

Haverhill Street: Dune Walkway Profile

Site Assessments: March 5, 2024, July 8, 2024, and May 23, 2005

Structure Conditions and Observations	
Road to Beach	385 ft
Boardwalk Length	308 ft
End of boardwalk to beach	77 ft
Walkway Width	8 ft
Boardwalk Material	<ul style="list-style-type: none"> Asphalt apron Pressure treated wood connected by galvanized cable
Attached pathways	1
Benches	4
Additional Features	<ul style="list-style-type: none"> Handicap parking spot nearby Seasonal Mobi Mat installed to extend wooden walkway over sand to beach
*Human-made pathways connected to the municipal walkway	



Ecological Conditions and Observations			
Community Types Present	Rare Species	Other Native Species of interest	Species of Concern
<ul style="list-style-type: none"> Beachgrass grassland 	<ul style="list-style-type: none"> Seaside goldenrod (<i>Solidago sempervirens</i>) 	<ul style="list-style-type: none"> Beachgrass (<i>Ammophila breviligulata</i>) Goldenrod (<i>Solidago sempervirens</i>) Beach pea (<i>Lathyrus japonicus</i>) 	<ul style="list-style-type: none"> Japanese knotweed (<i>Renoutria japonica</i>)^P Beach rose (<i>Rosa rugosa</i>)^W
P = prohibited species in NH, W = NH invasive watch list			



Walkway Entrance



Landward Side



Seaward Side

Walkway Observations

Landward Side of Dune

- The landward area to the south of the walkway is unvegetated (Figure 1). The area to the north of the walkway has recently planted beachgrass (as of May 2025)
- A walking path to homes connects to the municipal path perpendicularly and along the back side of the dune.
- An unvegetated area was observed to the north of the walkway (Figure 2).
- The vegetation to the north of the walkway is more sparse than to the south (Figure 3).



Figure 3. Vegetation to north of the walkway (right) is more sparse than south (left)

- There is one bench close to the entrance on the northside oriented parallel to walkway.

Dune Crest

- Former dune die-off area suspected on the dune crest where beachgrass is sparse, and the primary species present are goldenrod and beach pea.
- Then a second one located close to the end of the wooden portion of the walkway on the northside and oriented perpendicular to it. The area around the bench is unvegetated. (Figure 4).

Seaward Side of Dune

- There are two benches located near the beach entrance on the north and south sides and each bench is oriented parallel to path.
- The seaward end of the walkway is less vegetated and widens, creating a weak point for flooding during storms (Figure 5).



Figure 5. Wider less vegetated seaward end of walkway



Figure 1. south side of entrance is unvegetated



Figure 2. Unvegetated area to the north of walkway



Figure 4. Unvegetated area around bench

Potential Action Items

- Restore sand dune vegetation to create a narrower path on the seaward end of the walkway. Consider orienting the seaward end of the walkway away from the dominant wind and wave directions.
- Revegetate the landward area to the south of the walkway near the road with native dune species as this area is currently vulnerable to colonization by invasive species.
- Benches placed at an angle (~45°) generally appear to have less impact on the surrounding dune than benches placed perpendicular to the walkway. Consider positioning benches at a 45° angle to the walkway when practicable and revegetating the areas around them, other than directly in front.
- Allow the suspected former dune die-off area to revegetate. Consider treating the area with a lime and fertilizer (see die-off area planting suggestions).
- The orientation of the walking path to homes perpendicular to the municipal path, and along the back side of the dunes, is a good example of how to structure paths to homes with minimal impact to the dunes.

Resources

- GoBotany – Native Plant Trust: <https://gobotany.nativeplanttrust.org>
- MA Office of Coastal Zone Management Tips: [Basics of Building Beach Access Structures that Protect Dunes and Banks](#)
- NH Comprehensive Invasive Plant list: <https://www.agriculture.nh.gov/publications-forms/documents/nh-invasive-plant-list.pdf>
- NH Guide to Upland Invasive Species: <https://www.agriculture.nh.gov/publications-forms/documents/upland-invasive-species.pdf>
- NH Sea Grant - Dune Die-Off Factsheet (See Appendix IV)
- Planting Guide for Tidal Shoreline Erosion Management in New Hampshire (beach and dune sections): <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/tidal-erosion-planting-guide.pdf>
- UNH Extension resources on invasive species: <https://extension.unh.edu/natural-resources/forests-trees/invasive-species>