

New Hampshire Street: Dune Walkway Profile

Site Assessments: March 5, 2024 and July 25, 2024

Structure Conditions and Observations	
Road to Beach	239 ft
Boardwalk Length	NA
End of boardwalk to beach	NA
Walkway Width	10 ft
Boardwalk Material	NA – all sand
Attached pathways	3
Benches	2
Additional Features	<ul style="list-style-type: none"> • Emergency Access point • Wide enough for vehicular access. • A winter sacrificial dune is built on the beach side to provide storm surge and flood protection.
*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 	None observed on assessment dates	<ul style="list-style-type: none"> • Beachgrass (<i>Ammophila breviligulata</i>) • Seaside goldenrod (<i>Solidago sempervirens</i>) • Beach pea (<i>Lathyrus japonicus</i>) 	<ul style="list-style-type: none"> • Asiatic bittersweet (<i>Celastrus orbiculatus</i>)^P • Beach Rose (<i>Rosa rugosa</i>)^W • Shrub honeysuckle (<i>Lonicera species</i>)^P
P = prohibited species in NH; W = NH invasive watch list			



Walkway Entrance



Landward Side



Seaward Side

Walkway Observations

- No constructed walkway is present; the pathway consists entirely of sand.
- Multiple nonnative and/or invasive species are present at the entrance to the walkway near the road (Figure 2).
- Unvegetated, or sparsely vegetated areas, were observed north of the walkway with dead stems of beachgrass remaining in the sand, suggesting that these are areas of dune die-off. (Figures 1 and 3).
- Two benches are located close to the walkway about one-third down. The positioned opposite each other and oriented parallel to the path.
- A third benches are located close to beach but further into the dune requiring people to walk through the dunes to access them (Figure 4).
- Multiple walkways from the adjacent homes through the dunes have created additional unvegetated areas (Figures 5).
- Walkway is wider than most other access points and further widens on seaward end with a large unvegetated area. This area can serve as a weak point for flooding during storms (Figure 1).



Figure 1. Google aerial view of walkway



Figure 2. Nonnative and invasives near entrance



Figure 3. Areas of dune die-off north of walkway



Figure 4. Bench located inside of dune



Figure 5. Private walkway connecting to main walkway

Potential Action Items

- Delineate walking paths from homes. Consider routing the paths perpendicular to the walkway, along the edge of the dune close to the houses to limit dune impacts.
- Remove invasive species and revegetate with native dune species
- Erect temporary fencing (post and rope) to delineate a narrower walkway and allow vegetation to re-establish along the length of the walkway.
- Consider orienting the seaward end of the walkway away from the dominant wind and wave directions.
- Move benches closer to the primary walkway. Consider positioning benches at a 45o angle to the walkway when practicable and revegetating the areas around them, other than directly in front.
- In areas of suspected dune die-off, consider planting a diversity of sand dune species and/or treating the area with lime and fertilizer (see die-off area planting suggestions).

- Install a Mobi Mat or similar ADA-compliant beach access mat at the end of the walkway to improve accessibility. However, any installation should be coordinated with the Department of Public Works and Emergency Management to ensure continued access for emergency and municipal vehicles, as this location serves as a vehicle access point.

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 Guide to Upland Invasive Species: <https://www.agriculture.nh.gov/publications-forms/documents/upland-invasive-species.pdf>
- NH Comprehensive Invasive Plant list: <https://www.agriculture.nh.gov/publications-forms/documents/nh-invasive-plant-list.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>