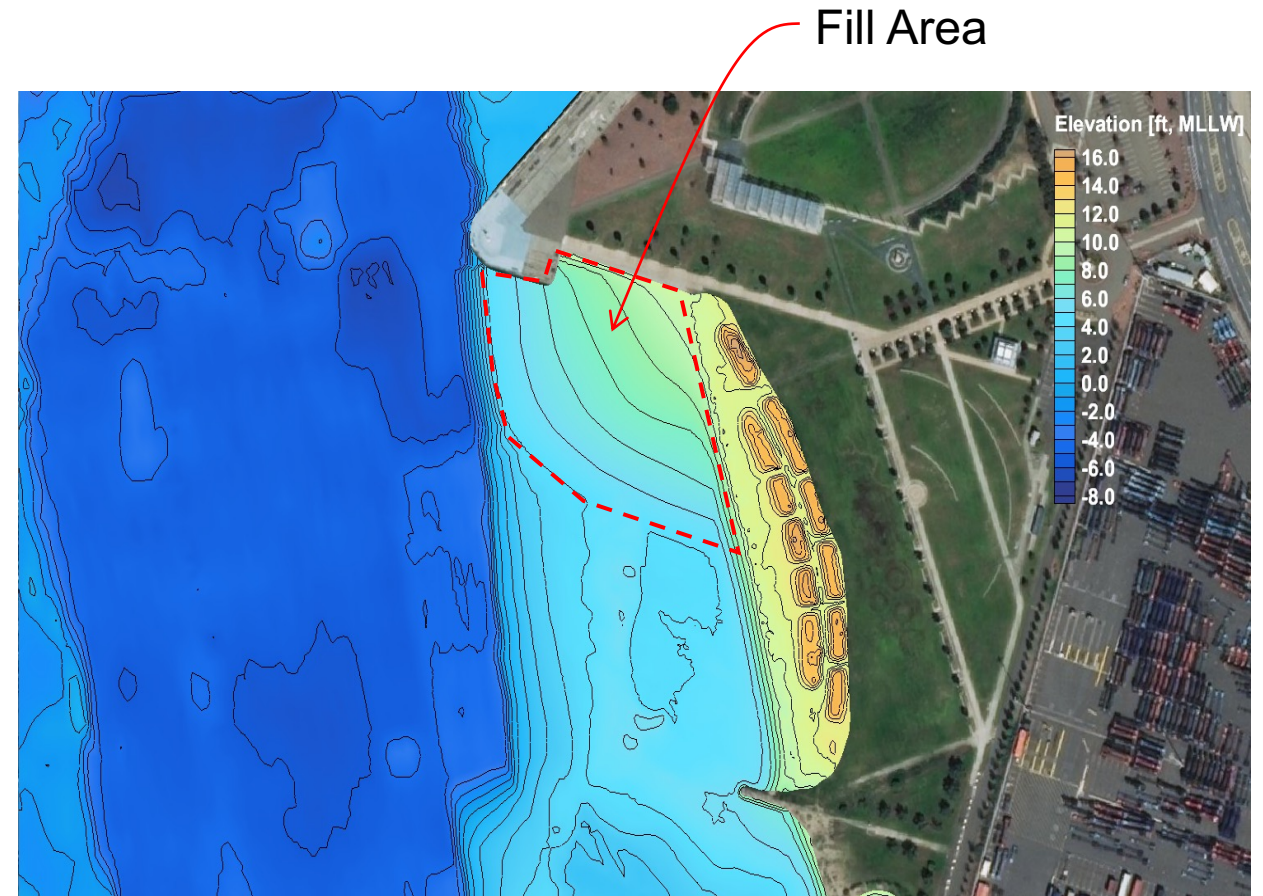
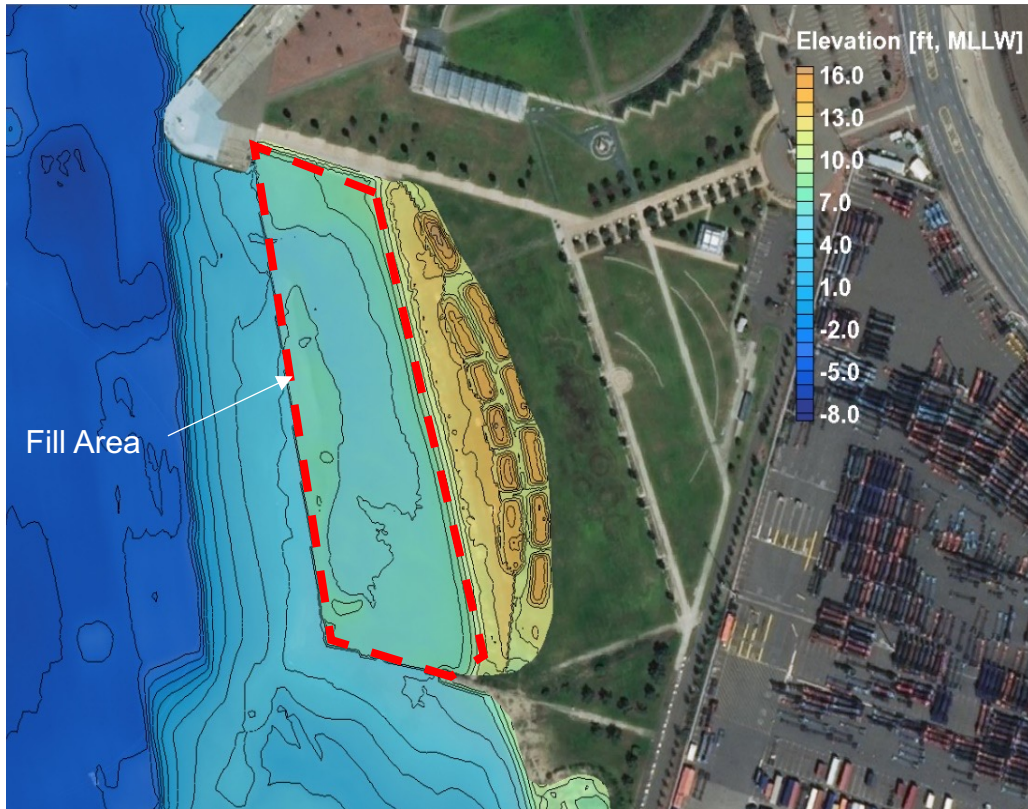
Alternative 2 Visualization



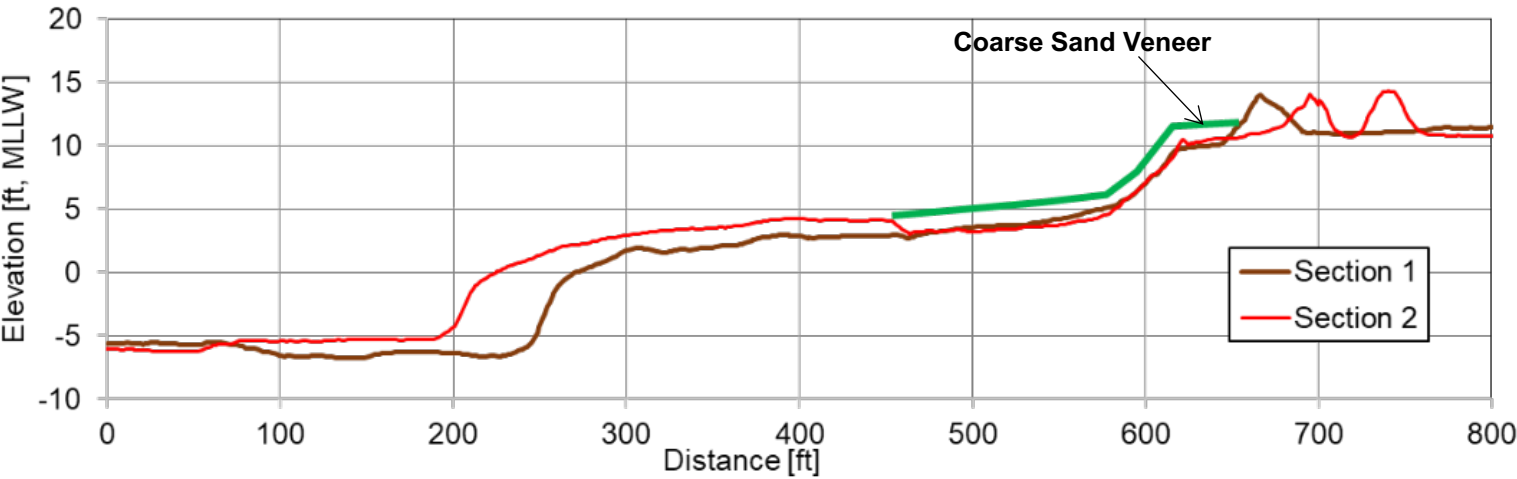
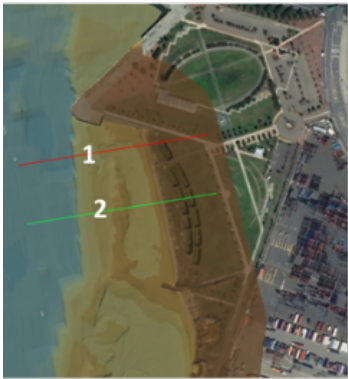
Image of Angel Island Coarse Sand from Albany Beach



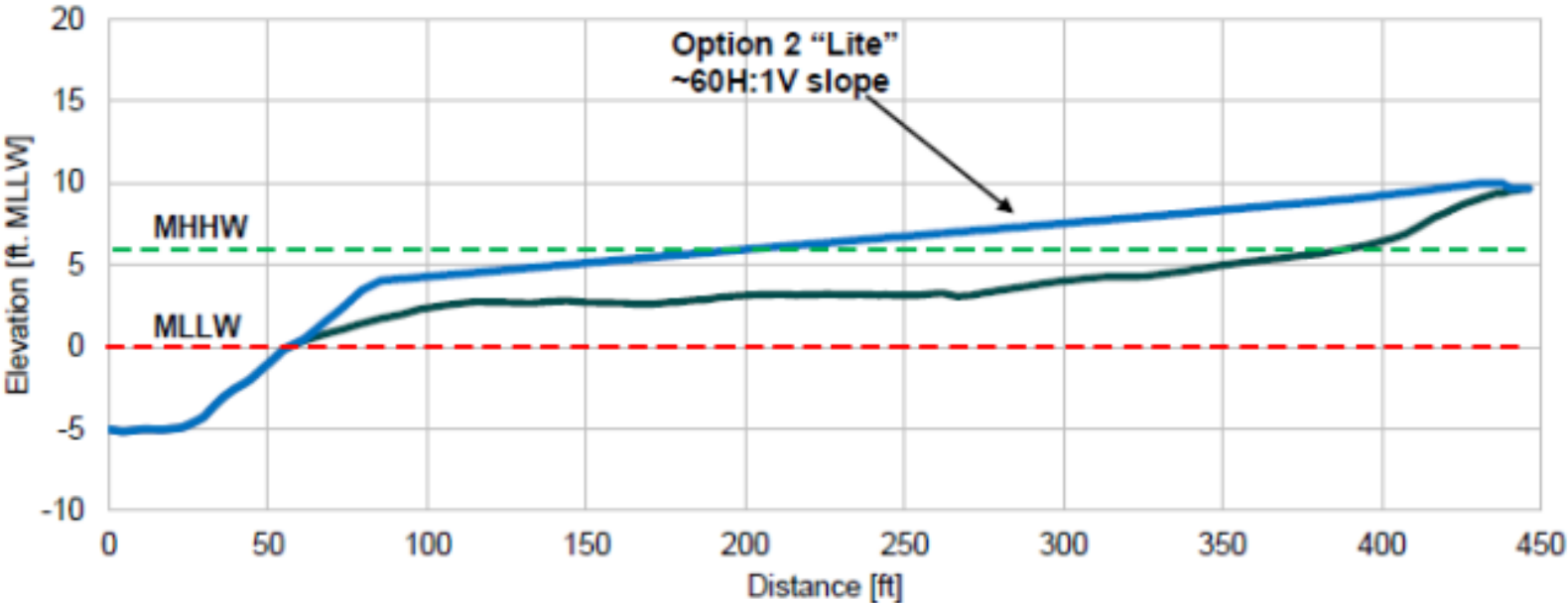
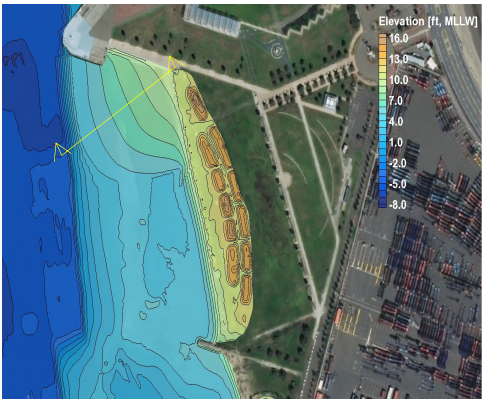
Alternatives 1 & 2 – Side by Side Comparison



Alternative 1



Alternative 2



Comparison of Alternatives

Criteria	Alternative 1	Alternative 2
Meets Original Community Goals	Yes	Yes
Approved by BCDC	Yes	Yes
Most square footage covered	Yes	No
Lowest risk of muddy area	No	Yes
Provides continuous new beach sand down to the water, even at low tide	No	Yes
Most Resilient design (long-term beach)	No	Yes

Alternative 2 is Preferred by USACE/Port

- Both Alternatives are approved by BCDC & Technical Advisory Committee

Port/USACE prefer Alternative 2 because:

- Meets original community goals from the Community Action Committee.
- Provides continuous new beach sand down to the water, even at low tide.
- Most resilient design (long-term beach).
- No significant sedimentation is predicted due to steeper beach slope configuration.
- Southern part of existing beach retains biodiversity.
- Less risk of muddy areas than Alternative 1.

Next Steps

- Finalize Alternative Decision
- Procure federal funding
- Bring current conceptual design to 100%
- Construction

Survey

<https://www.surveymonkey.com/r/MHEAACORN>



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