

Nantasket Beach Reservation Master Plan

Hull, MA



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EXECUTIVE SUMMARY



Illustrative plan of the Master Plan recommendations.

In 2005, in conjunction with a project for seawall and beach accessway repairs at Nantasket Beach, the Massachusetts Department of Conservation and Recreation (DCR) initiated this Nantasket Beach Reservation Master Plan for the landside facilities of the Reservation.

The overarching goal for the Nantasket Beach Master Plan is to provide an enhanced natural and recreational experience at Nantasket Beach, with:

- attractive amenities to support a wide range of activities,
- safe and convenient access for pedestrians, cyclists, transit and ferry passengers and automobile users, and

- connections to adjacent bicycle paths and parking areas, as well as commercial and entertainment opportunities.

The Plan is designed to provide visitors with a “great day” at the Reservation from arrival to departure, while aiding the DCR in operating and maintaining the Reservation. The recommendations described throughout this Master Plan were developed to achieve that vision, and respond to DCR’s needs and concerns, as well as the concerns that were expressed by the community and the Citizens Advisory Committee throughout the Master Plan process.

The Plan recommendations are divided into the following categories:

- Landscaping and Green Space
- The Promenade/Boardwalk
- Open Space & Recreational Amenities
- Operations & Maintenance Area
- Vehicle & Pedestrian Access & Circulation
- Interpretive Opportunities
- Wayfinding & Signage
- Phasing

Key recommendations include:

- Nantasket Green - a major new park at the foot of Wharf Avenue, providing a welcoming

entrance to visitors and an important gathering spot.

- A continuous boardwalk with shade shelters and spaces for vendors, extending the length of the Reservation.
- A bicycle lane (adjacent to the boardwalk in most locations) extending the length of the Reservation and connecting to existing and proposed (by the Town of Hull) bicycle routes; along with new bicycle racks and opportunities for bicycle rental.
- Relocation of both the David A. Cook and Tivoli Bath Houses to more protected locations.
- Expanded playgrounds at both the David A. Cook and Mary Jeanette Murray Bath Houses.
- Improved plazas adjacent to the Bernie King Pavilion and Tivoli Bath House.
- New landscaping throughout the Reservation.
- A reconfigured Nantasket Avenue/Hull Shore Drive intersection to improve traffic flow and allow for an expanded and reorganized DCR operations and maintenance facility.
- Repairs to existing buildings.
- Potential reuse options for the Dormitory Building, Clocktower Building and Police Station.

1. INTRODUCTION

In 2005, in conjunction with a project for seawall and beach accessway repairs at Nantasket Beach, the Massachusetts Department of Conservation and Recreation (DCR) initiated this Nantasket Beach Reservation Master Plan process for the landside facilities of the Reservation.

Nantasket Beach has been a popular summer destination for city dwellers since the middle of the 19th century. The beach itself is an incredible resource, and is one of the busiest beaches near Boston. The water is consistently clean and the Reservation is within a one hour drive of much of the Boston Metropolitan Area.

While the Reservation includes a number of attractive historic structures, three bath houses, a comfort station and convenient parking, the overall Reservation has few additional amenities. Much of the land is taken up with surface parking lots. Existing seating and shade areas, as well as parking lots, are somewhat barren, with large expanses of concrete and minimal plantings to soften the environment.

The scope of this Master Plan included coordinating Reservation needs and community planning efforts to develop recommendations for:

- visitor amenities such as open space, bath houses and recreation areas
- parking, traffic and pedestrian access
- accessibility
- maintenance facilities
- the overall appearance of the Reservation.



Aerial view of Nantasket Beach Reservation looking north.

Public Process

This Master Plan was guided by a public process that included both a Citizens Advisory Committee (CAC) and a series of public meetings. The CAC provided significant input into the development of the Plan, reviewing and commenting on analysis and recommendations at six meetings over the course of the project. Several of these meetings were open to the public to elicit feedback on the Master Plan as it was developed.



Visitors enjoying a beautiful day at Nantasket Beach.

2. EXISTING CONDITIONS



Location of the Reservation and significant features within and adjacent to it.

The Nantasket Beach Reservation, located on the Atlantic Ocean on the northern shore of southeastern Hull, MA, is owned and operated by the DCR. The 26-acre Reservation encompasses approximately 1.3 miles of beachfront (6,800 linear feet), and includes the beach and adjacent visitor amenities, associated parking areas, and an operations and maintenance facility. It is bounded approximately by:

- Phipps Street to the north
- Hull Shore Drive and Nantasket Avenue (Route 228) to the west
- The driveway from Nantasket Avenue to the southern end of the DCR parking lot to the south
- The Atlantic Ocean to the east.

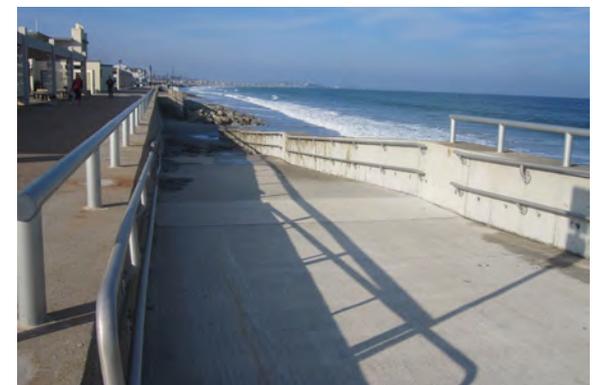
When the Master Plan was initiated, the Town of Hull had recently prepared the 2004 Nantasket Focus Area Study, and the Hull Redevelopment Authority (HRA) was moving forward with a plan for residential development on their parcels across Hull Shore Drive from the northern end of the Reservation. More recently, the Town has begun construction of streetscape improvements along Nantasket Avenue, between Water and Bay Streets, and is preparing a new plan for the HRA property and the adjacent commercial area.

The Beach & Promenade

The beach runs along a beautiful long and narrow strip of land (only 450 – 500 feet wide in some locations) that separates Nantasket Bay and the Atlantic Ocean. At low tide, the beach is a wide, expansive area that accommodates hundreds of beachgoers. At high tide much of the beach is underwater.

A beachfront promenade, located between the parking areas adjacent to the beach and the seawall (or revetment), runs along the entire length of the Reservation ocean frontage and provides visitors physical and visual access to the beach, as well as passive and active recreation opportunities. Along most of its length, the seawall provides beach users with seating along the promenade.

The beach is accessible from the promenade via concrete stairs and ramps in the seawall. New entry stairs, accessible ramps and railings were constructed to improve access as part of the seawall improvements during Spring 2007.



At left, from top: A busy beach at high tide; the beach at low tide; new ramps have improved beach accessibility.

Beachfront Buildings & Adjacent Amenities

Below are descriptions of buildings and adjacent amenities found within the Nantasket Beach Reservation. Recommendations for maintenance activities on individual buildings is included in the *Nantasket Beach Reservation Facilities Utilization Report*, prepared in 2014 by the The Louis Berger Group, Inc., as part of this Master Plan Project, and available under separate cover as Appendix A.

The buildings which are open to the public include three bath houses, one restroom facility and an open air pavilion. All three bath houses underwent renovation during Spring and Summer 2007.

Mary Jeanette Murray Bath House

The Mary Jeanette Murray Bath House (MJM) is the centerpiece of the Reservation. Built in 1930 in the Art Deco style, the MJM is one of the more architecturally significant buildings within the Reservation. The building has an area of approximately 3,640 square feet and currently is used as a bath house facility and community venue. It is in good condition overall, and was recently renovated.

The MJM Bath House is currently underutilized by the public as the main doors are locked when there are

no scheduled events. The wings of the building, which contain restrooms and changing rooms, are open to visitors regardless of event scheduling. Space within the bath house also is underutilized. There is a large, empty open space reserved for gatherings and a utility room in both wings that is either largely empty or used for minimal storage. The manager's office on the beach side of the building is partially used for cleaning supplies and first aid supplies (including an automated external defibrillator [AED]).

Historic Relevance

The Massachusetts Historic Commission (MHC) has determined that the building appears to be eligible for listing as a contributing structure within a potential Nantasket Beach Reservation Historic District. The building was constructed in year 1935 and reconstructed in the late 1990s.

Adjacent Amenities

Shade structures (pergolas) with benches are located on the north and south sides of the bath house. These are the primary shade structures for the Reservation and are heavily used by casual visitors and as gathering areas for large groups. A volleyball court is located directly north of the bath house and a small playground with play structure is located directly to the south. The playground was expanded in 2008.



From top: View of Mary Jeanette Murray Bath House from Nantasket Avenue; pergolas adjacent to the MJM Bath House provide a popular semi-shaded gathering area; the playground to the south of the bath house.



Bernie King Pavilion

Also on the oceanfront, south of the MJM Bath House, is the renovated Bernie King Pavilion. Originally built in the late nineteenth century, this 10,800 square foot open air facility is primarily used for seasonal concerts and dance events, and contains a privately-operated concession stand. The pavilion is a popular spot to picnic during summer months, as it provides concession, seating and shade areas, and allows views to the beach and ocean. On Sunday afternoons visitors come to dance to live music.

In 1999, elevated levels of lead were identified on the pavilion's exterior and interior. The facility subsequently underwent a \$940,000 complete reconstruction, which was completed in 2004.

Adjacent Amenities

An open water side plaza adjacent to the Bernie King Pavilion has picnic tables and benches. The lack of shade structures and plantings make this a somewhat inhospitable picnic area.



At left, from top: View of the Bernie King Pavilion from Nantasket Avenue; Sunday afternoon dancing at the Pavilion.

Tivoli Bath House

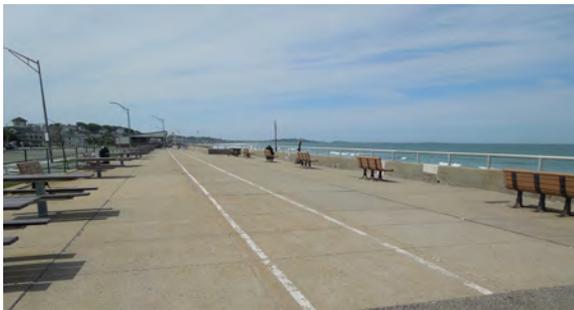
The Tivoli Bath House, located near the southern end of the Reservation, is a single story concrete structure built in 1981; it has an area of approximately 1,475 square feet and contains restroom and shower facilities. The building suffers from repeated storm and wave damage due to its unprotected locations so close to the ocean.

Adjacent Amenities

Just north of the Tivoli Bath House is a raised and widened portion of the promenade with a row of picnic tables and a row of benches with telescopes. The tables and benches are far apart and have no shade protection.

Comfort Station (205 Nantasket Avenue)

The Comfort Station, located on Nantasket Avenue adjacent to the Clock Tower Building, is across Nantasket Avenue from the beach and the Bernie King Pavilion. The structure has an area of approximately 1,500 square feet and is used as a public restroom facility. It is in seemingly good condition.



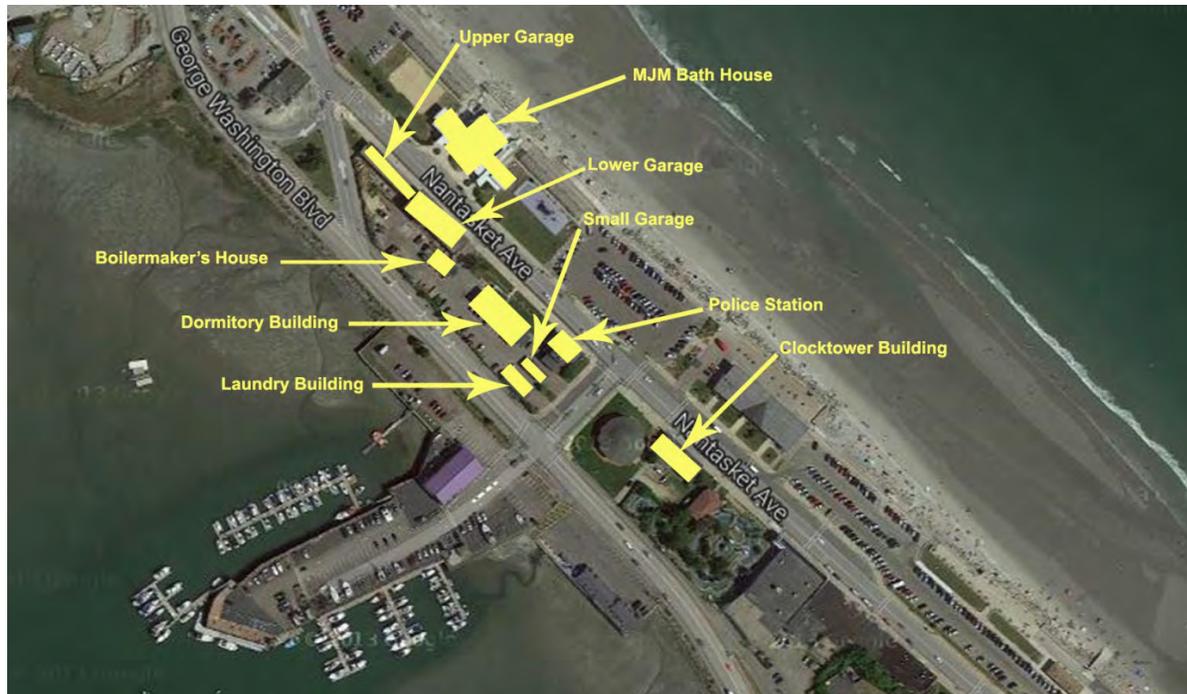
From top: The beach front plaza adjacent to the Bernie King Pavilion; view of the Tivoli Bath House from the south; view of the beach front plaza north of the Tivoli Bath House.



From top: View of the Comfort Station from Nantasket Avenue; view of the David A. Cook Comfort Station from Hull Shore Drive.

David A. Cook Comfort Station

The David A. Cook Comfort Station is located at the northern end of the Reservation on Hull Shore Drive. The single story red brick structure was built in 1953 and has an area of approximately 2,800 square feet. It contains public restroom and shower facilities and is in adequate condition. Additional space in the building is currently underutilized.



Location of the buildings within the Operations and Maintenance Facility, and the nearby Clocktower Building.

Landside Operations / Maintenance Buildings

Other DCR-owned buildings are found on the 3.5-acre block bounded by Wharf Avenue, Nantasket Avenue and George Washington Boulevard. The block is across Nantasket Avenue from the MJM Bath House. Some of these buildings date back to 1898. These buildings are used primarily by DCR operations and maintenance staff.

Dormitory Building

The two-story Dormitory Building has an area of approximately 9,000 square feet and is in overall poor condition. It was originally built in 1898 and used as a state police barracks. The main floor is currently used as the DCR's operations office building with some space available for dry and hazardous materials storage. The upper floor is largely vacant. During the summer of 2013 parking passes were sold from a fold-



View of the Dormitory Building from Nantasket Avenue.

ing table in front of the building and paperwork was filed in an office inside the building.

Historic Relevance

Although the MHC has not undertaken any formal survey or analysis of historical relevance for the Dormitory Building, it is likely that it would be considered eligible for listing as a contributing structure within a potential Nantasket Beach Reservation Historic District.

Police Station Building

The two-story former Police Station has an area of approximately 4,000 square feet and is in very poor condition. It was built in 1901 and used as a police station by the former Metropolitan District Commission (MDC). It is currently vacant and entry is prohibited due to high levels of asbestos. There is no full basement under the building, just a crawl space.

Major rehabilitation work would be necessary for this building to be re-used.

Historic Relevance

The MHC has determined that the building appears to be eligible for listing as a contributing structure within a potential Nantasket Beach Reservation Historic District.

Small Garage (Fire Safety Building)

The small wooden garage building, also known as the Fire Safety Building, has an area of approximately 1,000 square feet and is in overall poor condition. It is currently used for cold storage of parking supplies such as signs and posts.

Historic Relevance

The MHC has not undertaken a formal survey or analysis of historical relevance for the Small Garage.

Laundry Building

The Laundry Building is a World War II-era, single story structure of approximately 900 square feet. It is in overall adequate condition. It is currently used for dry storage of lumber and is sometimes referred to as the "wood storage room".

Historic Relevance

The MHC has not undertaken a formal survey or analysis of historical relevance for the Laundry Building. It was likely moved to the location and therefore would not be an original contributing element within a potential Nantasket Beach Reservation Historic District.



At right, from top: View of the Police Station Building from Nantasket Avenue; view of the Small Garage/Fire Safety Building from Wharf Avenue; view of the Laundry Building from Wharf Avenue.



Lower Garage

The Lower Garage (with attached carpenter shop), built in 1903, is a single story red brick structure composed of two attached building segments (a garage and carpenter shop) and is approximately 5,000 square feet. It is in overall good condition. Its major use is vehicle and maintenance storage but the facility also provides heated storage and houses the carpentry shop. The building is not prone to flooding, making it ideal for storage of sensitive goods such as toilet paper and waste oil. There are two bathroom facilities and a shower in the building.

All available floor space for vehicle and maintenance storage is used to its fullest extent. There is currently no pedestrian door to access the main part of the garage; only overhead garage doors. This decreases the energy efficiency of the building and causes unnecessary wear and tear to the motorized overhead door equipment.

Historic Relevance

The Lower Garage building is included in the MHC Inventory of Historic and Archaeological Assets of the

At left, from top: View of the Lower Garage from Nantasket Avenue and from the maintenance yard; view of the Upper Garage from the maintenance yard.

Commonwealth. MHC has also determined that the building appears to be eligible for listing as a contributing structure within a potential Nantasket Beach Reservation Historic District.

Upper Garage

The Upper Garage is a single story red brick structure built in 1900. It has an area of approximately 2,750 square feet and is in overall good condition. Its major use is vehicle and maintenance storage. Due to current space restrictions, the garage cannot accommodate a truck equipped with a plow and sander. The building is prone to flooding; during large storm events, up to 1.5 feet of water may be seen on the floor. This may be due to the overhead doors on the Nantasket Avenue side of the building that do not seal well with the concrete slab floor. There is no bathroom located in this building.

All available floor space for vehicle and maintenance storage is used to its fullest extent. The heated garage provides the best shelter for sensitive equipment. Desired improvements for this building include additional overhead doors on the George Washington Boulevard side of the building and expanded floor space.

.....

Around 2007, the building's interior was temporarily divided to provide leased space, and the section of the building fronting Nantasket Avenue was leased to an art studio ("Studio at the Beach"). DCR recently discontinued that lease and the entire building is once again used for vehicles and maintenance storage.

Historic Relevance

Although the MHC has not undertaken any formal survey or analysis of historical relevance for the Upper Garage Building, it is likely that it would be considered eligible for listing as a contributing structure within a potential Nantasket Beach Reservation Historic District. In addition, it is possible that the inventory form for the Lower Garage also includes this building. It was constructed around year 1900.

Boilermaker's House

The Boilermaker's House has an area of approximately 780 square feet and is in overall poor condition. It is currently used as a break room for lifeguards and as office space for the lifeguard supervisor. There is a functioning bathroom in the building.

Historic Relevance

The MHC has not undertaken a formal survey or analysis of historical relevance for the Boilermaker's House. It was likely moved to the current location and would not be an original contributing element within a potential Nantasket Beach Reservation Historic District.



From top: View of Upper Garage from Nantasket Avenue, with art studios opened to the sidewalk; view of the Boilermaker's House.



From top: View of the Paragon Carousel and Clocktower Buildings; closeup of the Clocktower Building; fun on the carousel.

Other Reservation Structures

The Clocktower Building and Paragon Park Carousel are located within the Reservation on the south side of Wharf Avenue.

Paragon Carousel

The Paragon Carousel was part of Paragon Park, an amusement park that opened in 1905. It is a local landmark and tourist attraction, moved to its current location following the 1984 closing of Paragon Park. The carousel is privately owned, although it is located on DCR land.

Clocktower Building

The Clocktower Building and the adjacent land for the carousel have been leased to the “Friends of Paragon Park”. The long-term lease expires in 2016. The basement currently houses the mechanical equipment for the carousel and a workshop where the carousel horses are maintained. The first floor houses a museum from Paragon Park and an ice cream parlor. The upstairs is used for storage but has no electricity, heat or plumbing.

The expiration of the lease in 2016 creates an opportunity for DCR to find alternative uses for the building.

Regardless of the uses on the first and second floor, DCR would like to allow the mechanical equipment for the carousel to remain in the basement and the carousel itself to remain on the adjacent land.

Historic Relevance

The building is included in the MHC’s Inventory of Historic and Archaeological Assets of the Commonwealth. MHC has also determined that the building appears to be eligible for listing as a contributing structure within a potential Nantasket Beach Reservation Historic District. It was constructed in 1903 as a restaurant and waiting area for the ferry.

Pedestrian & Vehicular Access

Contributing to the beach's appeal is its high level of pedestrian and vehicular accessibility from adjacent, largely residential areas, and its proximity to the Boston metropolitan area. Based on a 2006 Visitor Survey (see page 15), 91 percent of the visitors come by car. That number may have come down some since the introduction of the Greenbush Line Commuter Rail Service from Boston, but the reduction is likely small because of the lack of weekend service.

There are 26 crosswalks linking pedestrians to the Reservation beachfront (see page 19). The crosswalks are fairly evenly distributed along Nantasket Avenue and Hull Shore Drive at intersection and mid-block locations and connect to bath houses and other public facilities. Many of the crosswalks, however, are not at stop signs, limiting the degree to which pedestrians are protected.

Sidewalks along both sides of Nantasket Avenue in the Reservation are generally in good condition. Sidewalks on the western side of Hull Shore Drive (abutting vacant Hull Redevelopment Authority property) are deteriorating and in need of improvement. The sidewalk on the eastern side of Hull Shore Drive in this location was recently reconstructed.

Transit

Transit access to the Reservation is somewhat limited. Bus Route 714 runs from Pemberton Point to Hingham Center, with stops on Nantasket Avenue. It connects to the Greenbush Commuter Rail Line at Nantasket Junction; however, there is no commuter rail service on weekends. The bus provides access to the ferry terminal at Pemberton Point, which has ferry service from Long Wharf in Boston.

The 220 bus route connects the Quincy Center Massachusetts Bay Transportation Authority (MBTA) station to Nantasket Junction. A passenger could take the MBTA Red Line or Old Colony Commuter Rail to Quincy Center, then take the 220 bus to Nantasket Junction and transfer to the 714 bus to Nantasket Beach, but this three-seat journey would be lengthy, and difficult to coordinate.

Bicycles

Bicycle racks are located in several locations throughout the Reservation. The Town of Hull's Bicycle Plan was adopted in 2007 and proposes an extensive network of bike routes throughout the Town (see illustration on page 14); most of the plan has not been implemented to date. An existing bike path along the southwest side of George Washington Boulevard

connects to Hingham and there are plans to provide signage to the path during 2014. The Town also intends to stripe bike lanes on Wharf Avenue to connect cyclists from George Washington Avenue to the beach in 2014.

Parking

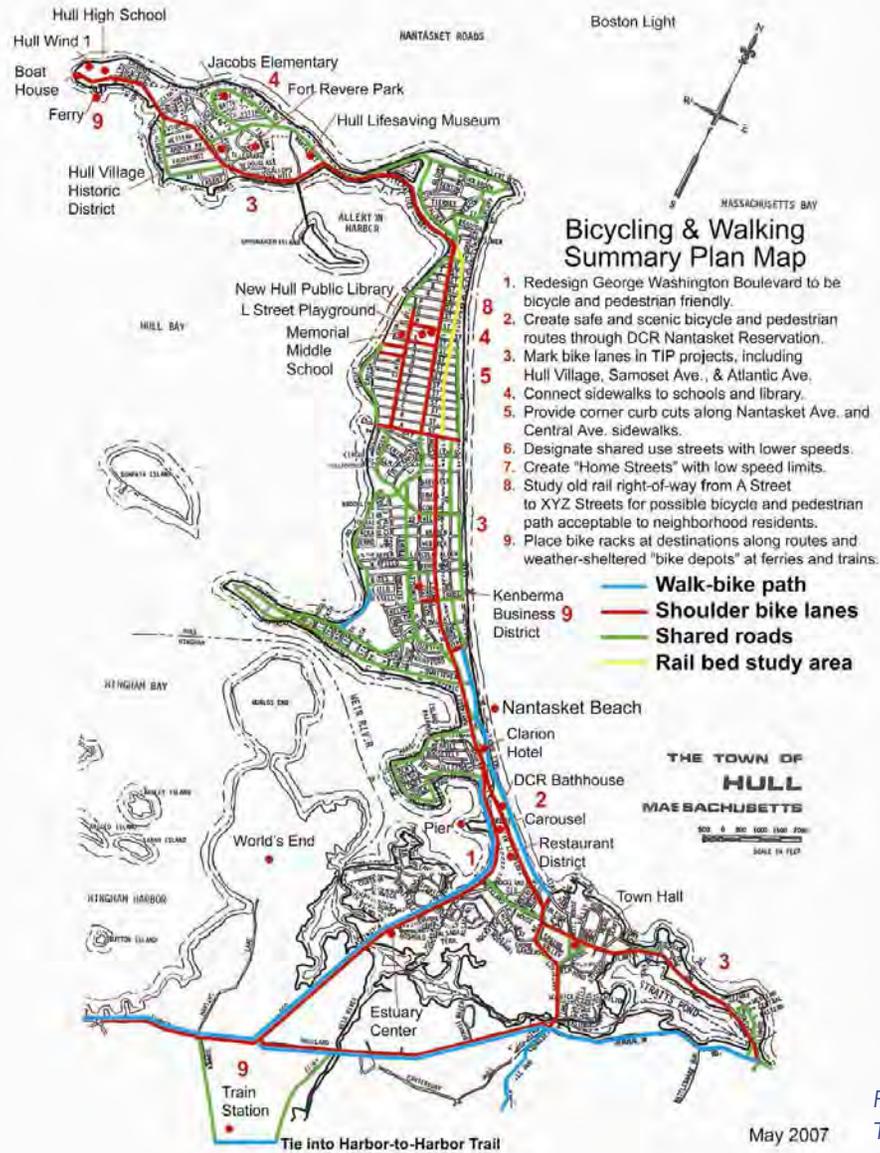
There are approximately 1,405 existing public parking spaces within the Reservation, including both on and off-street parking (see aerial photo on P. 3).

Most of the surface parking areas are adjacent to the beachfront, with the highest concentration of public parking found at the southern end of the Reservation. Two large overflow lots are located on George Washington Boulevard near the southern end of the Reservation.

These lots are separated from Nantasket Avenue by a large condominium development (Horizons Condominiums). Pursuant to a Massachusetts Public Waterfront Act Chapter 91 License, a path adjacent to the north edge of the Horizons Condominiums parking lot was constructed to provide a more direct link from the DCR parking lots on George Washington Boulevard to Nantasket Avenue and the beach; this path would increase the attractiveness of these underutilized lots. The path runs from Nantasket Avenue,



From top: Existing promenade and parking lots have minimal amenities; view of skating rink in the overflow lot on George Washington Boulevard.



Proposed route map from the Town of Hull's 2007 Bicycle Plan.

across from the elevated picnic area south of the Bernie King Pavilion, to within approximately 50-75 feet of George Washington Boulevard. The final segment of the path would need to cross private property. The DCR continues to negotiate with the property owner regarding the lease or acquisition of the necessary right of way.

Most of the parking lots are to the south of the MJM Bath House and most of the on-street parking spaces are to the north.

User Survey

An informal visitor survey was conducted to gain a better understanding of visitors' use and impressions of the Reservation. The responses provided valuable background information for development of the Master Plan.

A total of 101 surveys were conducted on Monday July 24, Sunday July 30, and Wednesday August 16, 2006. Although a few of the comments regarding facilities are out of date, the majority of the responses are still relevant. The responses are summarized below.

Visitors

Almost 90 percent of the visitors surveyed were from outside of Hull. It is assumed that many Hull residents use the Town portion of the beach, rather than the DCR portion of the beach. Respondents came from areas west and south of Hull, from up to 40 miles away.

91 percent of respondents came to the beach by car. This is consistent with the finding that most of the people on the DCR beach are not from Hull (transit connections to the beach were very limited – the Greenbush Line did not reopen until October 2007). Seven percent of respondents walked (Hull residents) and two percent drove a motorcycle.

Young crowds (13-25 years of age) tended to congregate at the southern end of the beach near the Tivoli Bath House, whereas families (adults with children under 18 years of age) tended to congregate at the northern end of the beach near the Cook Bath House. Approximately 25 percent of the respondents came with children under 18 years old.

Beach Facilities, Maintenance & Security

Overall, beach users had relatively positive responses regarding DCR's operation of the beach and the conditions at the Reservation. Concerns about the cleanliness of the bath houses were mentioned by some.

Beach Experience

72 percent of the respondents reported swimming. 28 percent said they had not been in the water, but many of these respondents said they would be going in shortly.

Beach Access

76 percent of the respondents thought there were enough beach access points. Many commented that existing access through the seawall would be adequate if ramps and stairs were improved, repaired, and cleared of large revetment boulders. Subsequent to the survey, the ramps and stairs were improved, and new ramps were added, as part of the seawall improvements. The ramps now meet ADA accessibility standards.

80 percent of respondents thought there was an adequate number of crosswalks on Nantasket Avenue and Hull Shore Drive.

Parking

Parking was often described as being convenient. 66 percent gave ease of parking either the highest or second highest rating. Respondents on the northern half of the beach reported more parking difficulty than those to the south. The most often cited problems with parking were “high prices” and lack of parking in lots near the Mary Jeanette Murray Bath House. 64 percent of respondents said they would not consider using a remote parking lot with shuttle service, even if it meant more green space within the Reservation.

Attraction to Local Restaurants & Shops

67 percent of the respondents said they had been or planned to go to a restaurant, shop, museum or other business in town while at the beach. A third of the respondents who gave improvement ideas for the Reservation wanted more food related facilities (more beach vendors, more convenient food).

Beach Replenishment

66 percent of the respondents said they would support beach replenishment with sand of another color. 74 percent of the respondents said they would like a wider beach at high tide.

Suggestions for Additional Amenities

Respondents identified the need for the following additional amenities:

- Bath houses
- Shower related facilities
- Water fountains
- Park areas/picnic areas with benches
- Umbrella/chair rentals
- Recreational facilities
- Convenient food related facilities
- Trash cans
- Shops.



The arcades across Nantasket Avenue from the Tivoli Bath House and Bernie King Pavilion.

3. GOALS

The overarching goal for the Nantasket Beach Master Plan is to provide an enhanced natural and recreational experience at Nantasket Beach, with:

- attractive amenities to support a wide range of activities
- safe and convenient access for pedestrians, cyclists, transit and ferry passengers and automobile users
- connections to adjacent bicycle paths and parking areas, as well as commercial and entertainment opportunities.

In order to focus the Master Planning process, the following master plan goals, organized around four focus areas, were developed.

The Beach

- Provide and improve amenities on the beach (such as bath houses, shade structures, a widened promenade, space for vendors, bike paths, and other amenities as determined appropriate).
- Improve public access to beach for people of all ages, abilities, and backgrounds, including: bicycle access, accommodation of public transportation, and improved parking and roadway design.

- Create a gateway to Nantasket Beach.
- Foster local commerce by making connections between the beach and local businesses and encouraging a variety of uses that benefit from the beach setting.
- Interpret the historical context and natural resource systems of the beach and the region.
- Preserve the essential character-defining features of the landscape while adapting the beach for contemporary uses.
- Consider year-round uses along the beach.
- Link Nantasket Pier to the Reservation.

Operations

- Establish an annual beach users meeting as a means of coordinating activities, sharing ideas and voicing concerns.
- Promote and accommodate regional events and programs on the beach.
- Ensure beach maintenance operations are adequately staffed and equipped.
- Maintain beach stability and sustainability.

- Ensure public safety by providing lifeguards and maintaining a clean beach.

Access & Circulation

- Provide safe and continuous bicycle, skating, and pedestrian access along the entire length of the beach promenade.
- Separate footpaths and bike paths in order to ensure safety and ease of movement for all users.
- Provide a comfortable, safe, and secure experience for visitors by reducing congestion and minimizing conflicts on the promenade, streets, and bike paths.
- Establish easier and safer pedestrian movement from the beach to local businesses and remote parking, and in general promote pedestrian friendliness.
- Improve traffic flow and access to parking, including use of signage to direct both pedestrians and vehicles.
- Increase public transportation to Nantasket Beach and create connections to existing and planned transit (i.e., a bicycle connection to the MBTA rail station and potential future ferry operations).

-
- Increase the use of the rear lot along George Washington Boulevard and open the pedestrian right-of-way along the Horizons Condominiums.
 - Improved public transportation including a ferry.

The Built Environment

- Ensure that all building uses on DCR property are public in nature .
- Make efficient use of DCR's existing buildings and operations area.
- Rehabilitate buildings consistent with programming for Nantasket Beach and maintenance operations .
- Provide multi-use public facilities and spaces that are flexible, well-designed, and easily maintained.

The Natural Landscape

- Diversify plant communities in the Nantasket beach area, to the degree that climate permits, for a healthier and more attractive landscape.
- Establish a sustainable and maintainable landscape.

4. RELATED STUDIES

The results of two studies conducted simultaneously with the final phase of this Master Plan are summarized below and incorporated into this Master Plan. The complete final reports are available under separate cover:

- *Nantasket Beach Reservation Traffic Analysis Report*, The Louis Berger Group, Inc. 2014.
- *Nantasket Beach Reservation Facilities Utilization Report*, The Louis Berger Group, Inc. 2014.

Traffic Analysis Report

This traffic study assessed traffic flow and pedestrian/bicycle interaction at and around the Nantasket Beach Reservation during the summer months and recommended modifications to improve circulation, as appropriate. Traffic, pedestrian, and bicycle flow were counted in 2006 and analyzed for year 2013 (existing conditions) and forecasted year 2033.

Pedestrian Crossings

The pedestrian counts at crosswalks within the study area were high, with a total of 996 pedestrians using crosswalks during the 12 pm to 1 pm hour on a Saturday. The most heavily used crosswalk was number 17 with 151 pedestrians; the crosswalk is located on



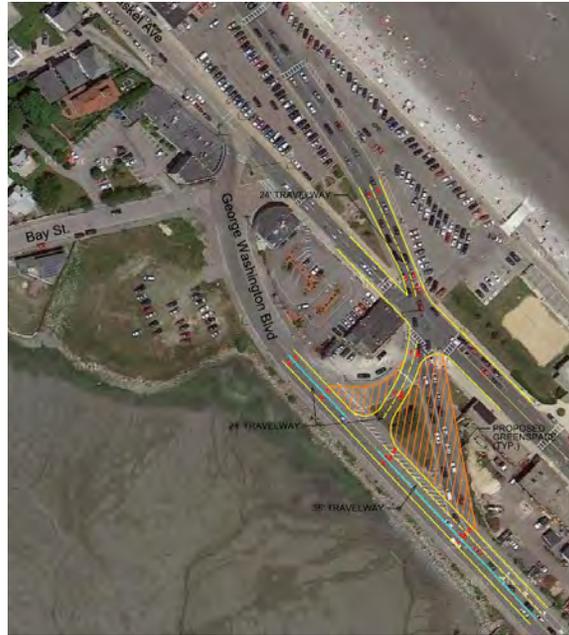
Crosswalk locations (does not include crosswalks 22-26 to the north).

Hull Shore Drive near a number of restaurants (i.e., Hull's Kitchen, Dry Dock, Daddy's Dogs). The report included the following recommendations:

- Crosswalk 4 was utilized by only 11 pedestrians during the Saturday peak hour. This crosswalk does not have a clear destination from the

beach and could be removed to reduce the number of locations where vehicles yield to pedestrians.

- Crosswalks 8 and 9, which both lead to the arcade buildings, could be combined. A total of 175 pedestrians would be expected to use this



From left: Roadway realignment alternatives A, B and C.

proposed crossing during the Saturday peak hour. A push-button activated flashing beacon and warning sign would be appropriate at this combined location.

- Crosswalks 17 to 18 may also be viable candidates for a pedestrian signal. These crosswalks service 151 and 118 pedestrians during the peak hour, respectively. Creating a push-button activated flashing beacon and warning sign at one or both of these locations would encourage safe crossing over the two-lane Hull Shore Drive

and allow larger groups of people to gather and cross at the same time.

- All crosswalks at intersections should remain. Drivers generally proceed more cautiously at intersections creating a safer environment for pedestrians when compared to mid-block crosswalks.

Traffic Alternatives For Improvements to the Maintenance Yard

Aside from the existing conditions, two alternatives were examined to re-configure traffic in the vicinity of the yard and thereby increase yard space. Specifically, the traffic alternatives being considered at the intersections of Hull Shore Drive, Nantasket Avenue and George Washington Boulevard are as follows:

- **Alternative A:** The existing condition remains. (Estimated Cost: \$0)

- **Alternative B:** Realignment of the cut-through portion of roadway from George Washington Boulevard westbound. (Estimated Cost: \$320,000)
- **Alternative C:** Relocation of the cut-through portion of roadway from George Washington Boulevard westbound to the current intersection of George Washington Boulevard and Nantasket Avenue. The southeastern terminus of Hull Shore Drive is also shifted to align with this proposed intersection. (Estimated Cost: \$1,000,000).

From a traffic capacity perspective all three of the intersection alternatives will operate at level of service (LOS) "B" during the current year and at LOS "C" in the year 2033. LOS "B" is classified as reasonably free flow. LOS "C" is classified as stable flow and also considered a passing level of service.

Alternative C will provide the largest amount of yard space for maintenance operations. The decision to move forward with any of the alternatives will need to consider factors such as property ownership, concerns of local residents, and long-term plans for the community.

The Town of Hull is currently in the process of evaluating changes to the existing roadway system. Potential changes include making both Nantasket Avenue and

Hull Shore Drive two-way, and increasing the number of through streets between them to improve connections and create smaller, more developable blocks on the Hull Redevelopment Authority owned parcels between Water and Phipps Streets. Alternative B is most compatible with these changes and is therefore included in the Master Plan drawings.

Other Findings

In addition to revising the roadway alignment, the report includes the following recommendations:

- The intersection of Nantasket Avenue, Phipps Street and Mountford Road is currently operating at a failing level of service (LOS) during the Saturday peak hour. Recommended mitigation for this location is to improve the signing system for parking at DCR lots. In recent years DCR has utilized four variable message signs (VMS) at select parking lots to alert drivers when lots are full. Adding VMS boards at other parking lot entrances and updating the signs regularly would allow drivers to be aware of full lots and empty spaces allowing them to spend less time circulating.
- All other stop-controlled locations are currently operating at LOS "B" or better.

- All signalized intersections analyzed are currently operating at a LOS "C" or better during the Saturday peak hour. If signalized intersections are found to be a bottleneck in future years, updating the fixed signal timing may decrease delays. Actuated signal timing systems are another option if an acceptable LOS is not achieved in the field. Actuated signal timing allows sensors to notify the controller of waiting vehicles to decrease unnecessary stop delay.

Facilities Utilization Report

This report assessed the maintenance operations and associated facilities at the Nantasket Beach Reservation. Several options were developed to improve operations on the site and at the same time allow for vacating some of the buildings for other potential uses. Options were developed jointly with DCR staff.

Maintenance Operations

Maintenance operations at the Reservation are ongoing year-round to keep the facility functioning as expected for public use. The busiest time of year is during the summer months from Memorial Day to Labor Day but the area is open year-round from dawn

to dusk. During the winter months the staff is responsible for snow removal. Storm management is necessary year-round. The maintenance crews are currently using all garage and yard space available and are in need of additional covered/heated storage for critical equipment.

Buildings

There are a number of buildings on site that are not used to capacity. The Dormitory Building is currently utilized by DCR as office space. The Clocktower Building is leased out and the Police Station is closed due to asbestos and major water damage. Maintenance of the buildings on site is a major factor in any future planning. Many buildings are 100+ years old and need substantial repairs and upgrades as summarized by DCR maintenance staff and documented in the report.

Aside from long-term layout changes, several repairs and modifications to the facilities are needed, as summarized below:

1. Dormitory Building

- Inspection and possible repairs to the roof
- Assessment of structural integrity of the building
- Re-pointing of all brick work

- Inspection and repair of the brick foundation and support columns due to salt damage
- Extensive gutter and fascia replacement on both porches
- Relocation of the generator from the basement of the Dormitory Building to an area protected from flooding.

2. Laundry Building (if not planned to be demolished)

- Asbestos abatement (if not completed previously)
- Inspection and repair of rotten sills
- Replacement of windows.

3. Small Garage/Fire Safety Building (if not planned to be demolished)

- Inspection and repair of rotten sills
- Replacement of doors and windows.

4. Lower Garage

- Inspection and possible repairs to the roof
- Repair of overhanging eaves
- Re-pointing of all brick work
- Repair or replacement of all windows

- Insulation of the structure
- Installation of a pedestrian-sized door to access the building.

5. Upper Garage

- Inspection and possible repairs to the roof
- Repair of eve supports and gutters
- Re-pointing of all brick work.

6. Clocktower Building

- Testing of the second floor for lead and asbestos
- Complete remodeling of both floors
- Possible upgrade of the heating, cooling, and electrical systems
- Roof repairs.

7. Police Station

- Major rehabilitation work.

8. Boilermaker's House (if not planned to be demolished)

- Inspection and repair of rotten sills
- Inspection and repair of the foundation.

Description	Option 1: Full Build-out of Upper Garage	Option 2: Partial Build-out of Upper Garage	Option 3: No Build-out of Upper Garage	Option 4: No Action
Traffic Alternative	B or C	B or C	A	A
Dormitory Building	Lease	Lease	Lease	Office Space
Clocktower Building	Lease	Lease	Lease	Lease
Police Station	Lease/Office Space	Office Space	Office Space	Lease
Yard Area	On site	On site	Parking Lot 8	On site
Small Garage	Demolish/Relocate	Demolish/Relocate	Demolish/Relocate	Demolish/Relocate
Boilermaker's House	Demolish/Relocate	Demolish/Relocate	Demolish/Relocate	Demolish/Relocate
Laundry Building	Demolish/Relocate	Demolish/Relocate	Demolish/Relocate	Demolish/Relocate
Upper Garage	10' expansion, 2nd story addition	10' expansion	No change	No change
Lower Garage	No change	No change	No change	No change
Additional Covered Storage	None	None	3-bay prefabricated garage	3-bay prefabricated garage

Table 1: Summary of Facilities Layout Options

Facilities Layout Options

Four layout options were considered to better utilize the yard area and consolidate DCR operations to meet the anticipated needs of DCR staff. Facilities Layout Options 1 and 2 include modifying traffic along George Washington Boulevard (i.e., Traffic Alternatives B or C) to create additional yard space for maintenance activities. Facilities Layout Options 3 and 4 are based on the No-build Traffic Alternative A.

Key features of each option are summarized in Table 1. Each option may be modified using elements from

other options. Under each option at least two buildings would be available for lease to an outside party whose purpose and goals match that of the DCR mission at the Reservation. In all four options the Boilermaker's House, Small Garage and Laundry Building are recommended for demolition or relocation to increase yard area.

Facilities Layout Option 2 – Partial Build-out of Upper Garage

Layout Option 2 - because it provides an improved operations area, keeps all maintenance facilities on

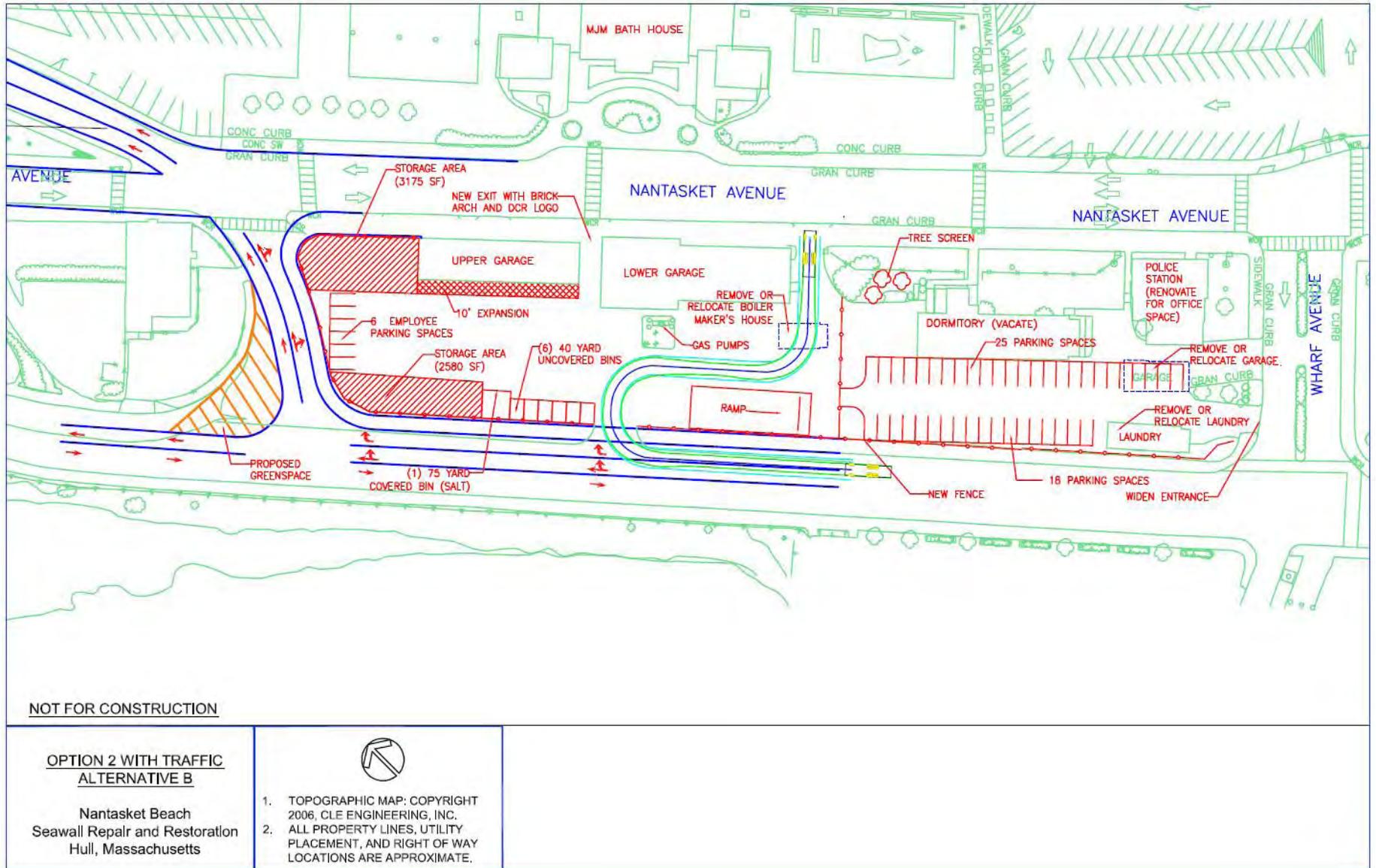
site, is consistent with Traffic Alternative B, and does not require adding a second floor to the Upper Garage - was selected as the option to be incorporated into the Master Plan illustrations in Chapter 5.

Office Buildings and Uses

Option 2 utilizes the Police Station for office space. While the Police Station needs extensive repairs to serve this purpose, DCR staff agrees that the central location and ease of access make it an appropriate 'face' of DCR's operations on the Reservation. The building is also slightly removed from the brick garages and would aid in separating the public from the maintenance operations and equipment. The Dormitory Building would be available for lease to a user and use that aligns with DCR's mission. The Clocktower Building would be available for a similar lease as well. The Small Garage, Boilermaker's House, and Laundry Building are recommended for removal or relocation to increase available yard space.

Maintenance Buildings

Due to the overall good condition of the brick Upper and Lower Garages, Option 2 suggests reuse of both with some improvements. Option 2 expands the back wall of the Upper Garage by 10 feet to the south (towards George Washington Boulevard) for additional storage. Garage doors should be included on the addition to create a convenient 'pull-through' area for



Facilities Layout Option 2

the operators. This would eliminate the need for drivers to stop traffic on Nantasket Avenue to either back into or out of the garage. The Lower Garage should be improved as suggested earlier in this chapter. A brick arch between the two maintenance garages with the DCR logo is recommended to maintain the architectural intent of the original design.

Yard Area

Due to the current restrictions of yard space it is recommended that the dumpster and ramp be relocated to provide easier access during pickup and to avoid the gas pumps. Additional yard space under Alternatives B and C can accommodate a truck entrance to the yard from Washington Boulevard. Trucks would exit to Nantasket Avenue.

To improve the available area in the maintenance yard, the Boilermaker's House, Small Garage, and Laundry Building have been removed or relocated. 43 parking spaces are located near the Dormitory Building.

For outside storage of materials and equipment, various locations around the site have been strategically chosen to leave sufficient open space for vehicle movement. One covered salt bin (capacity of 75 cubic yards) and six open bins (capacity of 40 cubic yards each) are located on the site for storage of materials throughout the year.

Six employee parking spaces are located at the north end of the site. Partial staff parking would be moved to Parking Lot 7 during the summer months.

For Traffic Alternative B, the entrance from Wharf Avenue should be reconfigured to increase the area for turning movements of large trucks. A new fence would surround the site to provide a visual screen.

Traffic Alternatives

Layout Option 2 under Traffic Alternative B increases the yard area substantially and "squares off" the yard.

Under Traffic Alternative C, even more yard area would be available. In addition to a truck entrance from Washington Boulevard and additional parking spaces near the Dormitory Building, the storage bins under Traffic Alternative C are moved to the northern side of the yard. For Traffic Alternative C, the number of employee parking spaces within the yard area is increased to 10 (compared to 6 spaces under Traffic Alternative B). Traffic Alternative C also allows for some future expansion of the maintenance area, if needed.

Considerations for All Future Operations Area Options

A number of building and yard maintenance improvements discussed in the preceding sections are recommended for near-term consideration. The

buildings on site are in need of fairly major repairs just to maintain the deteriorated conditions expected of buildings over 100 years old. Specifically, recommended improvements include the following:

- Build a temporary cover for the salt storage bin to meet environmental run-off regulations until a permanent structure can be constructed.
- Demolish or relocate the Laundry Building, Small Garage/Fire Safety Building, and/or Boilermaker's House to allow for additional yard space and to improve circulation.
- Re-route the current garage waste disposal drains to connect to the town sewer line under Nantasket Avenue.
- Relocate the generator from the basement of the Dormitory Building to an area protected from flooding.
- Investigate options for a covered dumpster to reduce odors.
- Work with local public transportation services to coordinate the timing of routes to allow for more convenient access to the Reservation.

Uses of Available Buildings

Under all facilities layout options, at least two buildings are available to be leased to interested parties that would help to maintain the buildings and act within the intent of DCR's mission statement. If no satisfactory lease candidates are selected for a building, DCR could use the buildings for internal programs. Possible options for either of these scenarios were discussed for each building by the DCR team and consultants. The resulting options are described in the following sections and are expected to be expanded upon in years to come.

Maintained and Operated by DCR

Maintaining the historic value and essence of all buildings on site is a priority of DCR. If maintenance and upkeep of selected buildings is not agreed to in a lease agreement, the repair and remodeling responsibility would fall to DCR. In this circumstance, appropriate uses for each building would need to be found.

The Dormitory Building could be used by DCR as a headquarters for the youth program Student Conservation Association (SCA). The first floor would be used as office space and the second floor would serve as rooming for students visiting the site to participate in the SCA program.

The Police Station could be used by DCR as a Visitor's

Center. It is centrally located and has extensive historical documentation that would be of interest to the public.

The Clocktower Building could be used by DCR for a variety of activities. The current ice cream stand within the building would make a convenient permit sales location. The adjacent first floor area could serve as a visitor's center, office space, storage space, and/or a museum. The second floor would be better suited for office space or storage space.

Leased by DCR

The project team agreed that the first step in leasing any of the spaces abandoned is to create a public forum to collect ideas on how visitors would like to see the spaces used in the future. All proposals submitted would be required to account for historic preservation and maintenance tasks while fitting within the DCR mission statement. Possible uses that the team felt were appropriate for the area and follow the mission statement have been documented for each building. The intent was only to brainstorm and inspire ideas, not to limit the proposals that are received.

The team felt that the Dormitory Building may be a suitable hostel for international youths visiting the area. The Clocktower Building is historically relevant so use as a museum was suggested to complement the existing carousel. The Police Station building is

also historically relevant and could be used as a museum or perhaps as a studio for artists.

A few relevant details pertaining to the possible leasing of these sites for interested parties are:

- Consideration should be given to the adjacent maintenance facility with respect to visitors and lessors.
- Flood insurance would be required for leased occupants. The area is classified as a "high velocity" zone by FEMA and flooding is common.
- Retail uses have historically struggled in the region.

5. THE PLAN

As described in Chapter 2, creating a more attractive, greener environment, with better access to the beach and Reservation, and more amenities for visitors, were key goals of this Master Plan. The Plan is designed to provide visitors with a great day at the Reservation from arrival to departure, while aiding the DCR in operating and maintaining the Reservation. The recommendations described below were developed to achieve that vision, and respond to DCR's needs and concerns, as well as the concerns that were expressed by the community and the Citizens Advisory Committee throughout the Master Plan process.

As described in the introduction, this Master Plan was developed in conjunction with the Nantasket Beach Seawall Repair Project. Recommendations (both design and phasing) have been coordinated with the remaining unfinished elements of that Project, including:

- Installation of a stone revetment to stabilize the existing seawall segment from the Mary Jeanette Murray Bath House north to Water Street.
- Rehabilitation of the revetment at the northern end of the Reservation, near the David Cook Comfort Station.

Recommendations are divided into the following categories:

- Landscaping and Green Space
- The Promenade/Boardwalk



Illustrative Master Plan (see enlargement on pages 28-29)

- Open Space and Recreational Amenities
- Operations and Maintenance Area
- Access and Circulation
- Interpretive Opportunities
- Wayfinding and Signage

All facilities should be designed to meet ADA accessibility standards, and layouts for new facilities (including the boardwalk, bikepath and parking) were developed to accommodate those requirements. Specific modifications to existing facilities are noted in the text.

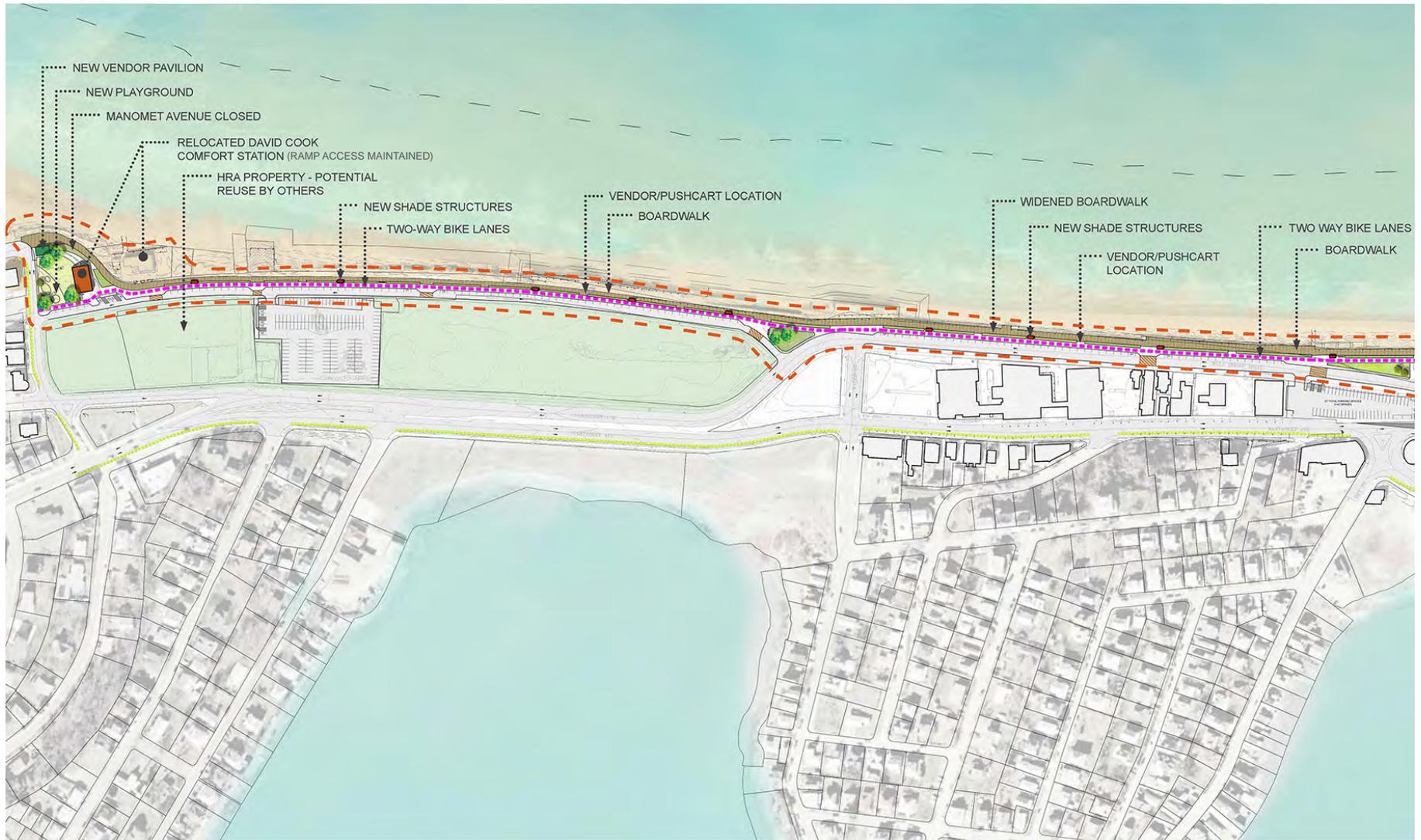
Landscaping & Green Space

A key concern expressed during this project was the overall lack of greenspace throughout the Reservation.

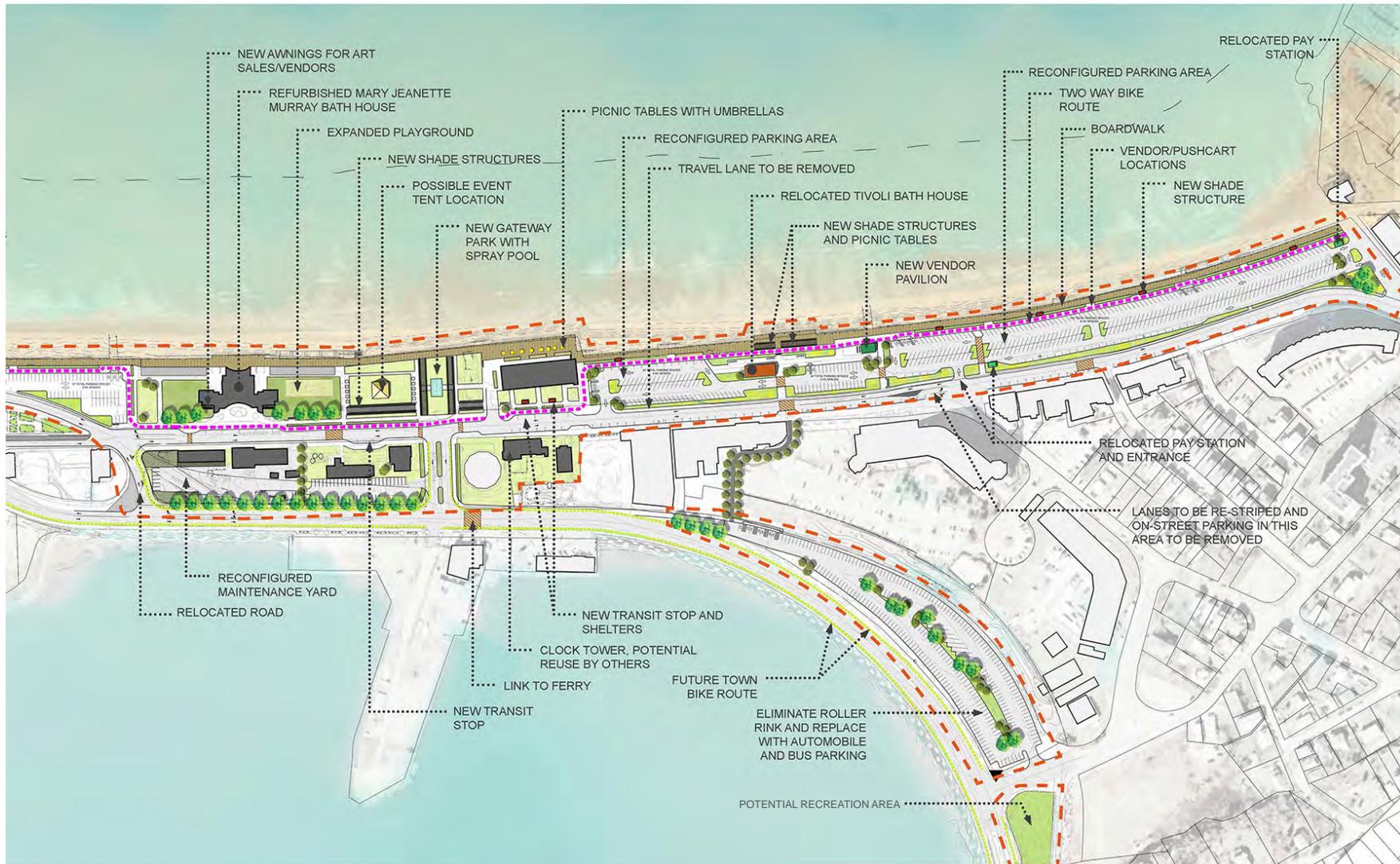
In addition to the landscape buffer and new open spaces described later in this chapter, recommendations include:

- Planting a row of trees along George Washington Boulevard to help screen the Maintenance Area.
- Adding landscaping to parking lots.
- Enhancing plantings at entry points, such as along Wharf Avenue.

It has been DCR's experience at Nantasket Beach that the harsh beachfront environment makes it difficult for trees to flourish. With the exception of the trees noted above, it is recommended that landscaping include primarily shorter, hardy plants that can withstand the strong winds and sea spray.



Illustrative drawing of Master Plan recommendations



The Promenade/Boardwalk

All visitors to the Reservation walk along the beachfront promenade, whether to access the beach or to simply exercise and enjoy the view. The promenade also provides a refuge for visitors during high tide, when the beach is underwater.

As with the existing promenade, the redesigned promenade will be continuous along the entire length of the Reservation. To give it more of the feel of a traditional oceanfront boardwalk, it is recommended that it be surfaced with either a wood or recycled material boardwalk.

For most of the length of the beach, the promenade is 16 feet wide. It widens to almost 20 feet behind the Mary Jeanette Murray Bath House. At the northern end of the beach, along the Hull Shore Drive, it narrows to 10 feet because of the limited land area available between Hull Shore Drive and the seawall. The promenade could be widened to 12 feet in this area if the promenade construction takes place during or after the Town of Hull's proposed roadway widening.

A six foot wide planting buffer along the landside of the promenade separates the promenade from the bicycle lane (described on page 39). The sides of the planters should be angled inward to avoid conflicts with cyclists. In a few locations, the buffer strip nar-

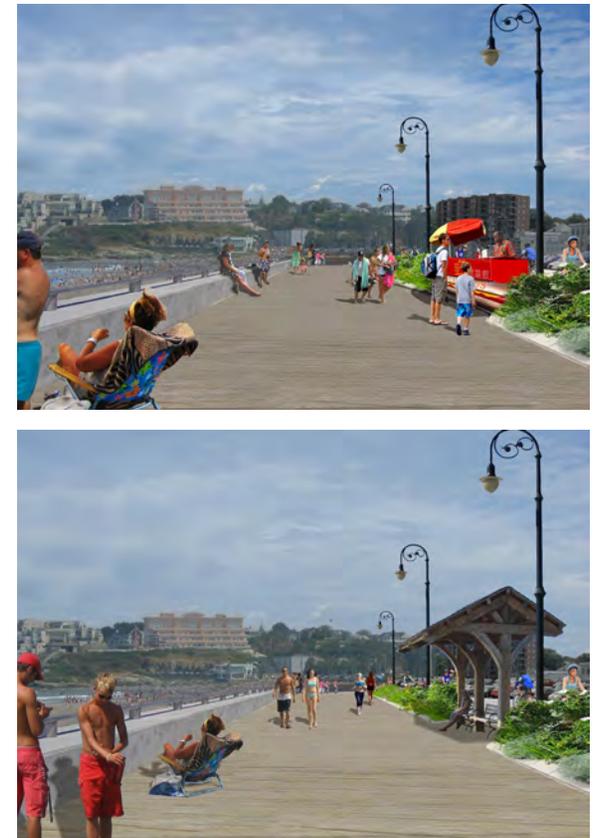
rows to 4 feet. The exact width and juxtaposition of the boardwalk, planting buffer and sidewalks change as the available space differs over the length of the Reservation. The cross sections (pages 31 through 35) illustrate the different conditions.

Shade structures with benches, as well as locations for vendor carts, are interspersed in the planting strip along the length of the promenade. Vendor areas will provide opportunities for local businesses to sell food, beverages and beach items like inflatable toys or sunscreen. Larger vendor stalls or pavilions to accommodate umbrella, beach chair and/or bicycle rentals are located near the northern and southern end of the beach.

Lighting is incorporated into the design for the promenade and is shown as double pendant lights, similar to those used at other DCR Reservations. Where possible, the lights are placed to illuminate both the promenade and the bicycle lanes or adjacent seating areas. Lighting should be energy-efficient; the use of solar-powered lights should be explored during the next design phase.

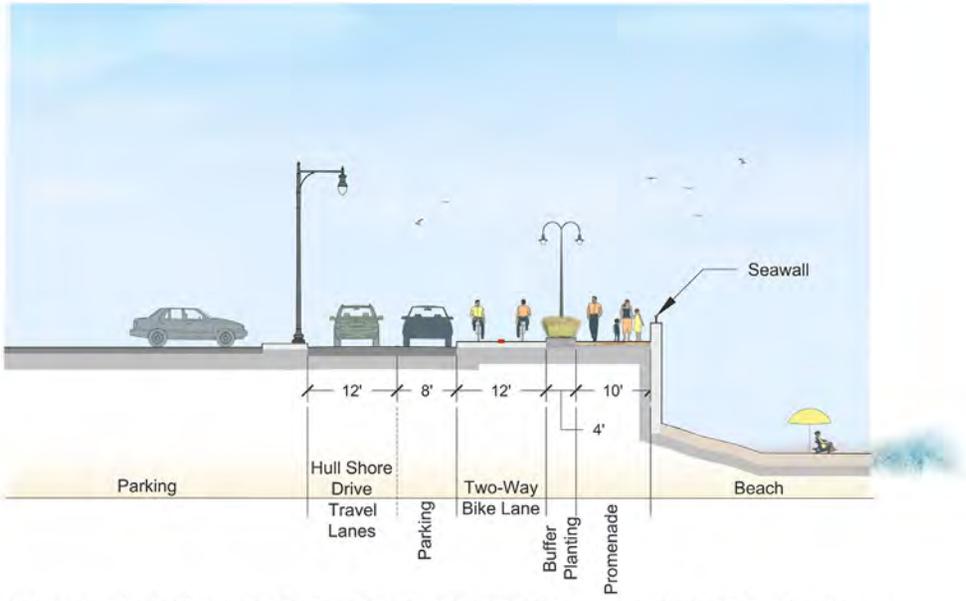
Open Space & Recreational Amenities

The beach is, of course, the major recreational amenity and the reason most visitors come to the Reservation.

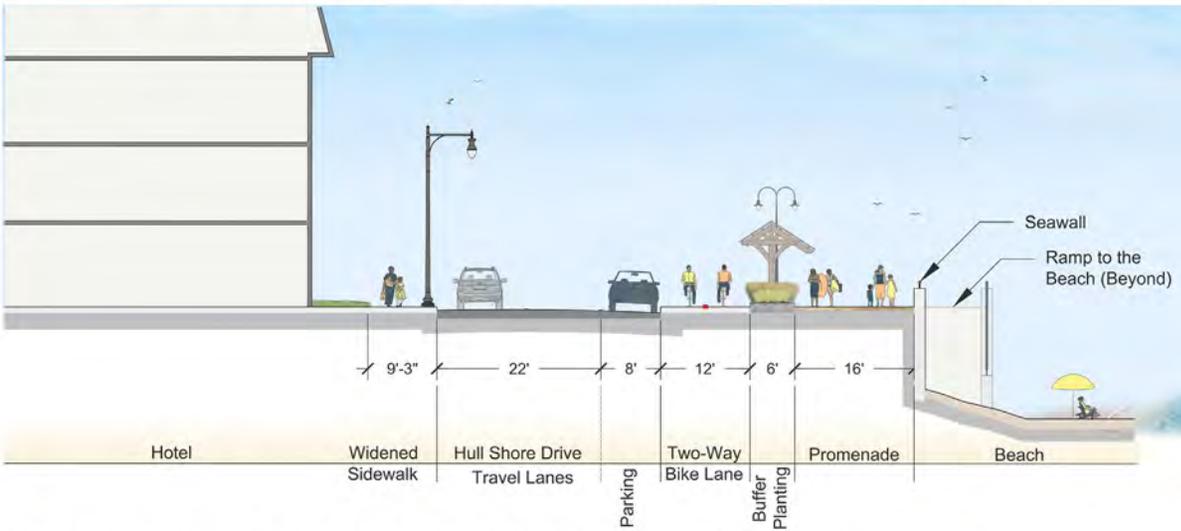


Above: Rendering of boardwalk with food vendor cart and with shade structure.

However, many visitors come for the day and are looking for other recreational opportunities to limit sun exposure, to create a more varied experience and to “wait out” the loss of the beach during high tide.

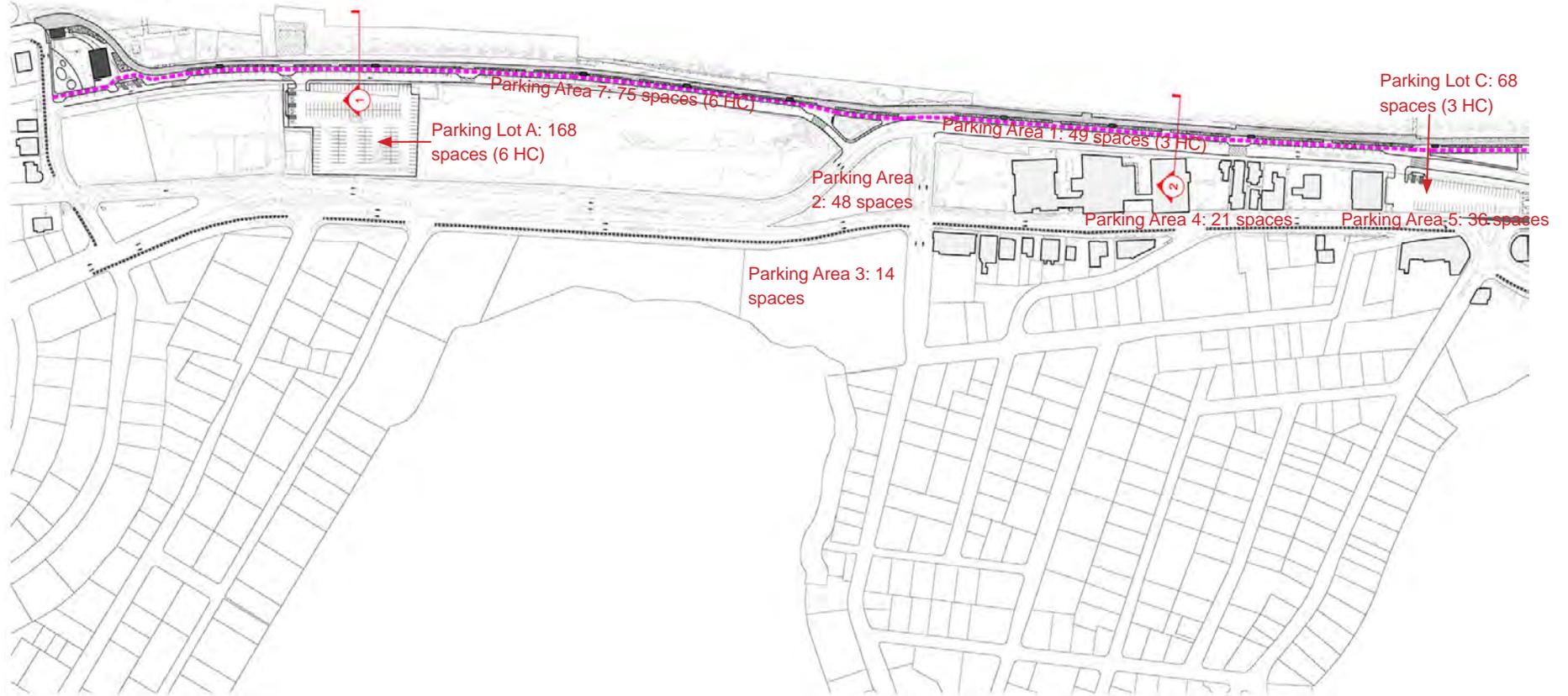


SECTION 1- 20' TOTAL WIDTH @ HULL SHORE DRIVE, REDUCED BUFFER ZONE WIDTH (4')

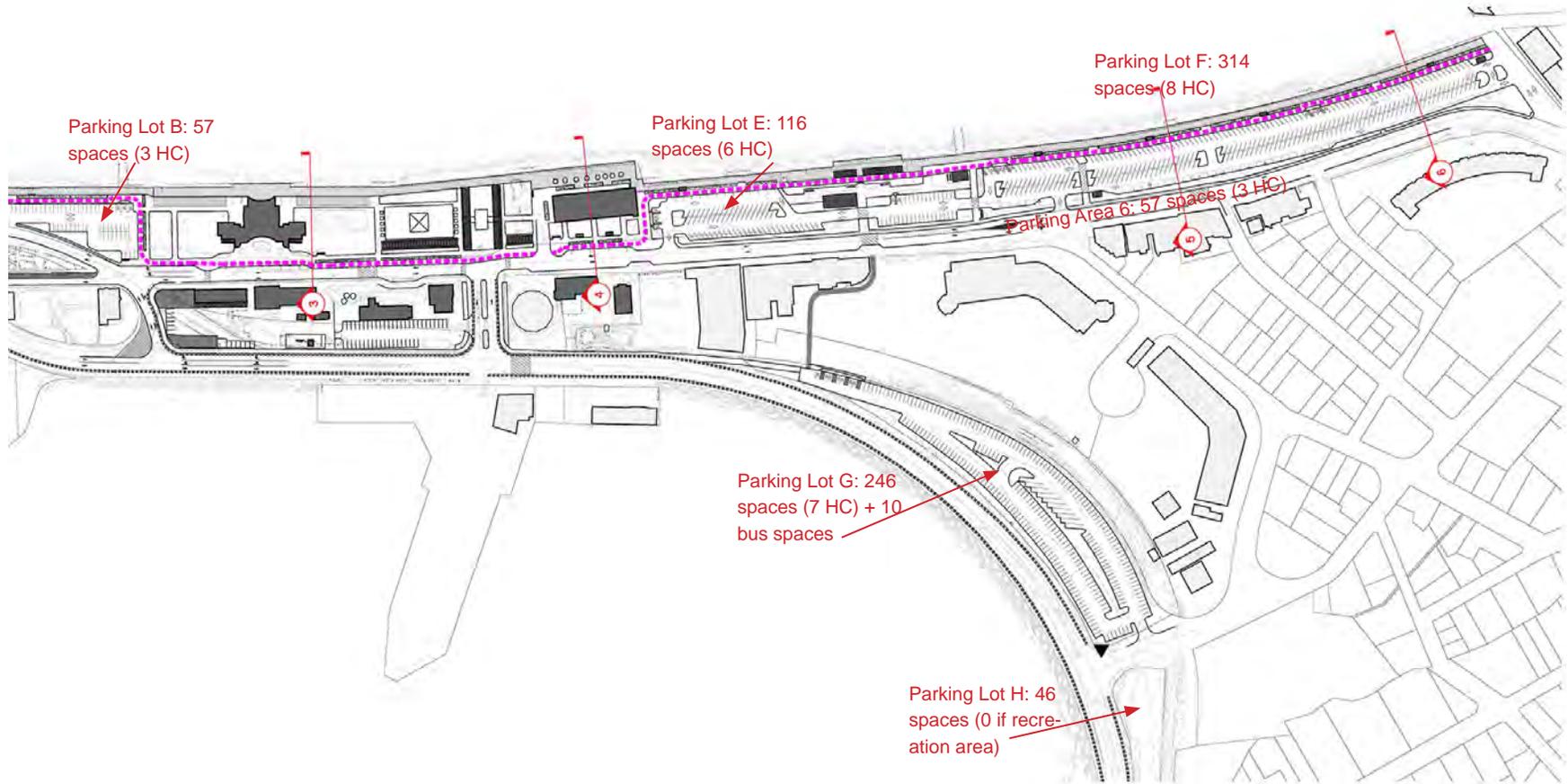


SECTION 2- 12' BIKE LANE ALONG PROMENADE, 30' TOTAL WIDTH @ HULL SHORE DRIVE

Cross sections indicating juxtaposition and width of promenade, bicycle lane and other amenities at various locations (cross section locations are shown on Page 32).



Above and facing page: Location of cross sections on pages 31, 34 and 35 and parking facilities discussed on page 39.



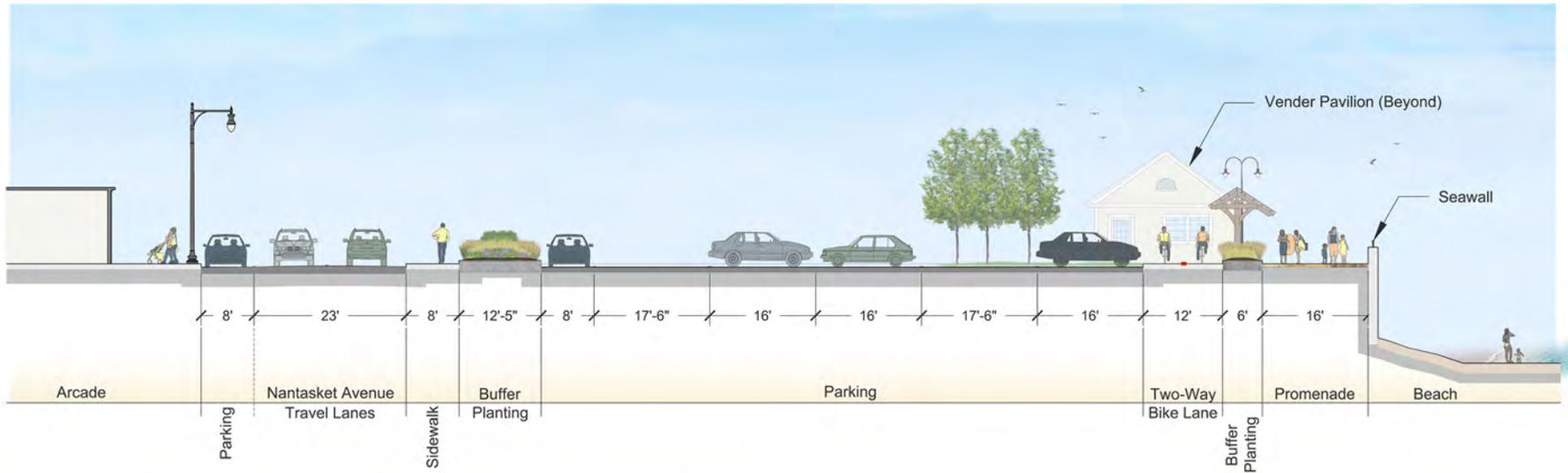


SECTION 3- 12' BIKE LANE ALONG SIDEWALK, 24' TOTAL WIDTH @ NANTASKET AVENUE

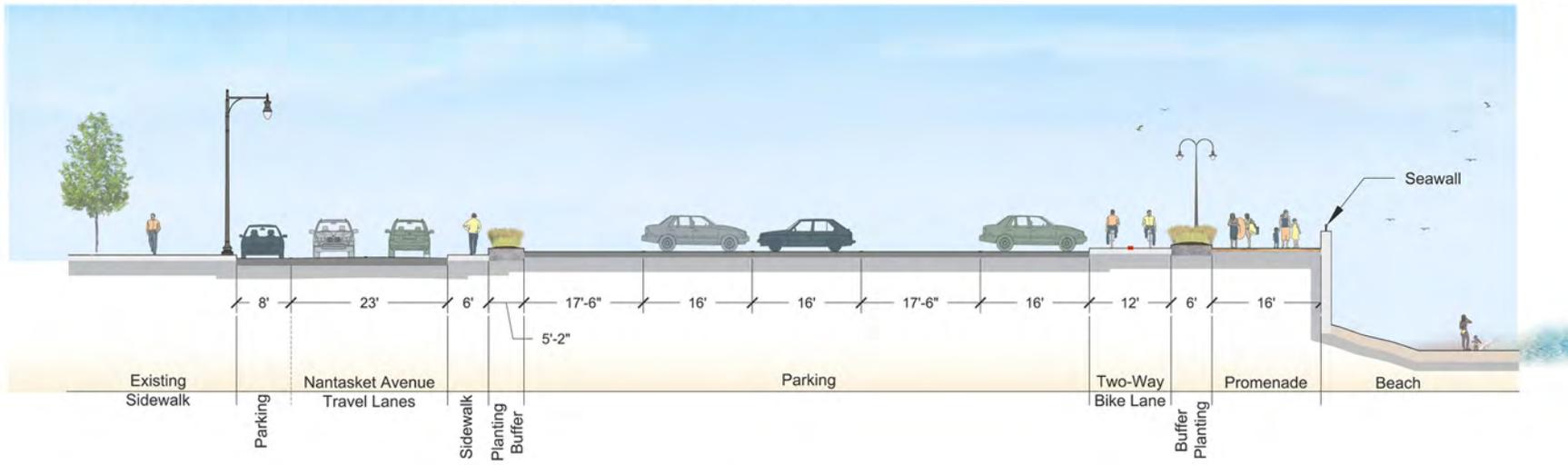


SECTION 4- 12' BIKE LANE ALONG SIDEWALK, 42' TOTAL WIDTH @ NANTASKET AVENUE

Above and facing page: Cross sections indicating juxtaposition and width of promenade, bicycle lane and other amenities at various locations (cross section locations are shown on Page 32).



SECTION 5- 12' BIKE LANE ALONG PROMENADE, 31' TOTAL WIDTH @ NANTASKET AVENUE



SECTION 6- 12' BIKE LANE ALONG PROMENADE, 31' TOTAL WIDTH @ NANTASKET AVENUE

The recommendations on the following pages are designed to provide a range of amenities and activities for visitors.

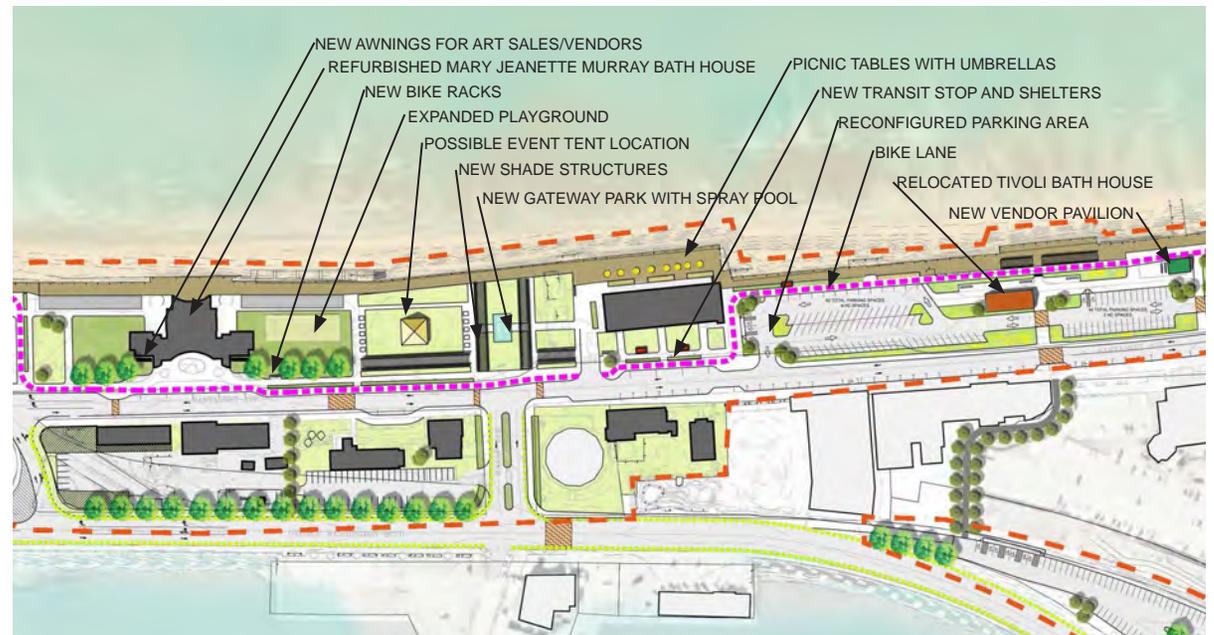
Central Area

The area from the MJM Bath House to the Tivoli Bath House encompasses many of the key visitor amenities and gathering spots, including the MJM Bath House, a playground, the Bernie King Pavilion and the Tivoli Bath House. It is located close to much of the parking and is very visible for visitors arriving via Wharf Avenue. It also is directly across Nantasket Avenue from the Carousel and Clocktower Buildings, as well as the DCR operations and maintenance center. A number of improvements are recommended for this area.

As part of the ongoing Seawall Stabilization Program, a stone revetment is planned be constructed between the MJM Bath House and Water Street. Recommendations described below for this area should not be constructed until after the revetment is in place.

Nantasket Green

A key feature will be Nantasket Green, a new gateway greenspace directly across from Wharf Avenue, that will welcome visitors to the Reservation. The space includes a water feature that will both be visually attractive and provide a popular play/cooling off spot during



Close-up of the Central Area.

high tide. A large open lawn will provide space for picnics, Frisbee throwing, etc. and can accommodate a tent for larger gatherings and events. Long shade structures are shown parallel to Nantasket Avenue and lining both sides of the water feature area. Community members liked the idea of open lattice roofs so that the benches are not in full shade. Picnic tables are shown along the sides of the large lawn area.

Bernie King Pavilion

On the ocean side plaza adjacent to the Bernie King Pavilion, new plantings and picnic tables with permanent



Rendered view of Nantasket Green from Wharf Avenue.



Rendering of improvements to plaza behind the Bernie King Pavilion.

umbrellas will provide a more attractive and better protected picnic area adjacent to the beach. The design and installation of these umbrellas will need to allow for potential removal during strong storm conditions.

Accessibility: The existing promenade is widened at the southwest corner of the Bernie King Pavilion, by the stairs to the beach, to eliminate the pinch point in that location.

Mary Jeanette Murray Bath House

As discussed in Chapter 2, the Mary Jeanette Murray Bath House is underutilized, with the main space being closed for much of the time. While no maintenance repairs are needed at the MJM Bath House, a number of changes were suggested for the near future:

- Hang historical pieces and artwork in the open meeting space to create a more inviting atmosphere.
- Open the doors and invite the public in during normal operating hours, rather than just during special events.
- Create a station in the open meeting space to sell DCR parking permits during the summer; this would require a phone line for credit card transactions.
- Add windows to the utility rooms in each wing of the building to create office space for the rangers and the lifeguard supervisor.
- In the women’s wing, reconfigure the currently empty room with the large door to the outside to be a break room for the lifeguards. The inside door would need to be secured to prevent access to the women’s room – lifeguards would be allowed access through the large outer door. The room has a large door that opens directly to the beach and a number of lockers that could be used for storage. This layout would allow the rangers and lifeguards to stay closer to the beachfront to serve visitors.
- The Manager’s office could be used for storage of materials that are currently located in the utility rooms proposed.

- Awnings are provided along the front of the MJM Bath House for artists and vendors.

The existing playground on the south side of the Mary Jeanette Murray Bath House is expanded to accommodate more children. Play structures should be designed for a variety of ages.

Tivoli Bath House

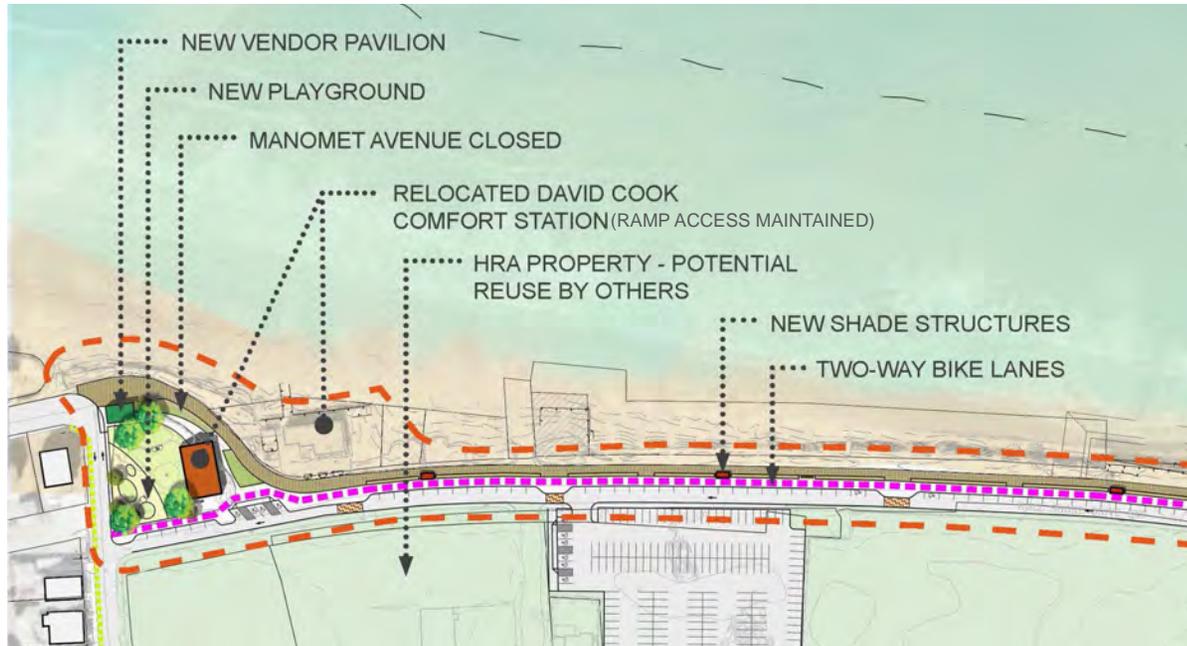
The Tivoli Bath House is relocated further back from the beach, to provide more protection from wave damage.

At the existing plaza between the south side of the Bernie King Pavilion and the Tivoli Bath House, new shade structures are added. One of two larger vendor pavilions is shown to the south of the plaza, to provide a location for chair and umbrella rentals.

Accessibility: The promenade in this location will require regrading to eliminate the steep slopes at either end of the plaza.

North Area

North of Bay Street, the narrow width of the Reservation limits facilities to the Promenade, buffer strip and bike lane, with the exception of the far north end. Changes at the northern end of the Reservation at Phipps Street are designed to make this area more



Close-up of the North Area.

attractive and user-friendly. Currently, amenities and opportunities for purchasing food and drink are very limited at this end of the Reservation.

It is recommended that Manomet Avenue, which separates the beach from adjacent Reservation property, be closed to create a larger area contiguous to the boardwalk. The expanded area includes a new playground as well as a vendor pavilion for selling food, beverages and other beach items, or for bicycle rental.

A portion of the revetment needs to be rehabilitated in this area. It is recommended that the David Cook Comfort Station be relocated to the land side of the boardwalk to allow for dune reclamation, and that this area serve as an early pilot project for the beach nourishment program.

Operations & Maintenance Area

Recommendations for the operations and maintenance area are described in detail in Chapter 4.

Vehicular & Pedestrian Access & Circulation

Pedestrian Access

Pedestrian access to and through the Reservation is provided via the sidewalks and Promenade described above. Buffer planting will provide a more attractive pedestrian environment. 26 crosswalks provide access to the beach. The Plan includes the introduction of bumpouts at a number of those locations to shorten the crossing, and it is recommended that temporary raised crosswalks be used to slow traffic during the summer. The temporary raised crosswalks can be



It is recommended that the David Cook Comfort Station be relocated to the landside of the boardwalk.

removed between the fall and spring to provide good traffic flow and to avoid conflicts with snow plows.

Recommendations for push-button activated flashing beacons and warning signs are discussed in Chapter 4.

A wide crosswalk on George Washington Boulevard (outside of the Reservation) will provide a safe pedestrian crossing, should ferry service to the City Pier be established.

Bicycles

As shown on the Plan on Pages 28 and 29, and the sections on Pages 31 through 35, a two-way 12-foot wide bicycle lane runs the entire length of the Reservation. For most of that length, it is at the same height as the boardwalk and sited to allow cyclists to ride close to the beach, separated from the Boardwalk/Promenade by the planted buffer strip. The bike lane moves to the street in front of the MJM Bath House and the Bernie King Pavilion, where beach side access is limited by the buildings. The bicycle lane would connect with the Town's proposed bike lanes at either end of the Reservation, and with the George Washington Boulevard bike lane at Wharf Avenue.

Bicycle racks are provided throughout the Reservation and vendor pavilions near the north and south ends could be designed to accommodate bicycle rentals.

Transit

The Plan is designed to accommodate transit access to the Reservation, and it is recommended that DCR work with the MBTA to coordinate ferry, train and bus schedules to allow for easy transfers between modes. It is also recommended that a consolidated schedule be developed each summer so that potential visitors can easily plan a transit route to and from the Reservation.

Recommended transit-related improvements include:

- On Nantasket Avenue, new pull-outs are provided for buses and trolleys in front of the Bernie King Pavilion (on the northbound side) and the Dormitory Building (on the southbound side), in addition to the existing pull-out in front of the MJM Bath House. Covered waiting areas have been included in front of the Bernie King Pavilion.
- Parking at the George Washington Boulevard lot (Lot G) has been reconfigured to accommodate 10 buses (see plan on pages 32 and 33).
- A wide crosswalk has been added on George Washington Boulevard (outside of the Reservation) to provide a safe pedestrian crossing should ferry service to the City Pier be established, as stated above.

Parking

While much attention has been paid to bicycle, pedestrian and transit access, it is likely that the majority of visitors will continue to arrive by car. As discussed in Chapter 4, a key recommendation is the incorporation of a variable message signage system that will direct drivers to the lots with space available. This system will help to eliminate much of the needless circling of cars searching out available spots.

Particularly important will be the addition of a sign just south of the entrance to the George Washington Boulevard lots (Lots G and H). Drawing visitors into those lots will reduce traffic on Nantasket Avenue and Hull Shore Drive. Similarly, a sign on Route 228/Nantasket Avenue, south of Rockland Road, would direct drivers to open lots and keep them off of Nantasket Avenue when the lots there are full. A sign in this location would be more difficult to implement because it would not be on DCR property.

Many of the parking lots are reconfigured somewhat to accommodate the boardwalk, bicycle lane and landscape buffer, as well as to provide more efficient layouts. Landscaping has been added to most of the parking lots. Parking locations, as well as accessible spaces, are indicated on the drawing on pages 32 and 33 and in Table 2. Location-specific changes include the following:

- **George Washington Boulevard lot north of Rockland Circle (Lot G):** The skating rink has been removed and the lot is reconfigured to accommodate bus parking. DCR should continue to negotiate with the private property owner to allow completion of the pedestrian path adjacent to the north edge of the Horizons Condominiums parking lot. This path would provide a direct link from the DCR parking lots to the beach, which would increase the attractiveness of these underutilized lots.
- **George Washington Boulevard lot south of Rockland Circle (Lot H):** It is suggested that this lot, which is used only on the busiest days, could be converted into a skate park.
- **South of the Bernie King Pavilion (Lots E & F):** The parking lots have been reconfigured as one continuous lot with entrances at both the far southern end and at a midpoint across from Park Avenue. Exits are located at the southern entrance and at the northern end by the Bernie King Pavilion. The midpoint entrance and the northern exit are sufficiently wide to allow cars to enter and exit at both locations during non-peak times when the lots are not staffed, or for special events at the MJM Bath House, Nantasket Green or Bernie King Pavilion.

Location	Existing Spaces	Future Spaces (including Accessible Spaces)	Accessible Spaces
Parking Lots			
Lot F: Nantasket Ave., south of Tivoli Bath House	332	314	8
Lot E: Nantasket Ave., Tivoli Bath House to Bernie King Pavilion	136	116	6
Lot D: Nantasket Ave., Bernie King Pavilion to MJM Bath House	81	0 (open space)	
Lot C: Between Nantasket Ave. and Hull Shore Drive, south of Red Parrot Restaurant	57	68	3
Lot B: Nantasket Ave., North of MJM Bath House	90	57	3
Lot A: Between Hull Shore Drive and Nantasket Ave., south of Quincy St.	109	168	6
Subtotal Parking Lots	805	723	
Remote Lots			
Lot G: George Washington Boulevard, north of Rockland Circle	230	246 (+ 10 bus spaces)	7
Lot H: George Washington Boulevard, south of Rockland Circle	46	46 (0 if skate park)	
Subtotal Remote Lots	276	292	
Parking Areas			
Area 1: Hull Shore Drive, south of Water Street	89	49	3
Area 2: North of Water Street (on grass)	48	48 (no changes)	
Area 3: North of Bay Street, west of Nantasket Ave. (on grass)	14	14 (no changes)	
Area 4: Nantasket Ave., north of Sagamore Terrace	21	21*	
Area 5: Nantasket Ave., north of Bay Street	36	36*	
Area 6: Nantasket Ave., from south to Bernie King Pavilion	66	57	3
Area 7: Hull Shore Drive, between Water and Phipps Streets	50 est.	75	6
Subtotal Parking Areas	324	300	
TOTAL	1,405	1,315	

Table 2: Existing and future parking availability (see plan on pages 32 and 33 for parking locations).

* Number of spaces may be changed due to ongoing streetscape improvements by Town of Hull.

- *South of the MJM Bath House (Lot D)*: The lot is eliminated to accommodate the Nantasket Green open space.
- *North of the MJM Bath House (Lot B)*. The lot is reconfigured to accommodate roadway changes and additional landscaping.

On-street parking is also modified, as shown on Table 2.

Traffic Circulation

Changes in traffic circulation related to the realignment of the George Washington Boulevard/Nantasket Avenue intersection are described in Chapter 4.

Year-Round Operation

The busiest time of year at Nantasket Beach Reservation is between Memorial Day and Labor Day when warm weather draws a lot of beachgoers. However, the Reservation also is utilized during the other nine months of the year by visitors walking along the beach and enjoying the view. Improvements proposed in the Master Plan are designed to benefit visitors during all seasons through use of hardy plants and sturdy weather-proof materials. The improved promenade and the new bicycle lanes can be used year-round.

Potential new uses discussed for the Dormitory, Clocktower and Police Station Buildings, as well as interpretive exhibits in the Mary Jeanette Murray Bath House, are designed to encourage year-round activity.

Interpretive Opportunities

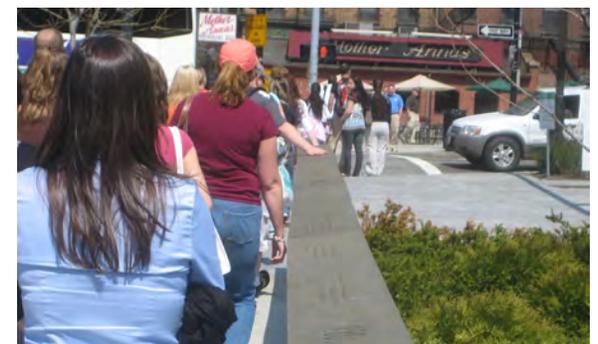
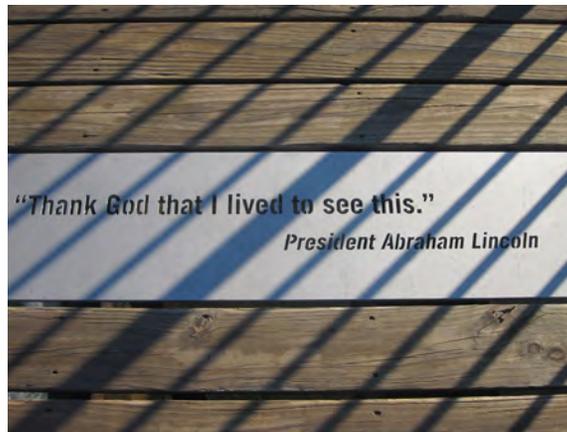
Interpretive opportunities at Nantasket Reservation include both historic and natural resources. Key elements could include the former Paragon Park, former uses of the buildings within the operations and maintenance facility, as well as an explanation of the evolution of the beachfront from a natural seashore to a constructed seawall. The former Police Station, Clocktower Building and MJM Bath House all provide opportunities for displaying historic photos and artifacts.

Potential outdoor interpretive signage locations include the plaza behind the Bernie King Pavilion and the new park at the northern end of the Reservation. The northern end, in particular, would provide a prime location for explaining sand dunes and natural wave action.

Wayfinding & Signage

A wayfinding and signage program would help visitors to navigate the Reservation and the important destinations scattered throughout. Maps in key locations, including arrival spots such as parking lots and transit stops, would better enable visitors to plan their

At right: Examples of interpretive elements inserted in boardwalks, embedded in pavement, attached to railings and free standing.



visit. Signage should clearly identify bath houses, picnic areas, vendor pavilions and the carousel. Signage should also identify the location for pass sales.

Phasing

It is anticipated that full implementation of the Master Plan recommendations, including beach nourishment, could take up to 30 years. However, as shown on Table 3, it is recommended that much of the design work take place during the next two years, with construction of many of the visitor amenities taking place in years two to five.

The schedule is laid out to ensure that the design and construction of related and/or adjacent elements can happen in a coordinated and cost effective manner, and that design and construction packages have realistic budgets based on potential DCR funding availability.



Above: Examples of interpretive elements attached to low walls and free standing.



Above: Examples of interpretive elements attached to indoor building walls and within shade shelters; typical DCR wayfinding signage.

Year	Location	Activity	
<i>Master Plan (not including DCR operations and Maintenance Facilities)</i>			
0-2	Boardwalk, Bike Lane and Other Improvements from Southern End to Phipps	Design	Boardwalk (incl. accessibility improvements on existing promenade ramp) Relocated bath houses (Cook and Tivoli) Shade Structures Expanded playground Closed Manomet Avenue Bike lane Vendor pavilions Planting buffer Lighting
	Nantasket Green Area	Design	Nantasket Green Park with Water Feature Playground expansion Seating area behind Bernie King Pavilion
	Nantasket Avenue Improvement (Narrowing roadway)	Design	Roadway, crosswalks and sidewalk Bike lane in front of MJM and Nantasket Green Parking lot north of MJM and south of Bernie King Pavilion (Incl. Kiosk) Transit stops
	Seawall Stabilization between MJM Bath House and Water Street	Design & Construct	Stone Revetment to provide passive support, so seawall will survive a 100-year storm
	Parking Signage Program	Design & Construct	Parking signage/notification program
2-5	Central/Nantasket Green Area	Construct	Nantasket Green with water feature Playground expansion Boardwalk Seating area behind Bernie King Pavilion

Table 3: Phasing Schedule

Year	Location	Activity	
2-5	Boardwalk & Bike Lane from Southern end to Bernie King Pavilion	Construct	Boardwalk (incl. accessibility improvements on existing promenade ramp) Relocated Tivoli Bath House Shade Structures Bike lane Vendor pavilions Planting buffer Lighting
	Boardwalk & Bike Lane from Bay Street to Water Street	Construct	Boardwalk Shade Structures Bike lane Vendor pavilions Planting buffer Lighting
	George Washington Boulevard	Design & Construct	Final segment of pedestrian link from George Washington Blvd. to Nantasket Avenue
5-10	Boardwalk, Bike Lane & Other Improvements from Water Street to Phipps Street (to occur after rehabilitation of revetment and potential pilot beach nourishment program)	Construct	Relocated Cook Comfort Station boardwalk Shade structures Vendor pavilions Expanded playground Bike lane
	Nantasket Avenue Improvements (narrowing roadway)	Construct	Roadway and crosswalks Planting buffer Sidewalk Bike lane in front of MJM and Nantasket Green Parking lot north of MJM and south of Bernie King Pavilion (including kiosk) Transit stops
	George Washington Boulevard Parking Lots	Construct	New layout and landscaping for lot north of Rockland Circle New skate park for lot south of Rockland Circle (potential)
10-30	Beach Renourishment	Construct	Renourish the beach to provide 10 year overtopping protection as well as enhanced recreation

Table 3: Phasing Schedule continued

Year	Location	Activity	
<i>DCR Maintenance Facilities</i>			
0-2	Operations & Maintenance Yard	Design & Construct	Install storage bins including a covered bin for salt Re-route the garage waste disposal pipe to tie into the town sewer line under Nanatasket Avenue Remove or relocate the boilermaker's House Investigate options for a covered dumpster
	Mary Jeanette Murray Bath House	Operate & Construct	Hang historical pieces and artwork in open meeting space Keep doors open during normal operating hours Move parking permit sales to MJM (requires phone line for credit card sales) Secure large conference room door that connects to women's bathroom to serve as lifeguard's break area
	Dormitory Building	Construct	Move the generator from the basement to prevent damage due to flooding
	Other	Operations	Work with public transportation services to better coordinate timing of routes
2-5	Operations & Maintenance Yard	Design & Construct	Coordinate with MassDOT and design for Traffic Alternative B Create an entrance on George Washington Boulevard for maintenance workers and large vehicles Install new fencing throughout the maintenance yard area Remove or relocate the Laundry Building and Small Garage Building/Fire Safety Building Add a new entrance and exit point between the lower and upper garage buildings, finish with a brick arch and DCR logo
	Mary Jeanette Murray Bath House	Design & Construct	Remodel by installing windows in the utility rooms on each wing Move the Ranger's office to one of the recently remodeled utility rooms Move the Lifeguard's Office to one of the recently remodeled utility rooms
	Clocktower Building	Design & Construct	2016-buldging lease ends. The carousel and it's operating equipment will remain Utilize the recently vacated 1st floor as storage for materials currently in the Laundry Building and Small Garage/Fire Safety Building Renovate, including: testing and possible abatement for lead and asbestos, roof repairs, structural assessment and repairs, remodeling both floors, heating systems upgrade, electrical system upgrade, plumbing system upgrade Lease or repurpose the building

Table 3: Phasing Schedule continued

Year	Location	Activity	
5-10	Operations & Maintenance Yard	Construction	Implement Traffic Alternative B and expand maintenance yard
	Police Station	Design & Construct	Renovate to serve as DCR office space. Renovations include, but are not limited to: asbestos abatement, structural repairs, heating system installation, electrical system installation, plumbing system installation Move DCR on-site operations into the newly renovated building
	Lower Garage	Design & Construct	Renovate, including: roof and eave repairs, repointing all brick work, replacing windows, insulating the structure, installing a pedestrian door, inspecting floor drains
10-20	Upper Garage	Design & Construct	Expand garage space by a minimum of 10 feet as shown in the conceptual design Install overhead doors on the expansion side of the building to improve circulation Renovate the existing portion, including: roof and eave repairs, repointing all brick work, replacing gutters and fascia Lease or repurpose the building

Table 3: Phasing Schedule continued

