



Shoreline Protection at Point Betsie

Past, Present, and Prospective

Point Betsie Lighthouse

The Early Years



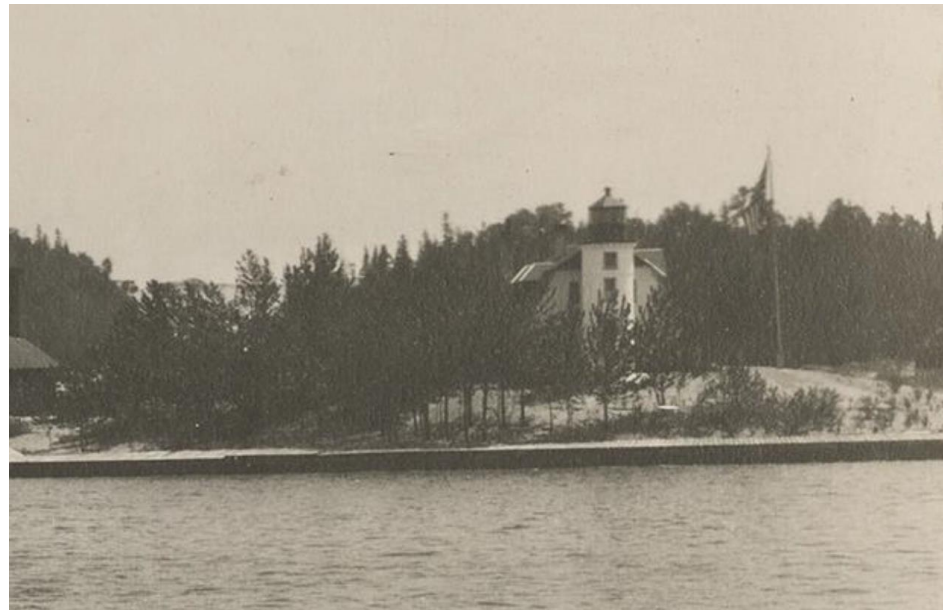
- ❖ In 1853 the newly formed Lighthouse Board recommended \$5,000 be spent on the construction of a lighthouse at the southern entrance of the Manitou Passage
- ❖ President Franklin Pierce ordered the purchase of 10 acres of barren dunes on April 4th for this purpose
- ❖ Contractor arrived in 1854, but for unknown reasons, the construction was not completed until 1858, and the lighthouse went into service in February 1, 1859 with David Flury as the first Keeper
- ❖ After only a year of operation, the tower's location on the dune a scant few feet back from the waters edge was found to be causing a problem that would plague the station throughout the ensuing years.

Protecting Point Betsie

1870s Era SPS



1890s Era SPS



Erosion Continues



1940's Era SPS

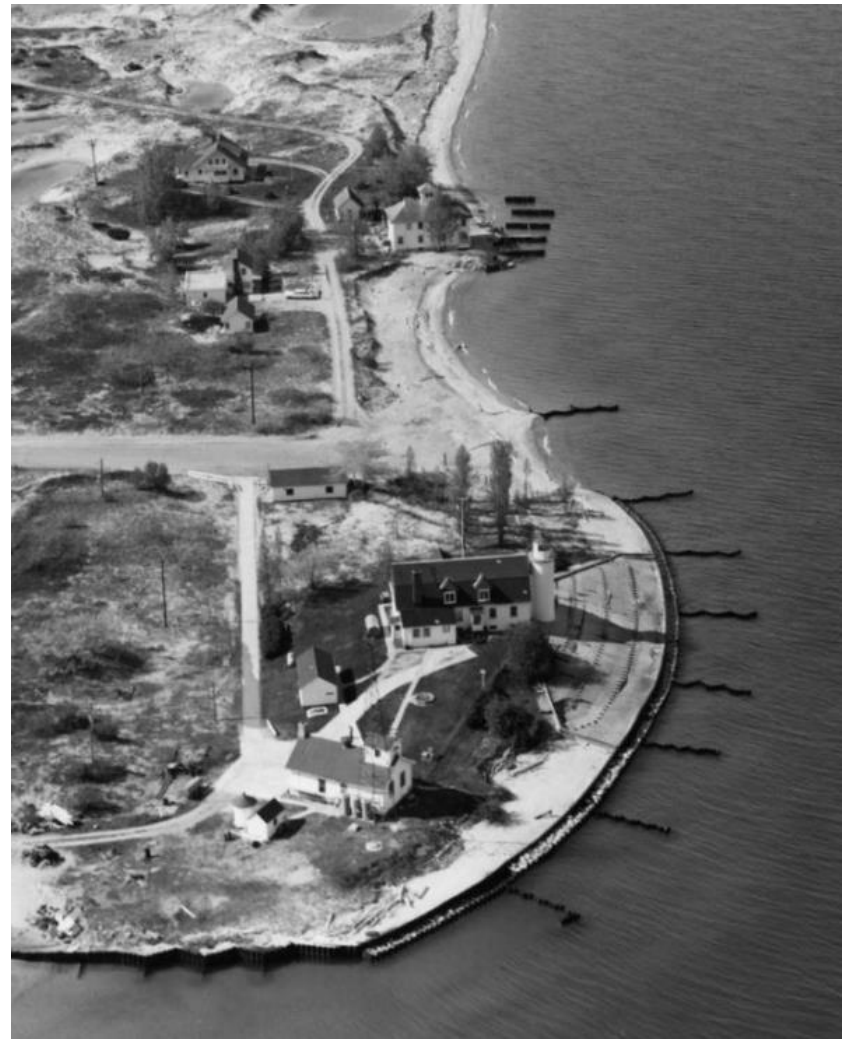
Construction Begins



Terraced Apron 1940

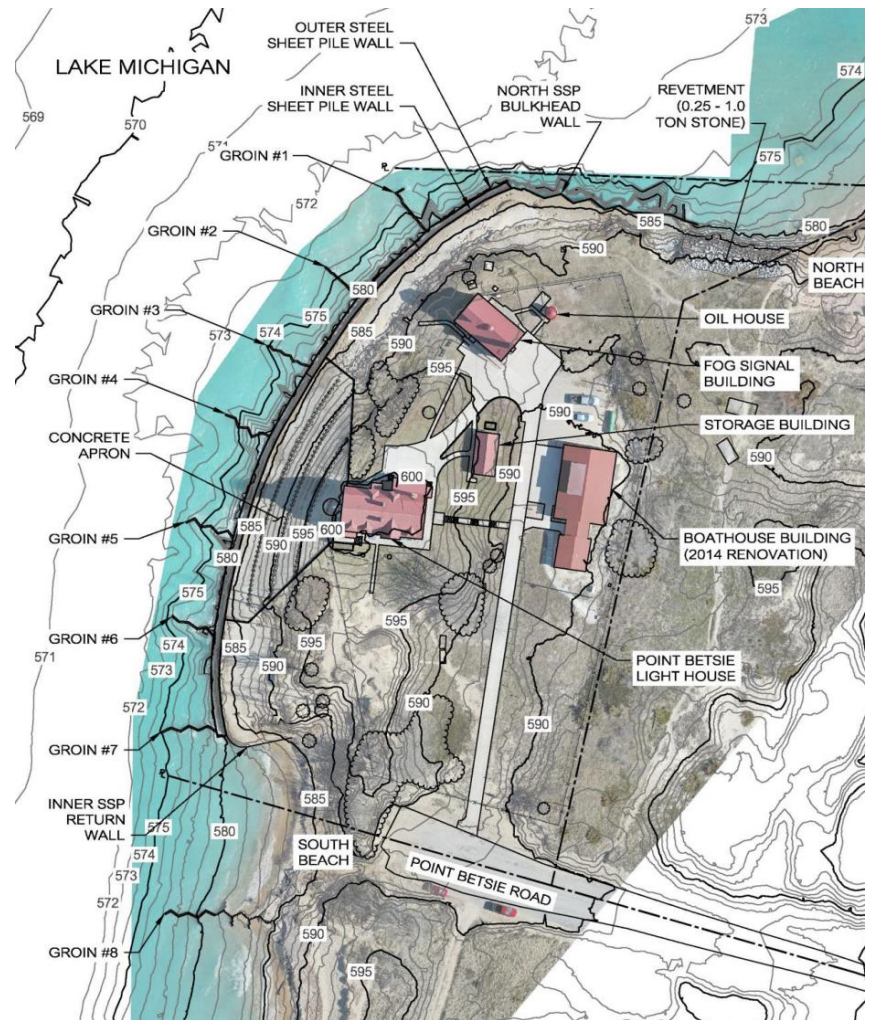


Groins Added 1944-1961



Present Day

Repairs to the concrete apron in the 1970s, last major work completed on SPS to date.



Current Deterioration

Interior Structure of Concrete Apron Visible



Extensive Damage to the Northern Steel Wall Visible

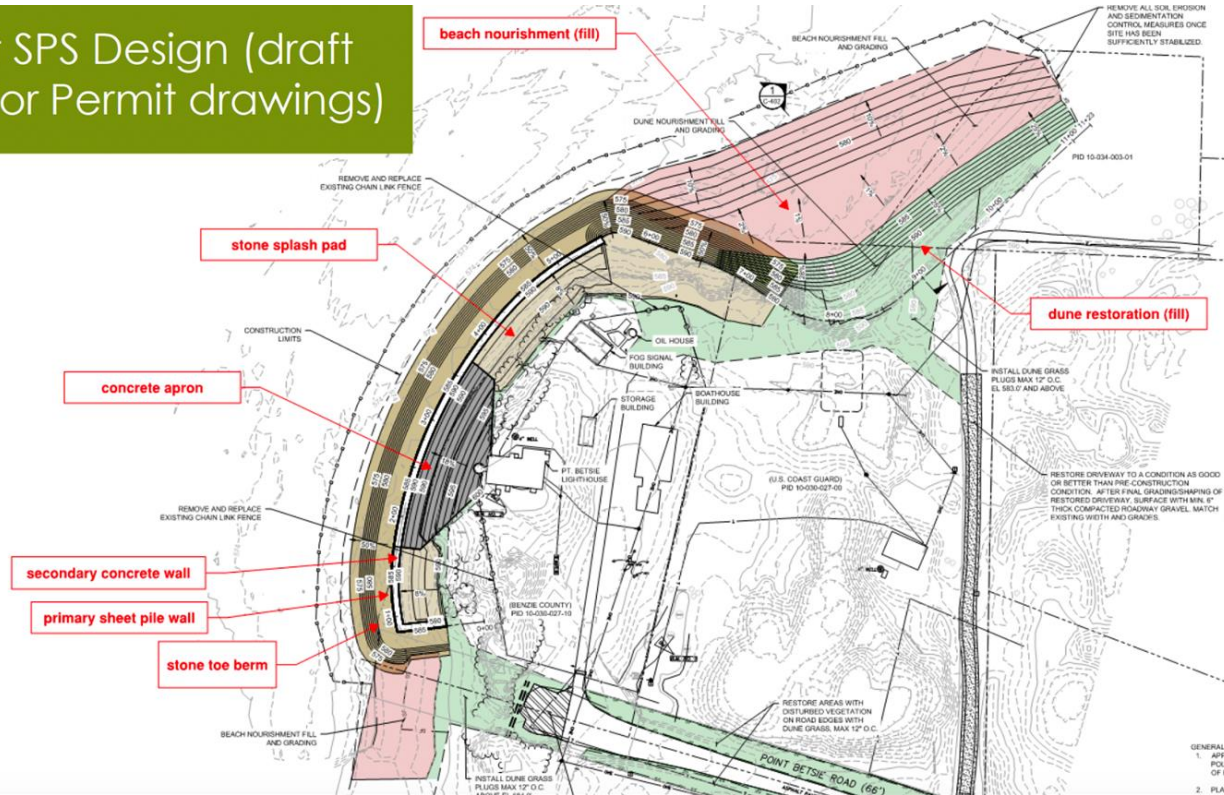


Current State of Erosion

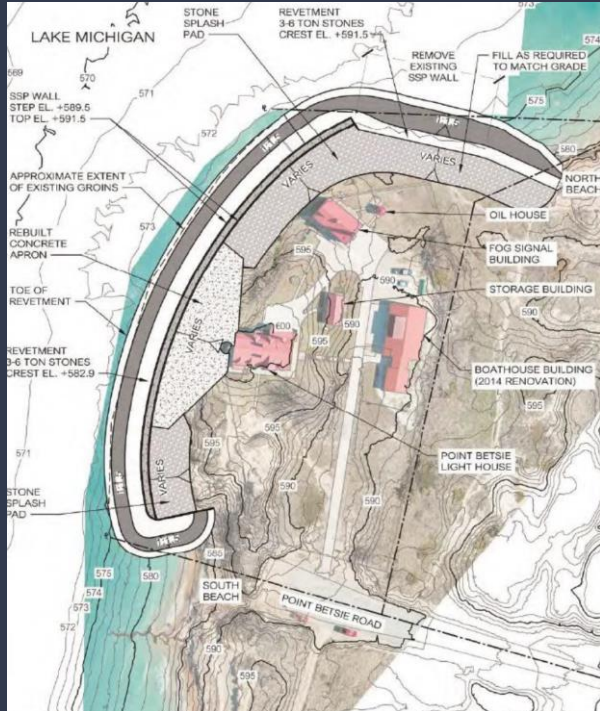


Current SPS Plan

Current SPS Design (draft
Issued for Permit drawings)

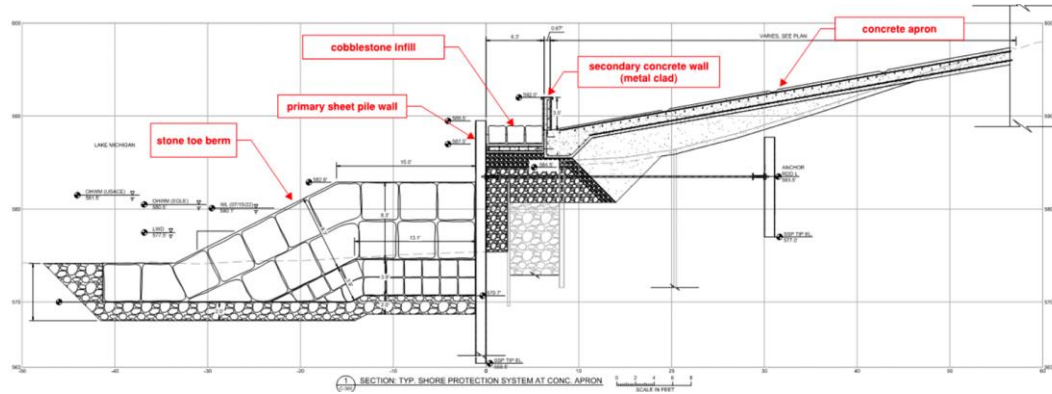
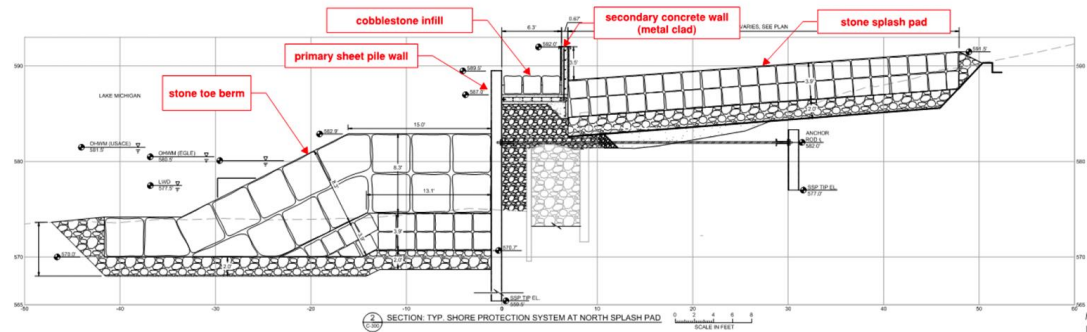


What this Plan Includes



- ❖ Removal of sheet pile groins
- ❖ Sheet pile wall and concrete beam with stone toe berm
- ❖ Concrete apron replacement
- ❖ Stone splash pad
- ❖ North stone revetment
- ❖ Beach and Dune Replenishment

Cross Sections



Side View

Existing and Proposed views from south beach



photo: 11/17/2021 (Quinn Evans)



Beach and Dune Replenishment



Where We Are Now



- ❖ Estimated cost of project: \$7-10 Million
- ❖ Funds Raised: \$6.9 Million
- ❖ Permits are still in process
- ❖ Unsuccessful bid of \$9.8 Million
- ❖ Will go out for bid again in 2024
- ❖ Estimated construction in 2025

Questions?

