

PARKS AND RECREATION TECHNICAL MEMORANDUM



1. INTRODUCTION

1.1 Project Description

The Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration (FHWA), is considering a range of transportation alternatives along the I-64 Hampton Roads Bridge-Tunnel (HRBT) corridor. As part of this process, VDOT and FHWA are studying the environmental consequences of the No-Build Alternative and three Retained Build Alternatives: the Build-8 Alternative, Build-8 Managed Alternative, and the Build-10 Alternative. The study area is a one-mile wide corridor along I-64 from the interchange with I-664 in the City of Hampton to the interchange with I-564 interchange in the City of Norfolk, a distance of approximately 12 miles, including the 3.5-mile-long HRBT. Information in this memorandum supports discussions presented in the Draft Environmental Impact Statement (EIS) and in the Draft Section 4(f) Evaluation.

The purpose of this Technical Memorandum is to inventory existing and proposed parks and recreational facilities and to assess the potential impacts to these that could result from implementation of the Retained Build Alternatives.

- **Section 1** provides an overview of the study and outlines the methods used to assess impacts to park and recreation resources.
- Section 2 provides an overview of existing conditions (affected environment) and identifies
 resources located within the study area, including parks, open spaces, conservation lands,
 recreational areas, and bike and hiking trails.
- Section 3 assesses potential direct, indirect, and cumulative impacts to parks and recreational facilities from each of the Retained Build Alternatives, compared to the No-Build Alternative.

Details regarding all alternatives, including footprints, are included in the *Alternatives Technical Report*. Each of the three Retained Build Alternatives retained for detailed evaluation in the Draft EIS represent a set of improvements that form a stand-alone solution to the identified needs of the study. These three alternatives form the basis for considering potential impacts to parks and recreation, as discussed in this Technical Memorandum:

- The **Build-8 Alternative** would provide four continuous mainline lanes in each direction of I-64 throughout the study area. Through the Hampton section of the study area, this alternative would require one lane of widening in each direction of I-64. Through the Norfolk section, this alternative would require the addition of two lanes in each direction of I-64. The eastbound and westbound directions would be separated by a concrete traffic barrier. The total pavement width of the Build-8 Alternative mainline would be approximately 150 feet. Through the Willoughby Spit portion of the Norfolk section, widening would occur on the south side of the existing roadway only. The eastbound approach bridge would be modified to carry two westbound lanes, and a new four-lane bridge would be constructed to the west of the existing bridges to carry the eastbound lanes. A new four-lane tunnel would be constructed approximately 200 feet west of the existing tunnel.
- The Build-8 Managed Alternative mainline, bridges, and tunnels would be similar to the Build-8 Alternative, providing four continuous mainline lanes in each direction of I-64 with a new bridge structure and tunnel. However, some or all of the travel lanes would be managed using tolls and/or vehicle occupancy restrictions. Additionally, the typical section

- would also include an approximate four-foot buffer separation between the general purpose lanes and any managed lanes, with the total width of the mainline pavement approximately 160 feet. The managed lanes would tie to the high occupancy vehicle (HOV) lanes on I-64 on both ends of the study area.
- The **Build-10 Alternative** would provide five continuous mainline lanes in each direction of I-64 throughout the study area, with the eastbound and westbound directions separated by a concrete traffic barrier. Throughout the Hampton section of the study, this alternative would require widening both directions of I-64 by two lanes. In the Norfolk section, this alternative would require widening both directions of I-64 by three lanes. The total width of the mainline pavement would be approximately 170 feet. The approach bridges and tunnel would be similar to the Build-8 Alternative; however, the new bridge-tunnel would include one westbound lane and five eastbound lanes.

Additionally, the No-Build Alternative has been retained to serve as a baseline for the comparison of alternatives and their potential effects. Under the No-Build Alternative, I-64 would remain predominantly three lanes per direction within the Hampton section of the study area, with auxiliary lanes (acceleration and deceleration lanes) at the interchanges. The 3.5-mile HRBT would continue with current operations. Within the Norfolk section of the study area, I-64 would remain two lanes per direction, including the I-64 bridges across Willoughby Bay. VDOT would continue maintenance and repairs of I-64 and the HRBT as needed. There would be no rehabilitation or reconstruction of the HRBT.

As the limits of disturbance (LOD) for the Retained Build Alternatives are similar, the figures in this memorandum show the LOD for the Build-10 Alternative only, which would have the largest disturbance area and therefore the largest potential impact. The text and tables discuss the potential impact of all Retained Build Alternatives in comparison to the No-Build Alternative.

1.2 Methods

Facilities within a half mile radius of the I-64 corridor were identified through coordination with the Cities of Hampton and Norfolk, field reviews, and review of published plans. Existing and proposed park and recreational facilities were studied in detail including identification of location, ownership, and available amenities. Facilities that are located on public land, including facilities on lands owned by the Department of Defense were included for evaluation. One privately owned outdoor recreation facility was identified in the study area, and also was included in this memorandum.

1.3 Regulations Protecting Park and Recreation Lands

Publicly owned park and recreational facilities may be subject to Section 4(f) of the Department of Transportation Act of 1966. The Draft Section 4(f) Evaluation provides additional details (see Appendix C of the Draft EIS). All park and recreational facilities identified in the Draft Section 4(f) Evaluation are addressed in this memorandum.

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act prohibits the conversion of property acquired or developed with LWCF grants to a non-recreational purpose without the approval of the Department of the Interior's National Park Service (NPS). Section 6(f) requires that replacement lands of equal value, location, and usefulness be provided as conditions to such conversions. Research was conducted to determine if any parks in the study area were purchased or improved with LWCF funds.

2. AFFECTED ENVIRONMENT

Sections 2.1 and 2.2 provide a general description of the parks and outdoor recreational facilities that are located within each city in the study area, including a description of general location, amenities, and ownership. Linear facilities such as bikeways, greenways, and trails are discussed in Section 2.3.

Table 1 summarizes those facilities and includes information regarding location, ownership and available amenities at these facilities. The Norfolk Department of Recreation, Parks and Open Space (NRPOS) administers a majority of the park facilities in the City of Norfolk. The Hampton Parks and Recreation Department administers a majority of the parks in the City of Hampton. **Figures 1A–1E** depict existing and proposed parks and outdoor recreational facilities. The facility ID number on Table 1 corresponds with the location numbers that are shown on **Figures 1A-1E**.

Table 1. Summary of Park and Recreation Facilities

Facility ID	Facility Name	Location	Ownership	Amenities					
City of Hampton									
1	Newmarket Creek Park and Trail System (proposed)	Along Newmarket Creek north of I-64 opposite I-664 interchange in vicinity of Hampton Coliseum	City of Hampton	Multi-use trail with pocket parks and water access points to be located at several points					
2	Bluebird Gap Farm	60 Pine Chapel Road	City of Hampton	Picnic Shelters, Playgrounds, Nature Trails, Farm, Small Stage					
3	Hampton High School	1491 West Queen Street	City of Hampton	Athletic Fields					
4	Suzanne E. Jones Community Center	1137 LaSalle Ave.	City of Hampton	Community Center with some outdoor areas					
5	Y.H. Thomas Neighborhood Park Complex	1300 Thomas Street	City of Hampton	Football, Baseball/Softball Fields, Basketball Court, Playground, Picnic Shelters					
6	Mary Peake Playground	1306 Thomas Street	City of Hampton	Playground					
7	Old North Hampton Community Park (proposed)	Bethel Ave. (north of Mary Peake School)	City of Hampton	n/a					
8	YMCA	1322 LaSalle Ave.	City of Hampton	Track					
9	Phenix High School	LaSalle Ave.	City of Hampton	Athletic Fields					
10	Old Hampton Community Center	201 Lincoln Street	City of Hampton	Athletic Fields					
11	Mill Point Park	100 Eaton Street	City of Hampton	Amphitheater, Passive Recreation					
12	River Street Park	River Street	City of Hampton/VDOT	Walkways, Small Craft Boat Launch					
13	Woodlands Golf Course	9 Woodland Road	City of Hampton	Golf Course					
14	Robert Moton Elementary School	339 Old Buckroe Road	City of Hampton	Playground					
15	L.B. Davis Playground	58 Fulton Street	City of Hampton	Basketball Courts					
16	Kearney Park	N. Mallory Street/County Street	City of Hampton	Passive Recreation					
17	Phoebus Recreation Fields	County Street/Willard Ave.	Phoebus Recreation Association, Inc.	Athletic Fields					
18	Fort Monroe	City of Hampton	National Park Service	National Monument with Historic Buildings, Beaches, Marina					
19	Fort Wool	Hampton Roads Harbor	Commonwealth of Virginia	Historic Park					

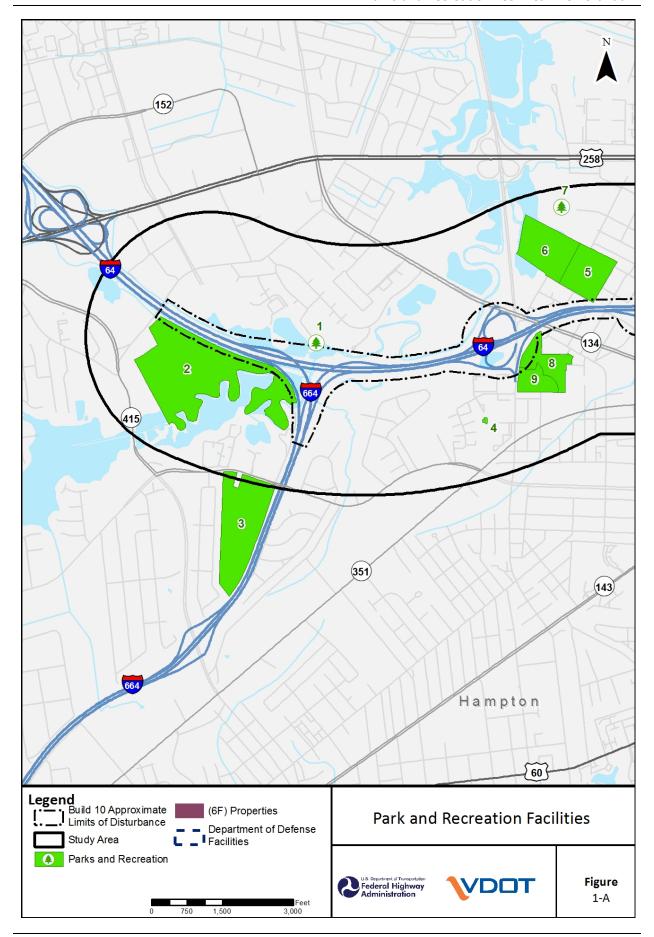
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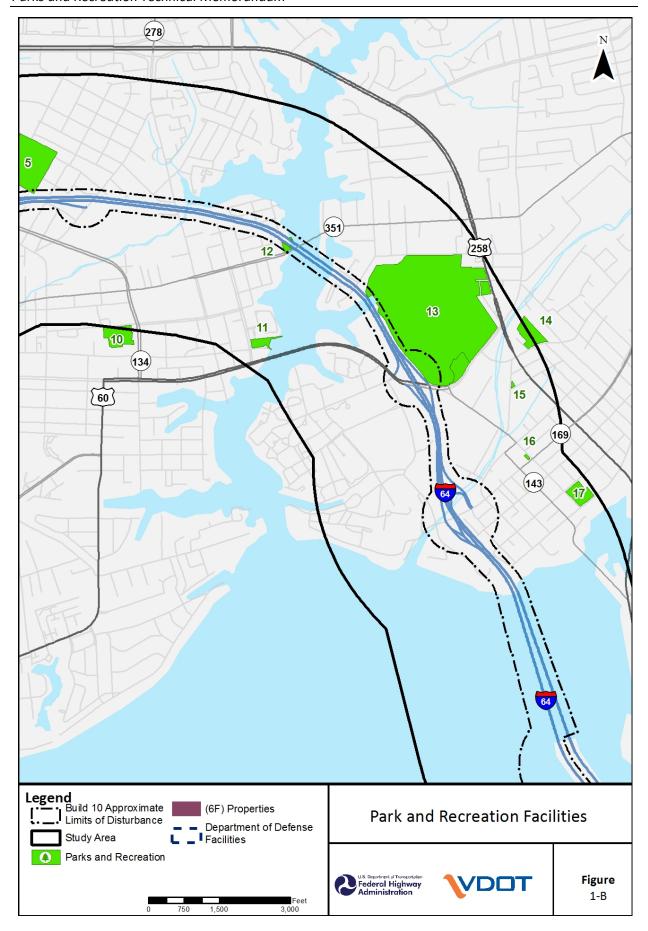
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Facility ID	Facility Name	Location	Ownership	Amenities					
City of Norfolk									
20	Trails End Park	1501 W. Ocean View Ave.	VDOT	Open space					
21	Willoughby Boat Ramp	1305/1309 Bayville Street	City of Norfolk	Boat Ramp					
22	Captains Quarters Park	800 Little Bay Ave.	City of Norfolk	Playground, Beach					
23	Sarah Constant Beach Park	300 W. Ocean View Ave.	City of Norfolk	Beach, Monument					
24	Monkey Bottom Wetland Walkway	9401 4 th View Street	US Navy	Elevated Walkway					
25	Monkey Bottom Park	9625 Mason Creek Road	City of Norfolk	Playground, Passive Recreation, Open Space					
26	Ocean View Elementary School	9501 Mason Creek Road	City of Norfolk	Playground, Baseball Field, Tennis and Basketball Courts					
27	Willoughby Elementary School	9500 4 th View Street	City of Norfolk	Playground					
28	Lagoon Waterpark	Bellinger Blvd., Norfolk Naval Station	US Navy	Pool					
29	Maple Avenue Dog Park	176 Maple Ave.	City of Norfolk	Dog Park					
30	Ocean View Golf Course	9548 Norfolk Ave.	City of Norfolk	Golf Course					
31	Merrimack Landing Recreation Center	8809 Monitor Way	City of Norfolk	Baseball, Track, Playground					
32	Lenox Wetland Restoration Site	8950 Granby Street	City of Norfolk	Open Space					
33	Northside Middle School, Mary Alcott Elementary School and Norfolk Therapeutic Recreation Center	180 E. Evans Street	City of Norfolk	Baseball, Soccer, Tennis and Basketball Courts					
34	Breezy Point Park	Patrol Road, Norfolk Naval Station	US Navy	Playgrounds, Baseball, Volleyball, Basketball Courts					
35	Camp Apasus	8420 Granby Blvd.	Girl Scouts of the Colonial Coast	Camp Sites, Picnic Area					
36	Northside Park	8400 Tidewater Drive	City of Norfolk	Pool, Playgrounds, Walking Paths, Picnic Shelters, Basketball and Tennis Courts					
37	Navy Athletic Field	Patrol Road near I-564, Norfolk Naval Station	US Navy	Softball Field					
38	Monticello Village Park	8075 West Glen Road	City of Norfolk	Baseball, Playground, Basketball Court					
39	Kaboom Playground	352 San Antonio Blvd.	City of Norfolk	Playground					

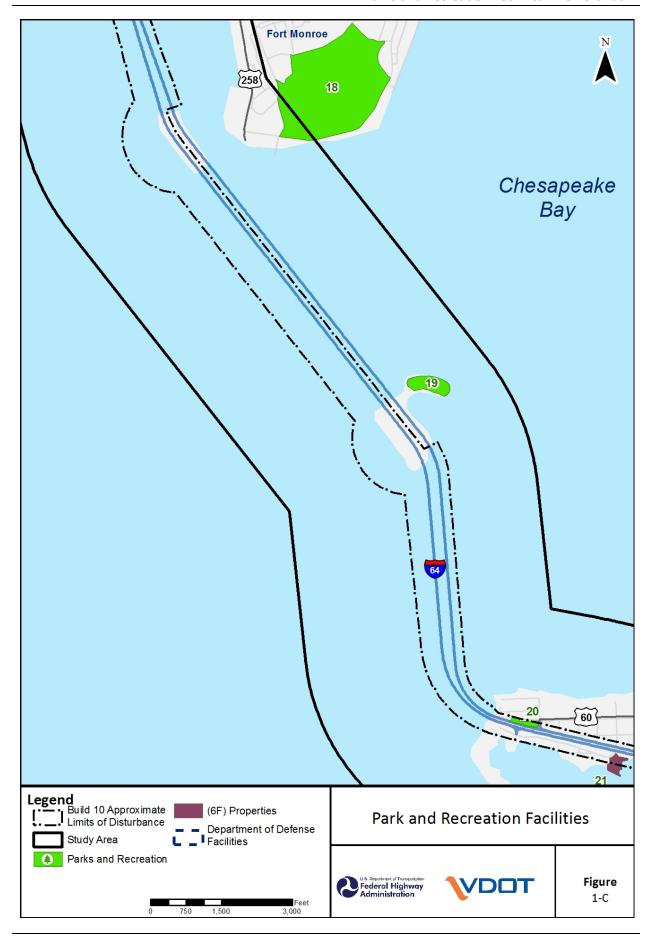
2.1 City of Hampton Parks and Outdoor Recreational Facilities

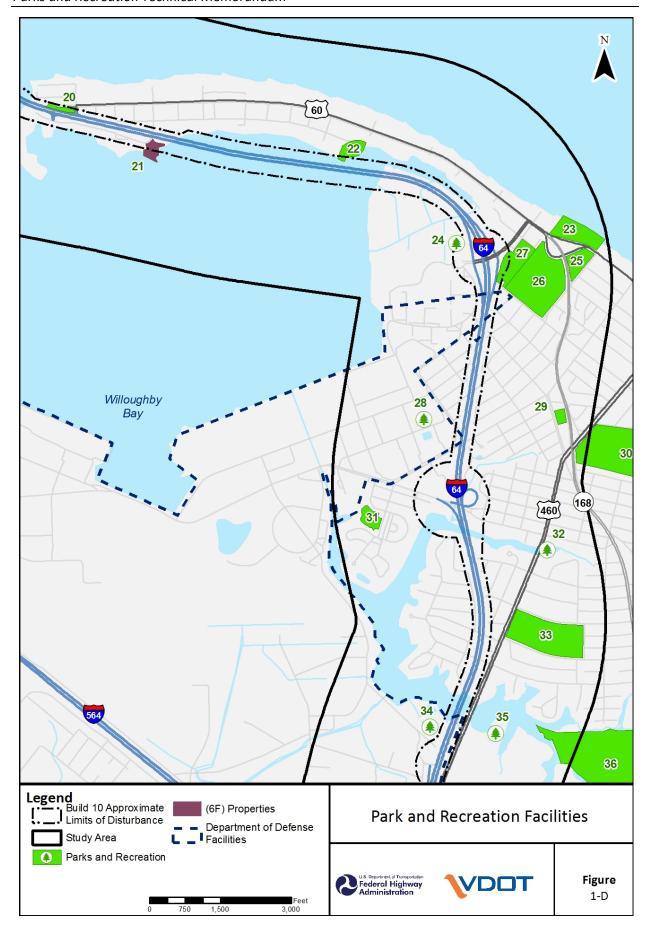
Facility 1 - Newmarket Park Creek and Trail is a proposed multi-use trail facility to be located along Newmarket Creek north of I-64 near the I-664 interchange, on land owned by the City of Hampton. The trail would start at the Mercury Boulevard and LaSalle Avenue interchange near the Air Power Park and Museum and continuing southwest near the Hampton Coliseum. The trail is proposed to cross over I-64 at Pine Chapel Road and end with a loop around the lake at the Bass Pro Shops. Pocket parks and water access points are proposed to be located at several points along the trail.

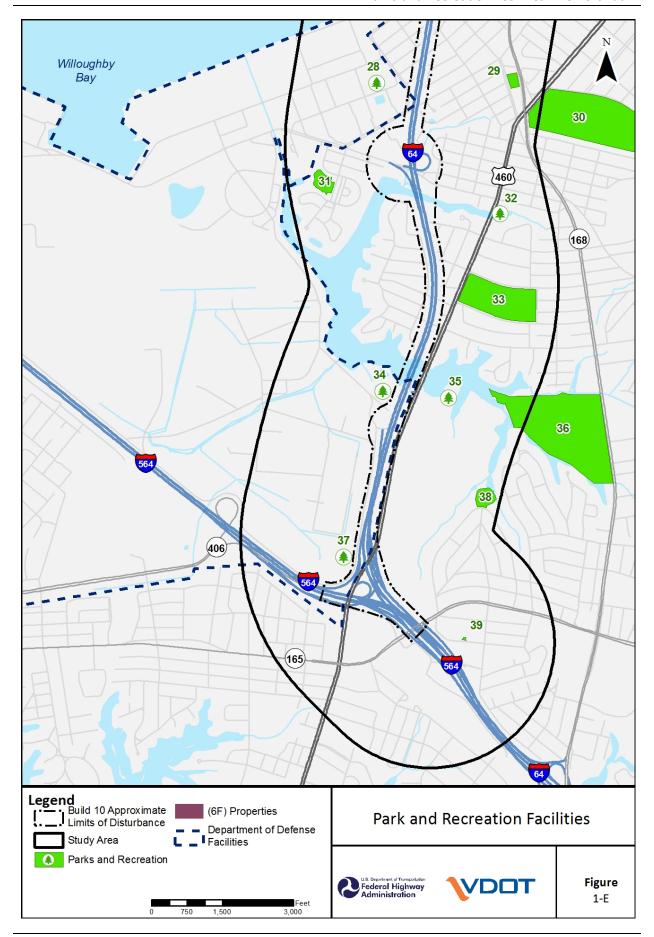
Facility 2 - Bluebird Gap Farm is located off of Pine Chapel Road in the southwest quadrant of the I-64/I-664 interchange. It is a sixty-acre farm and park owned by the City of Hampton, featuring a picnic shelter, playground equipment, a nature trail, a small stage with seating, and pens and enclosures for over 150 wild and domestic animals.











- **Facility 3 Hampton High School** is located at 1491 West Queen Street, includes adjacent athletic fields. The property is owned by the City of Hampton.
- **Facility 4 Suzanne E. Jones Community Center** is located at 1137 LaSalle Avenue and includes outdoor athletic fields. The facility is owned by the City of Hampton.
- **Facility 5 Y.H. Thomas Neighborhood Park** is owned by the City of Hampton and is located at the intersection of Thomas Street and Bassette Street near the interchange of LaSalle Avenue/Armistead Avenue with I-64. It is situated behind the Y.H. Thomas Building and features a basketball court, a youth baseball field, a football field, a softball field, a playground, and two picnic shelters.
- **Facility 6 Mary Peake Playground** is owned by the City of Hampton and is located at the Mary Peake Center at 1306 Thomas Street. This is an early childhood development facility that includes an outdoor playground.
- **Facility 7 Old North Hampton Community Park** is a proposed facility that would be located off of Bethel Avenue north of the Mary Peake Center and Playground, on land owned by the City of Hampton.
- **Facility 8 YMCA** is located at 1322 LaSalle Avenue and includes indoor and outdoor recreational facilities. The facility is owned by the City of Hampton and leased to the YMCA.
- **Facility 9 Phenix High School** is owned by the City of Hampton and located adjacent to the YMCA on LaSalle Avenue. The site includes an athletic field. This facility is not an active school; the building is currently used as office space.
- **Facility 10 Old Hampton Community Center** is owned by the City of Hampton and is located at 201 Lincoln Street. The site includes outdoor athletic fields.
- **Facility 11 Mill Point Park** is a two-acre park owned by the City of Hampton and located at the intersection of Queens Way East and Eaton Street. It features a 300-seat amphitheater and a view of the Hampton River. Special events such as musical entertainment and festivals occur at this park.
- **Facility 12 River Street Park** is located under I-64 near the Pembroke Avenue and River Street intersection. It is a small urban park comprised of pedestrian walkways with views of the Hampton River, and a public boat launch for small craft such as kayaks. There is no parking on-site. The park is located on land owned by the City of Hampton and by the Commonwealth of Virginia (VDOT).
- **Facility 13 Woodlands Golf Course** is owned by the City of Hampton and located immediately east of I-64 at 9 Woodland Road. The facility includes a golf course and clubhouse, skateboard park, and tennis center.
- **Facility 14 Robert Moton Elementary School** is owned by the City of Hampton and is located at 339 Old Buckroe Road. The site includes outdoor playground facilities.
- **Facility 15 L.B. Davis Playground** is located near the intersection of Fulton Street and Webster Street and owned by the City of Hampton. It consists of open space and basketball courts.
- **Facility 16 Kearney Park** is a small urban park owned by the City of Hampton and located at the corner of North Mallory Street and County Street in Phoebus. . It consists of open urban space.
- **Facility 17 Phoebus Recreation Fields** are located at the corner of County Street and Willard Avenue in Phoebus, and privately owned and operated by the Phoebus Recreation Association, Inc.

Facility 18 - Fort Monroe is an island located east of the HRBT in the southeast section of Hampton. It is a former Army base which was officially closed on September 15, 2011. Within the 565 acres of Fort Monroe are 170 historic buildings and nearly 200 acres of natural resources, including 8 miles of waterfront and 3.2 miles of beaches on the Chesapeake Bay. It has a 332-slip marina and shallow water inlet access to Mill Creek, suitable for small watercraft. A portion of the island was officially designated as a National Monument on November 1, 2011. The site is administered by the National Park Service.

Facility 19 - Fort Wool, a former military facility, is a man-made island located in Hampton Roads immediately east of the southern HRBT tunnel portal. The Army left Fort Wool in 1967 and the property reverted to the Commonwealth of Virginia. The City of Hampton leases the Fort and administers it as an historic park. The facility includes the historic fort and an outdoor theater. Access is via ferry.

2.2 City of Norfolk Parks and Outdoor Recreational Facilities

- **Facility 20 Trails End Park** is located at 1501 West Ocean View Avenue, and is a passive recreation open space area within the I-64 right-of-way on land owned by VDOT.
- **Facility 21 Willoughby Boat Ramp** is owned by the City of Norfolk and located at 1305/1309 Bayville Street. The site consists of 2 boat ramps with approximately 80 parking spaces. A building and adjacent tower are located on the northern portion of the property but are not used for recreation purposes. This site is protected by Section 6(f); LWCF funds were utilized for its purchase and construction.
- **Facility 22 Captains Quarters Park** is a small park owned by the City of Norfolk and located at 800 Little Bay Avenue on Willoughby Spit. The site consists of an indoor recreation center, a sand beach, a playground and a non-motorized boat launch facility.
- **Facility 23 Sarah Constant Beach Park** is owned by the City of Norfolk and located at 324 West Ocean View Avenue. It includes a sand beach on the Chesapeake Bay with picnic shelters and restroom facilities. The Sarah Constant Shrine, which was dedicated in 1932 as a memorial to veterans of all wars, is also located at this park.
- **Facility 24 Monkey Bottom Wetland Walkway** is located on US Navy property southwest of I-64, near the 4th View interchange behind the Norfolk Visitor Information Center. It is an elevated wooden boardwalk that extends into a wetland created by the Navy as a compensatory project.
- **Facility 25 Monkey Bottom Park** is owned by the City of Norfolk and located at 9625 Mason Creek Road. It is comprised of a passive recreation area and a small playground. Because this facility is located on Naval Station Norfolk, there are no defined park boundaries. The facility is located adjacent to the Norfolk Visitors Center on Navy Property.
- **Facility 26 Ocean View Elementary School** is owned by the City of Norfolk and located at 9501 Mason Creek Road. The school property includes an outdoor playground and recreational facilities.
- **Facility 27 Willoughby Elementary School** is owned by the City of Norfolk and located at 9500 Fourth View Street. The school includes an outdoor playground and recreational facilities that are available for public use during non-school hours.
- **Facility 28 Lagoon Waterpark** is owned by the US Navy and located off of Bellinger Boulevard on Naval Station Norfolk, west of I-64. Amenities include a pool and restroom/locker room facilities. The site is open only to military personnel/dependents/retirees and their guests.
- **Facility 29 Maple Avenue Dog Park** is owned by the City of Norfolk and located at 176 Maple Avenue. The park offers a fenced facility for use by dog owners and their pets.

- **Facility 30 Ocean View Golf Course** is owned by the City of Norfolk and located at 9610 Norfolk Avenue. The facility consists of a golf course and clubhouse.
- **Facility 31 Merrimack Landing Recreation Center** is owned by the City of Norfolk and located at 8809 Monitor Way. The site is comprised of both indoor and outdoor recreational facilities.
- **Facility 32 Lenox Wetland Restoration Site** is a wetlands restoration area at the headwaters of Oastes Creek, located at 8950 Granby Street in Norfolk. The site, which is owned by the City of Norfolk, allows for passive recreation.
- Facility 33 Northside Middle School, Mary Calcott Elementary & Norfolk Therapeutic Recreation Center is owned by the City of Norfolk and located at 180 East Evans Street. It is a shared facility with outdoor recreational facilities including a baseball field, tennis courts, basketball courts, and soccer field that are open to the public.
- **Facility 34 Breezy Point Park** is owned by the US Navy and located on Naval Station Norfolk off of Patrol Road, west of I-64. Because this facility is located on Navy property, there are no defined park boundaries. The site is comprised of outdoor recreational facilities including softball fields, outdoor volleyball and basketball courts, and playground equipment. The site is open only to military personnel/dependents/retirees and their guests.
- **Facility 35 Camp Apasus** is owned by Girl Scouts of the Colonial Coast and located at 8420 Granby Boulevard. Amenities include lodges, campsites, picnic areas and kitchen and restroom facilities.
- **Facility 36 Northside Park** is owned by the City of Norfolk and located at 8400 Tidewater Drive. Amenities at the park include outdoor recreational facilities, picnic shelters, walking paths, a year-round indoor pool and a wading pool. Northside Park is also the site of the Imagination Island playground, the largest community-built playground in the state.
- **Facility 37 Navy Athletic Field** is located on Naval Station Norfolk on Patrol Road near the I-64/I-564 interchange. Because this facility is located on Naval Station Norfolk, there are no defined park boundaries. The site is comprised of recreational fields. The site is open only to military personnel/dependents/retirees and their guests.
- **Facility 38 Monticello Village Park** is owned by the City of Norfolk and located at 8075 West Glen Road. The site consists of outdoor recreational facilities including a playground, baseball field and basketball court.
- **Facility 39 Kaboom Playground** is owned by the City of Norfolk and located at 352 San Antonio Boulevard.

2.3 Bikeways, Greenways, and Trails

According to the City of Hampton GIS information, the following roads are identified as bike routes where they traverse I-64:

- Settlers Landing Road.
- East Pembroke Avenue.
- King Street.
- Rip Rap Road.
- LaSalle Avenue.
- Armistead Avenue.

These bike routes are primarily transportation facilities and not recreational facilities; thus, they are not subject to Section 4(f). With the exception of Settlers Landing Road, which is marked with on-street bike lanes, bicyclists use shoulders or vehicle travel lanes on these routes. Settlers Landing Road, East Pembroke Avenue, King Street, and Rip Rap Road have sidewalks that can be used for bike traffic. The City of Norfolk does not identify any bike routes in the study area.

3. ENVIRONMENTAL CONSEQUENCES

Fourteen parks and recreational facilities are potentially impacted by the three Retained Build Alternatives; seven are located in the City of Hampton and seven are located in the City of Norfolk. All Retained Build Alternatives impact the same park facilities, although the extent of impact differs by alternative. The impacts of the No-Build and Retained Build Alternatives on these fourteen facilities are described below. The Draft Section 4(f) Evaluation in Appendix C of the Draft EIS provides additional evaluation for impacted properties which are subject to Section 4(f) or Section 6(f).

The No-Build Alterative would have no impacts to park or recreational resources in the study area. **Table 2** provides a summary of the potential park impacts for each Retained Build Alternative. Only those parks potentially impacted by any of the Retained Build Alternatives are listed. No acreage of impact is available for the facilities on the Navy base as these facilities do not have defined boundaries. Figure 1 depicts the park facilities relative to the Build-10 Alternative LOD. As discussed in Section 1.1 the Build-10 LOD is used as it represents the largest potential impact area. Impacts associated with the Build-8 Alternative and the Build-8 Managed Alternative would be slightly less.

The Retained Build Alternatives would not have an effect on existing bike routes, as the continuity of the routes would not be compromised.

The proposed **Newmarket Park Creek and Trail** would be impacted by all Retained Build Alternatives where the potential trail alignment crosses I-64 on Pine Chapel Road and in two other locations where the trail runs roughly parallel to existing I-64. Minor rerouting of the planned trail would be necessary. This proposed park and trail is subject to Section 4(f).

Bluebird Gap Farm would be impacted by all Retained Build Alternatives. The alternatives would require the acquisition of a narrow strip of right-of-way along the existing I-64 alignment. The impacted part of the property consists of a vegetated buffer and a small amount of open field, which would be converted to a transportation use. A pig sty and a small shed would potentially be displaced. This park is subject to Section 4(f).

Y.H. Thomas Neighborhood Park Complex would be impacted by all Retained Build Alternatives. The alternatives would require the acquisition of a small portion of right-of-way along the existing I-64 alignment. The potentially impacted part of the property consists of a small amount of open field in the southern corner of the property. No structures or park amenities would be impacted. This park is subject to Section 4(f).

The **YMCA** property would be impacted by all three Retained Build Alternatives. The alternatives would potentially require acquisition of right-of-way at the I-64/LaSalle Avenue interchange. While the YMCA building itself may be displaced, the outdoor recreational area associated with the property would not be impacted. Only the outdoor recreation portion of this property would be subject to Section 4(f).

The **Phenix High School** property would be impacted by all three Retained Build Alternatives. The alternatives would potentially require acquisition of right-of-way along at the I-64 / LaSalle Avenue interchange. The recreational facilities to the rear of the property are open for public use and are subject to Section 4(f); however, these would not be impacted by any of the Retained Build Alternatives.

Table 2. Impacts to Park and Recreation Facilities

Facility ID	Facility Name	Public Ownership and Accessibility	Build-8 Alternative	Build-8 Managed	Build-10 Alternative				
City of Hampton									
1	Newmarket Creek Park and Trail (proposed)	Public ownership and accessibility is anticipated upon completion of the trail facility	750 linear feet	750 linear feet	750 linear feet				
2	Bluebird Gap Farm	Public Ownership and Accessibility	6.7 ac	6.9 ac	6.9 ac				
5	Y.H. Thomas Neighborhood Park Complex	Public Ownership and Accessibility	< 0.1 ac	< 0.1 ac	0.1 ac				
8	YMCA	Building privately owned; accessibility is limited to those with YMCA membership. Outdoor recreational facilities publicly owned and accessible to the public.	3.2 ac	3.3 ac	3.3 ac				
9	Phenix High School	Public Ownership and Accessibility to athletic fields on property	0.2 ac	0.2 ac	0.2 ac				
12	River Street Park	Public Ownership and Accessibility	< 0.1 ac	< 0.1 ac	< 0.1 ac				
13	Woodlands Golf Course	Public Ownership and Accessibility	7.6 ac	7.7 ac	8.3 ac				
City of N	orfolk								
20	Trails End Park	Public Ownership and Accessibility	1.1 ac	1.1 ac	1.2 ac				
21	Willoughby Boat Ramp	Public Ownership and Accessibility	0.7 ac	0.8 ac	0.9 ac				
22	Captains Quarters Nature Center and Park	Public Ownership and Accessibility	< 0.1 ac	< 0.1 ac	0.1 ac				
24	Monkey Bottom Wetland Walkway	Public Ownership and Accessibility	n/a	n/a	n/a				
27	Willoughby Elementary School	Public Ownership and Accessibility outside of school hours	1.7 ac	1.8 ac	1.9 ac				
34	Breezy Point Park	Public Ownership, Accessibility limited to military	n/a	n/a	n/a				
37	Navy Athletic Field	Public Ownership, Accessibility limited to military	n/a	n/a	n/a				

The *Woodlands Golf Course* would be impacted by all three Retained Build Alternatives. The alternatives would require acquisition of right-of-way along the existing I-64 alignment. Four maintenance buildings and the roadway used to access these buildings would potentially be impacted. The potential impact would also consist of removal of vegetated buffer along I-64 and impact to a small corner of one golf hole, including a sand trap. Woodland Golf Course is subject to Section 4(f).

Trails End Park would be impacted by all three Retained Build Alternatives. The alternatives would require the expansion of the I-64 mainline into VDOT right-of-way on which the park is located. The park is not subject to Section 4(f) because it is located entirely within VDOT right-of-way.

Willoughby Boat Ramp would be impacted by all three Retained Build Alternatives. The alternatives would require acquisition of right-of-way along the existing I-64 alignment. The structure and tower located at the north end of the property would potentially be displaced, as well as a portion of the parking lot. This park is subject to Section 4(f). The park also is subject to Section 6(f) of the Land and Water Conservation Fund (LWCF). Section 6(f) of the LWCF Act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the

Department of the Interior's National Park Service (NPS) and requires that replacement lands of equal value, location, and usefulness are provided as conditions to such conversions.

Captains Quarters Nature Center and Park would be impacted by all three Retained Build Alternatives. The alternatives would require acquisition of a small area of right-of-way along the existing I-64 alignment. The potentially impacted part of the property includes a vegetated area and a small area of sand beach located adjacent to the I-64 bridge over Willoughby Bay. This park is subject to Section 4(f).

The *Monkey Bottom Wetland Walkway* facility would be impacted by all three Retained Build Alternatives. The alternatives would potentially require acquisition of right-of-way at the I-64 / 4th View Street interchange which would displace the walkway. The alternatives may also impact the associated parking area. The property is not subject to Section 4(f) because its primary purpose is not recreation.

Recreational fields associated with *Willoughby Elementary School* would be impacted by all three Retained Build Alternatives. The alternatives would potentially require acquisition of right-of-way at the I-64 / 4th View Street interchange which would impact fields located in the southwest portion of the property. The outdoor recreational area at this site is subject to Section 4(f).

Breezy Point Park would be impacted by all three Retained Build Alternatives. The alternatives would require acquisition of right-of-way along the existing I-64 alignment. Potential impacts would primarily be to the forested buffer between existing I-64 and open area/recreational fields. The property is not subject to Section 4(f).

The *Navy Athletic Field* at Naval Station Norfolk would be impacted by all three Retained Build Alternatives. The alternatives would require acquisition of right-of-way near the I-64 / I-564 interchange and potentially impact access to the facility. The property is not subject to Section 4(f).