



**US Army Corps
of Engineers®**
Wilmington District



**DRAFT ENVIRONMENTAL ASSESSMENT
for
REPLACEMENT OF THE TOWN OF DUCK'S
PUBLIC SAFETY BUILDING AT
USACE DUCK FIELD RESEARCH FACILITY**



**TOWN OF DUCK, DARE COUNTY
NORTH CAROLINA**

April 2020

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Acronyms

ADA	Americans with Disabilities Act
ANSI	American National Standards Institute
AST	Aboveground Storage Tank
CALEA	Commission on Accreditation of Law Enforcement Agencies
CAMA	Coastal Area Management Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CZMA	Coastal Zone Management Act
DEQ	[North Carolina] Department of Environmental Quality
EA	environmental assessment
EPA	Environmental Protection Agency
ER	engineer regulation
ERDC	Engineer Research and Development Center
FEMA	Federal Emergency Management Agency
FIRMette	Flood Insurance Rate Map
FRF	Field Research Facility
HTRW	hazardous, toxic, and radioactive waste
NAAQS	National Ambient Air Quality Standards
NCDCM	North Carolina Division of Coastal Management
NCDWQ	North Carolina Division of Water Quality
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
SHPO	State Historic Preservation Officer
SLR	sea level rise
SOBWS	Southern Outer Banks Water System
T&E	threatened and endangered
UST	Underground Storage Tank
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

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Introduction

This Environmental Assessment (EA) was developed in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR parts 1500-1508), and Engineer Regulation (ER) 200-2-2. The EA evaluates environmental impacts to inform decision makers and the public of likely environmental consequences of the proposed action and alternatives. The Town of Duck (Duck) currently leases an approximate 2.2-acre parcel of land from the U.S. Army Corps of Engineers (USACE) on which its current public safety building is located. The existing public safety building is inadequate and in need of renovation and expansion. Duck is examining the potential to lease an additional approximate 4.6-acre parcel from the USACE to accommodate the needs of the growing public service departments (police, fire, and surf rescue services). See Figure 1 for a map of the project location.

1.1 Project Area

The proposed project would be located in northeastern North Carolina on the Outer Banks within Dare County in the Town of Duck. This portion of the Outer Banks consists of a narrow strip of land



**Replacement of the Town of Duck
Public Safety Building Environmental Assessment**
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Figure 1
Project Location Map

between the Atlantic Ocean and the Currituck Sound (see Figure 1). The only major transportation route through this area consists of one roadway, State Route 12 (also known as Duck Road), that runs north to south along the length of the northern Outer Banks. The area features a small year-round population with a large fluctuation of seasonal visitors during the months of April through October. Duck is characterized as a coastal village with a commercial center surrounded by built-out residential neighborhoods. Duck has a largely built-out physical environment with little open space available for new development.

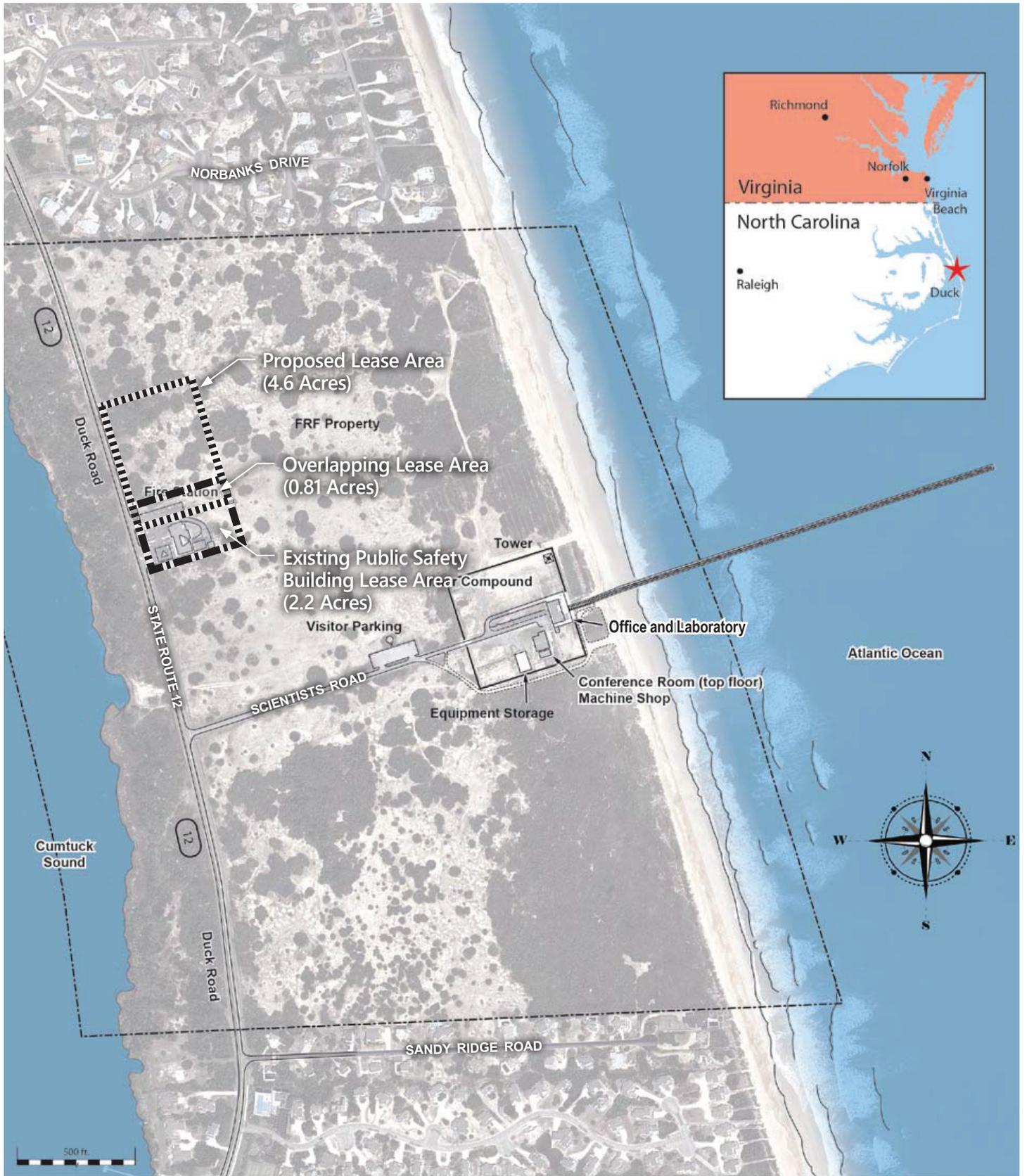
The project area is located within the USACE Field Research Facility, Coastal & Hydraulics Laboratory property, on the east side of Duck Road (State Route 12) between Scientists Road and Norbanks Drive (see Figure 1). The total project area consists of approximately 6 acres, which includes both the existing lease area (2.2 acres) and the proposed new lease area (4.6 acres), both of which partially overlap by approximately 0.81 acres, as shown on Figure 1 above. Once the proposed new facility is constructed, 1.4 acres of restored land from the existing lease area would be returned to the USACE. The project study area is bounded by Duck Road to the west and the USACE property on all other sides. See Figure 2 for a map of the USACE Field Research Facility, Coastal & Hydraulics Laboratory.

1.1 Purpose of the Project

The Duck public safety building houses both the town's police and fire departments. The facility is currently located on approximately 2.2 acres of land leased by the Duck Fire Department from the USACE. The purpose of this project is to increase the size of the land leased by the Duck Fire Department and to construct a new, larger public safety building that can accommodate the needs of the police, fire, and surf rescue departments occupying the building. As described in more detail below, the built-out nature of the Town combined with other physical and environmental constraints means that no viable alternative exists.

1.2 Need for the Project

The public safety building was originally constructed in 1982 and was designed to house the Duck Volunteer Fire Department. At the time, Duck was an unincorporated village within Dare County. In 2002, the town was incorporated and the fire department now includes career and volunteer staff. The Duck Police Department moved into the building in 2003 and now shares the space with the fire department. The building has undergone numerous renovations in an effort to accommodate the program needs of both the fire and police departments. However, the building remains antiquated and inadequate to serve the needs of both departments as well as to meet the guidelines under the National Fire Protection Association and the Commission on Accreditation for Law Enforcement Agencies. Although Duck has a small year-round population of 531 residents, the population increases to over 25,000 during the peak tourist season of April through October (U.S. Census Bureau 2018 and Duck Fire 2017). The town is in need of a public safety building that can adequately respond to the public safety and emergency calls during the peak tourist season.



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Figure 2

**USACE Field Research Facility
 Coastal & Hydraulics Laboratory**



The existing public safety building is currently inadequate in terms of program and operational space needs for the both the fire and police departments. Originally designed for 15-20 volunteer firefighters, the building now houses full-time (24/7) career staff. Currently, there are 37 firefighters (career and volunteer), 10 full-time police personnel, and a shared administrative assistant. Inadequate operational needs include a lack of sufficient space for a dedicated police evidence room, ammunition storage, processing area, and investigation rooms; a lack of appropriate ventilation in the apparatus bay; insufficient space for turnout gear storage, cleaning, and decontamination; and a lack of sufficient space in the apparatus bays.

Currently, the fire department houses within the apparatus bays a 100-foot aerial truck, a rescue pumper, a service/utility vehicle, and a brush truck. These bays currently have limited space in terms of length and width for ease of maneuvering around the large trucks parked inside. Outside of the bays, the fire department houses a Fire Chief command vehicle, a DC command vehicle, utility vehicle, and an open trailer. For the police department, officers typically take their patrol vehicles home when not on duty. On a typical day at the existing public safety building, approximately five patrol vehicles would be parked on the premises for those personnel on duty. In addition to the patrol vehicles, other police vehicles housed at the public safety building include a spare patrol vehicle, a utility vehicle, a 5-ton high water vehicle, and public safety trailers. While the fire department does not anticipate any additional vehicles, the police department may add up to two additional patrol cars.

The existing public safety building lacks separate female bunk room accommodations and a living area or kitchen for the full-time firefighters that is separate from the joint training rooms. The current space available for physical training is shared with the kitchen, dining room, living room, and break room. Capacity for training is deficient for both police and fire, and scheduling conflicts often arise when a use not related to training is taking place. In addition, the location and configuration of the training room does not meet Americans with Disabilities Act (ADA) accessibility standards, does not allow for controlled access for sensitive police training, and makes physical training disruptive to other users of the building. Overall, the building size and site configuration do not accommodate the unique and distinct programming needs of the fire and police departments, which hinders the departments' operations, reducing their ability to respond to public safety calls and emergencies.

The existing building was not originally designed or constructed to meet stringent performance design criteria specified under current 2018 North Carolina State Building Code, Chapter 16: Structural Design for an "Essential Facility" or hardened structure capable of remaining in full operation during catastrophic events. The building roof, wall framing system, and foundation do not meet the current requirements stated in Chapter 16 for wind load or seismic load. Additionally, the current building provides little to no capacity for storage of disaster mitigation equipment, which is currently stored in outside sheds, trailers, or vehicle bays. The building cannot accommodate stockpiling of surplus equipment and items such as foul weather gear, tarps, water, rations, generators, and pumps due to the lack of storage space. The building does not meet current accessibility requirements, including accessible showers, toilets, locker rooms, bunks, offices, and public support spaces.

The proposed new public safety building needs to be located on a lot large enough to accommodate the building, parking areas, and driveways (approximately 4.8 acres). The property also needs to be located on a public road with enough road frontage to accommodate maneuvering of emergency vehicles, particularly fire trucks. Based on correspondence with Duck's Town Manager, new Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) are expected to be adopted in 2020. In response to the new maps, Duck is anticipating a change to the Duck, North Carolina Code of Ordinances, Title XV, Chapter 150: Flood Damage Prevention requiring a finished floor elevation of all new buildings to be at or above 9 feet (NAVD 88). The existing USACE land is at an average elevation of 11 feet (NAVD 88) and would exceed the anticipated requirements. The space, location, and elevation requirements greatly limit other viable locations for the proposed new public safety building, which is discussed in detail in Section 2.5 below. Therefore, the continued lease of land owned by USACE is needed for this project.

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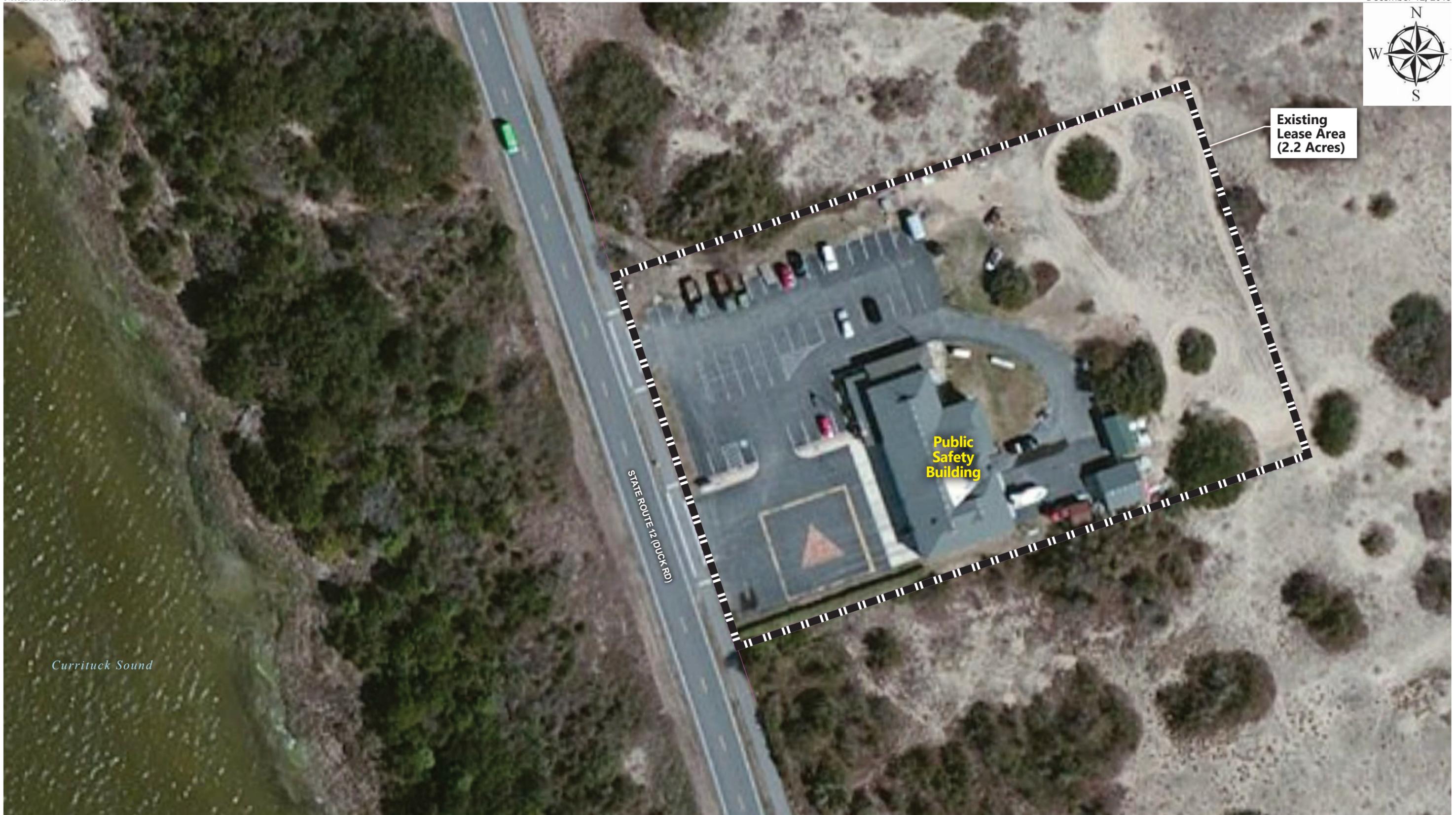
Alternatives

This section describes the alternatives considered during the planning process. Alternative 1: No Action and Alternative 2: New Public Safety Building (Proposed Action) are carried forward for detailed analysis in this EA. Alternatives 3 and 4 were considered but ultimately dismissed from consideration. The rationale for those dismissals is included in this section.

2.1 Alternative 1: No Action

Under the no action alternative, no new public safety building would be constructed. Duck would continue to lease the existing 2.2-acre parcel of land from the USACE and continue to use the existing building and facilities for both the fire department and the police department. See Figure 3. The existing building would continue to be inadequate to fully meet the needs of the fire and police departments or to serve the current public safety needs of the town population and the influx of seasonal visitors. The existing building would continue to have an inadequate number of showers, toilets, locker rooms, bunks, offices, and other critical support spaces and those spaces would continue to be out of compliance for accessibility standards. The existing building would continue to lack a dedicated training room and training exercises would continue to be conducted in a space shared with the kitchen, dining room, living room, and break room. The existing building would continue to not meet current 2018 North Carolina Building Code, as discussed in Section 1.4 above. Under the no action alternative, Duck fire and police department would continue to provide aid for fire suppression, EMT first response, motor vehicle collisions, weather related emergencies, ocean rescue, and public service calls. As a baseline to compare the other alternatives, this alternative was carried forward for detailed analysis in this EA.

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Existing Lease Area (2.2 Acres)

Public Safety Building

STATE ROUTE 12 (DUCK RD)

Currituck Sound



Existing Lease Area

Replacement of the Town of Duck Public Safety Building Environmental Assessment
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Figure 3
Alternative 1: Existing Conditions



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2.2 Alternative 2: New Public Safety Building (Proposed Action)

Under alternative 2, Duck would lease a 4.6-acre parcel of land from the USACE and would construct a new, larger public safety building to house the police department, fire department, and surf rescue services. The larger parcel of land would partially overlap the existing leased parcel by approximately 0.81 acres, as shown on Figure 4. The proposed leased parcel would continue to be outside of the 100-year floodplain and would be at an average elevation of 11 feet (NAVD 88), exceeding Duck's anticipated new requirement for construction at an elevation of 9 feet (NAVD 88).

The undeveloped portion of the parcel would be cleared of vegetation. A new, one-story-with-mezzanine building, totaling approximately 21,156 square feet, would be constructed on the new leased parcel just northeast of the existing building. Additional improvements on the site would include infiltration basins to treat stormwater onsite and improve water quality, a septic drain field and an asphalt parking area. This stormwater management plan is based on the preliminary site plan to meet North Carolina requirements for stormwater runoff in coastal counties (15A NCAC 02H.1019). As the project moves forward and design is refined, if it is determined that additional or larger stormwater management facilities are required, the size of the proposed leased land would be large enough to accommodate these changes. A portion of the parking lot would be secured behind a fence and dedicated to police operations and vehicle storage.

The building would include common space for both the fire department and the police department, as well as accommodating adequate bays for the current fleet, specifically four drive-through bays for fire engines. As shown on Figure 5, both departments would share common space for administration, building services, dedicated training areas, and living areas such as a fitness room, kitchen, dining room, day room, adequate sleeping quarters, and a t-shirt shop. While the selling of t-shirts is not a priority of the fire department, the interest from tourists in acquiring these shirts has grown over the years. Revenues from the t-shirt shop vary from year to year but helps take some burden off the fire department's budget request to the Town. Part of the revenues from the shop pay for duty uniforms and gear for the firefighters, medical exams, recruitment and retention activities (annual awards banquet, food during long events and storms, etc.), and help to offset capital purchases, most recently diesel exhaust removal systems for their apparatus financed over four years. Storage is lacking in the current facility for all operations; the new building would provide more space to run the shop.

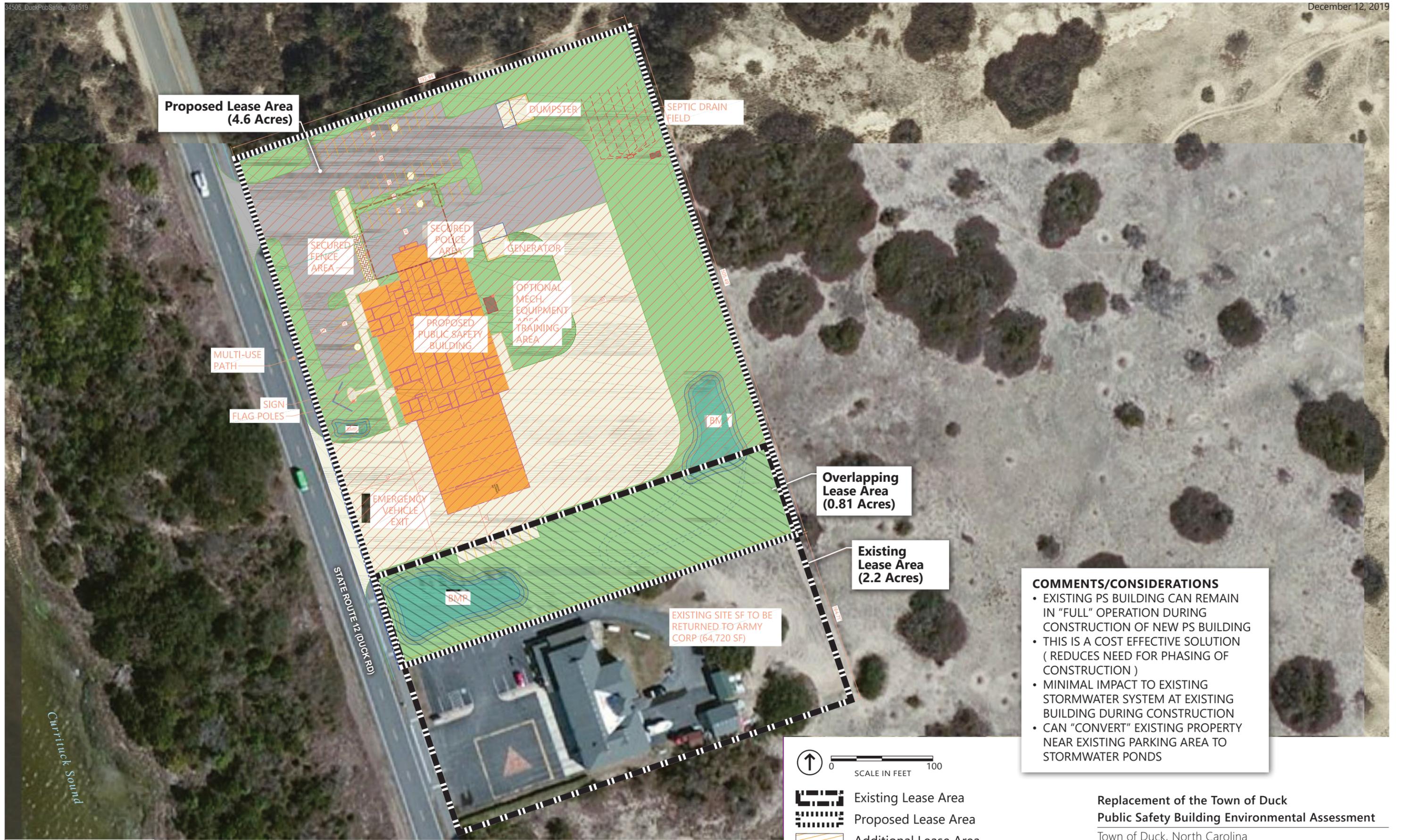
The fire department would have dedicated areas for administrative space, adequate sleeping quarters, and an apparatus bay to provide space to maintain equipment. The police department would have dedicated areas for administrative space and records management, patrol and investigative facilities, detention of suspects, questioning of suspects or questioning of victims of crime, property and evidence storage space, prisoner processing, and storage space for ammunition. Ammunition storage would be conducted in a manner to ensure the safety of the general public and building occupants. Specifically, ammunition would be stored in a fire container that would be locked and only accessible by police personnel. There would also be dedicated space in the building for surf rescue. There would

not be a substantial increase in the number of personnel working at the public safety facility relative to current conditions; however, the fire department could add three additional firefighters/EMTs and the police department could add two additional patrol officers and two new patrol vehicles. The fire department does not anticipate any additional large fire vehicles. The proposed building and parking area would accommodate these small increases in personnel and vehicles. The building would be constructed to meet current accessibility code (American National Standards Institute [ANSI] A117.1) and 2018 North Carolina Building Code. The proposed building would be capable of remaining in full operation during catastrophic events such as hurricanes or other severe storm events.

During construction, closure and temporary disturbance of a portion of the existing multiuse path along the east side of Route 12 would be required for construction of the new driveways and removal of the existing driveway at the public safety building. The multiuse path would be restored and reopened after construction is complete.

During construction of the new public safety building, the existing public safety building would remain fully operational. Duck fire and police departments would move into the new building once construction is complete. After construction completion, the existing public safety building would be demolished and approximately 1.4 acres of restored land would be returned to the USACE.

This alternative would meet the purpose of and need for the project, therefore, this alternative was carried forward for detailed analysis in this EA.



COMMENTS/CONSIDERATIONS

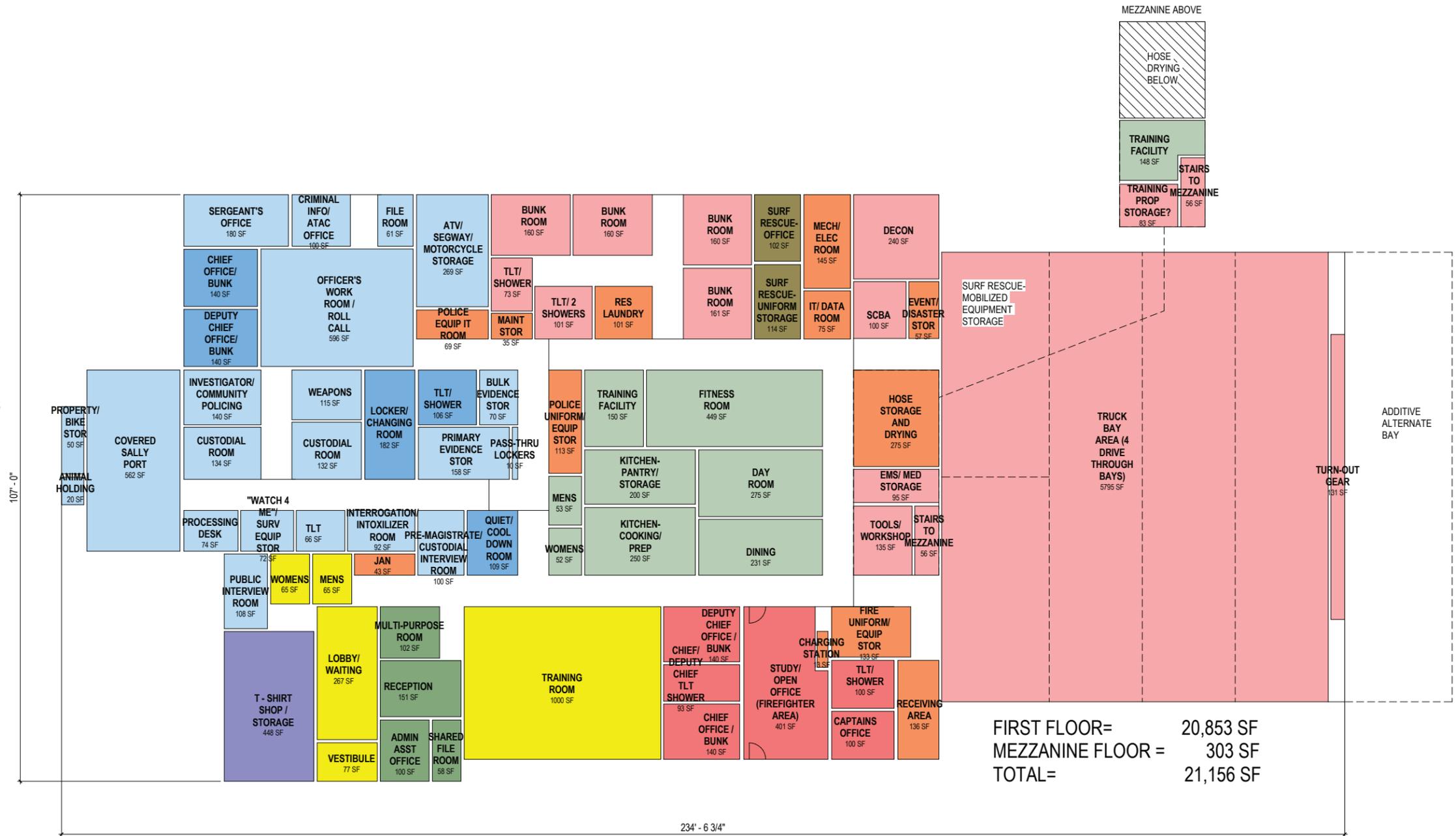
- EXISTING PS BUILDING CAN REMAIN IN "FULL" OPERATION DURING CONSTRUCTION OF NEW PS BUILDING
- THIS IS A COST EFFECTIVE SOLUTION (REDUCES NEED FOR PHASING OF CONSTRUCTION)
- MINIMAL IMPACT TO EXISTING STORMWATER SYSTEM AT EXISTING BUILDING DURING CONSTRUCTION
- CAN "CONVERT" EXISTING PROPERTY NEAR EXISTING PARKING AREA TO STORMWATER PONDS

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Figure 4
Alternative 2: Proposed Site Plan

Department Legend

- COMMON SPACE - PUBLIC AREAS
- COMMON SPACE - ADMINISTRATION
- COMMON SPACE - LIVING AREAS
- FIRE DEPARTMENT - ADMINISTRATIVE SPACES
- FIRE DEPARTMENT - APPARATUS BAY & SUPPORT SPACES
- FIRE DEPARTMENT - RESIDENTIAL SPACES
- POLICE DEPARTMENT - ADMINISTRATIVE SPACES
- POLICE DEPARTMENT - PATROL FACILITIES
- POLICE DEPARTMENT - INVESTIGATIVE
- POLICE DEPARTMENT -PROPERTY & EVIDENCE DIVISION
- POLICE DEPARTMENT - PRISONER PROCESSING DIVISION
- POLICE DEPARTMENT - COMMUNITY POLICING
- T - SHIRT SHOP
- SURF RESCUE
- COMMON SPACE - BUILDING SERVICES



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Figure 5
Alternative 2: Proposed Floor Plan

2.3 Alternative 3: Remodel/Expand Existing Building

During the planning process, potential design options included expanding and renovating the existing public safety building. However, during a facility conditions assessment and facility needs study, it was determined that due to the existing building size and location, along with current site constraints, it would not be feasible to reasonably accommodate all the required facility program functions and space needs. The most important factor in this determination is that the existing public safety building needs to remain fully operational during construction of the additions and renovations of the existing building. To ensure the existing facility remained fully operational at all times, all building expansion and renovation work would have to be performed in multiple phases. Multi-phased construction would require substantially more time to complete all required work when compared to constructing a completely new building in one phase. Additionally, expanding and renovating the existing facility while it remains occupied and operational increases the risk of unforeseen circumstance arising that could hinder the fire and police staff's ability to meet critical response times for all their emergency services calls.

Another factor in this determination is that the existing building was originally constructed as a smaller facility that has been expanded and renovated in various areas over the years. The existing facility includes various types of building systems including wood framing, masonry walls, and steel support members. The existing foundation systems appear to vary throughout the existing facility and were designed to accommodate selective design load conditions based on applicable building codes at the time of each previous expansion or renovation project and do not conform to current 2018 North Carolina Building Code, Chapter 16: Structural Design. Furthermore, the existing ceiling height is very low in various locations (as low as 7 feet 2 inches in some locations), which would make it very difficult to accommodate all the required new mechanical, electrical, plumbing, and fire protection systems that must be installed above the finish ceilings. It is not technically feasible to completely remove and replace all of the existing second floor framing systems at a higher elevation than currently constructed to accommodate all new systems and provide an appropriate code-compliant ceiling height. Finally, the current building layout, including existing emergency egress paths, structural framing systems, toilet fixture counts, and other related design elements do not conform to current accessibility code (ANSI A117.1).

Because maintaining full operation of the existing public safety building is imperative to ensure public safety for Duck, and because the existing facility does not meet current building or accessibility codes, this alternative was ultimately dismissed from consideration.

2.4 Alternative 4: New Public Safety Building to Replace Existing

During the planning process, Duck considered constructing a new public safety building to replace the existing building in the same location. Under this alternative, Duck would lease a parcel of land approximately the same size as that described under alternative 2 (4.8 acres) but would fully overlap the existing parcel (see Figure 6). The new public safety building would be the same design as the building described under alternative 2 above. However,

implementation of this alternative would require the complete demolition of the existing public safety building prior to construction of the new building. Therefore, Duck's only immediate and primary emergency response facility would not be operational during construction. Furthermore, the police department cannot work from a neighboring police department because of the specific originating agency identifier (ORI) assigned to the Town of Duck Police Department by the FBI. There are many reasons for this identification, including geographic and other identifying characteristics that are specific to the agency identified. The ORI essentially determines by definition that one agency cannot be combined with another law enforcement agency. Uniform Crime Reporting (UCR) data, crime mapping, crime patterns, crime trends, databases, information systems, size and demographic makeup (of the agency) are examples of some of the important information that the ORI is used for.

Similarly, the fire department is unable to operate from neighboring departments because their priority to the community is to provide timely responses to all calls for service with adequate staffing and equipment. This requires a response from within the district. To operate out of neighboring fire departments is logistically not possible and realistically would significantly delay response times, apparatus, and limit personnel response. Of note, Corolla Fire and Rescue (Pine Island Station) is 7.0 miles to the north. The Whalehead Station is 11.2 miles to the North. These stations do not have the apparatus bay or station space to accommodate the Duck fire department. Southern Shores Fire Department is 7.7 miles away to the south and currently under construction. Even once completed, they do not have the apparatus bay or station space to accommodate Duck's fire department. Kitty Hawk Fire Department is 10.2 miles away. While they respond on Duck's first alarm assignment, arrival times to Duck's emergencies are impacted by geography and traffic. The community is best and most safely served by Duck fire department's ability to respond with people and equipment from within its town limits.

Because the police and fire departments are unable to work from neighboring departments, maintaining full operation of the existing public safety building is imperative to ensure public safety for Duck. Therefore, this alternative was ultimately dismissed from consideration.

2.5 Alternative Locations for New Public Safety Building

Duck considered alternative locations for the new public safety building that were outside of USACE property. ER 1130-2-550 authorizes non-recreational use of USACE lands only if there is no viable alternative to the use of USACE land, or if there is a direct benefit to the government. Because the physical environment of Duck is largely built out, no viable alternative locations outside of the USACE property were identified during the planning process, as described below.

Three main site selection criteria were used in evaluating alternative sites for the public safety building. The criteria include siting the building outside of the 100-year floodplain, locating the public safety building on a public road, and finding a parcel or combination of parcels large enough to accommodate the program needs of Duck's police, fire and surf rescue departments, estimated at approximately 4.8 acres.

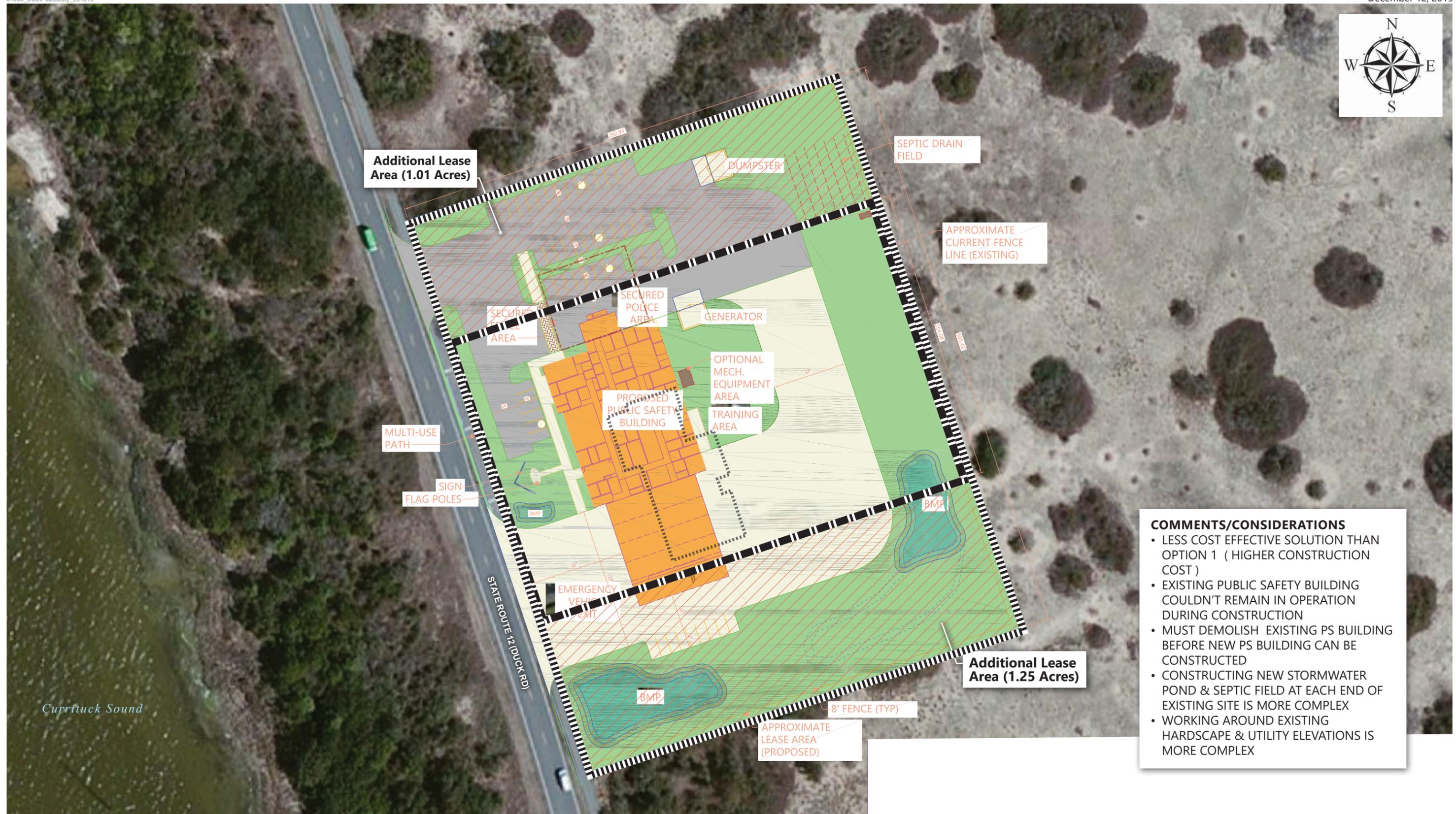
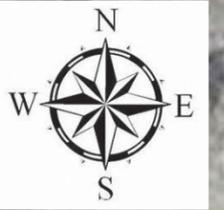
The first selection criterion was to site the facility outside of the limits of the 100-year floodplain. As expected in a coastal community, much of Duck is located within the 100-year floodplain, identified by FEMA flood zones AE and VE, which are also known as Special Flood Hazard Areas. According to correspondence with the Duck Town Manager, new FEMA FIRMs are expected to be adopted in the spring of 2020 and, in response, the town requirements for construction are expected to change from the current 1 foot requirement to 3 feet above base flood elevation, or 9 feet. Because it is important for emergency vehicles to be able to maneuver in and out of the property during emergency calls and storm events, as well as respond during disastrous events, it is important that not only the building be designed above the required elevation, but also the adjacent roadway, driveway, and parking areas be located in areas naturally higher elevation to more fully support a resilient facility. This limits the feasible locations for a new public safety building to those parcels located outside of the 100-year floodplain, illustrated on Figures 7a-c as Zone X in a light-yellow color. As evidenced on Figure 7a, siting the proposed public safety building outside of the 100-year floodplain eliminated all parcels in the northern portion of the town.

The second selection criterion was to locate the public safety building on a public road. As many of the roads in Duck are private, this criterion further limits available property options. On Figures 7a-c, all public roads are identified with a solid purple line and private roads are unshaded.

The last site selection requirement considered was parcel size. A review of available lots that are large enough to accommodate the new public safety building, or about 4.8 acres was completed. As is evident on Figures 7a-c, there are no vacant parcels (or combination of parcels) large enough to accommodate the needs of the program. The constraints posed by the acreage of available land are further exemplified by the planning and design of the Duck Town Hall. In 2008, when the Town Hall was being planned and designed, Duck considered sizing the building so that the Police Department could be headquartered there. However, it was quickly determined that the lot on which the Town Hall was to be constructed was not large enough to accommodate a building that could adequately house local government administration and the Police Department. Prior to selecting the site for the Town Hall, local officials had undertaken a search of available sites, and the building was eventually constructed on the only available property (which was large enough for administrative offices but not for public safety functions).

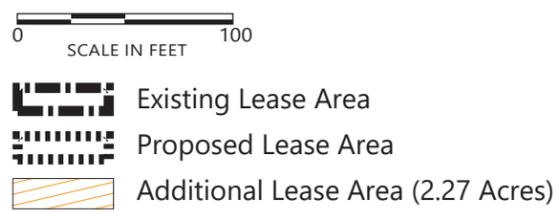
After assessing the available lots in Duck and eliminating parcels within the 100-year floodplain, eliminating parcels on private roads and those that did not provide enough road frontage for maneuvering emergency vehicles, then further eliminating those that were not large enough to accommodate the public safety building, it was determined that there were no viable alternative locations that met all program requirements. Therefore, other alternative locations outside of the USACE property were considered but dismissed from consideration.

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COMMENTS/CONSIDERATIONS

- LESS COST EFFECTIVE SOLUTION THAN OPTION 1 (HIGHER CONSTRUCTION COST)
- EXISTING PUBLIC SAFETY BUILDING COULDN'T REMAIN IN OPERATION DURING CONSTRUCTION
- MUST DEMOLISH EXISTING PS BUILDING BEFORE NEW PS BUILDING CAN BE CONSTRUCTED
- CONSTRUCTING NEW STORMWATER POND & SEPTIC FIELD AT EACH END OF EXISTING SITE IS MORE COMPLEX
- WORKING AROUND EXISTING HARDSCAPE & UTILITY ELEVATIONS IS MORE COMPLEX



Replacement of the Town of Duck
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Figure 6
Alternative 4: New Public Safety Building to Replace Existing

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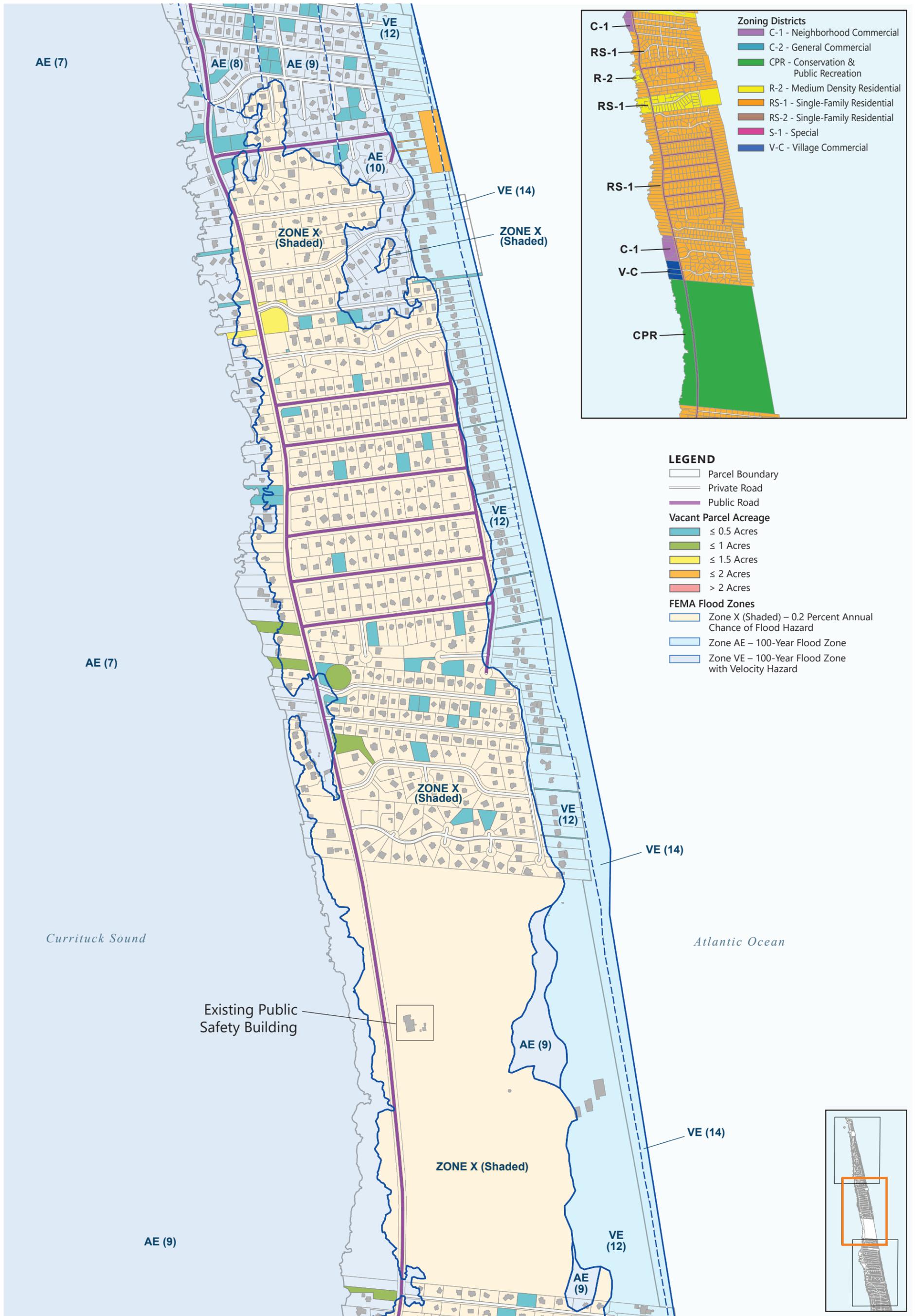


0 SCALE IN FEET 700

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Public Safety Building Environmental Assessment
Town of Duck, North Carolina



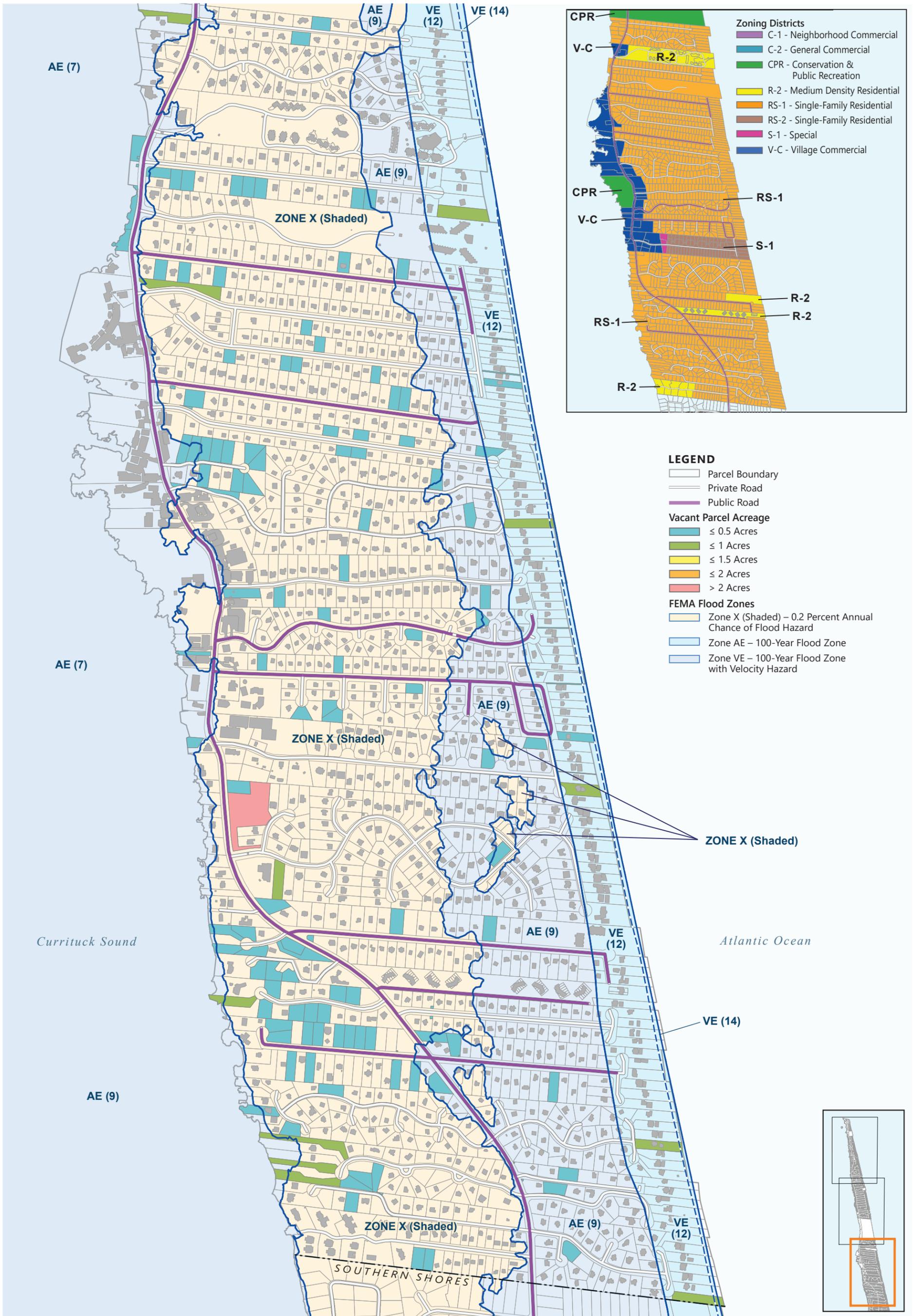
Figure 7a
Town of Duck Parcel Map North



Replacement of the Town of Duck
Public Safety Building Environmental Assessment
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Figure 7b
Town of Duck Parcel Map Central





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Replacement of the Town of Duck
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3

Affected Environment and Potential Impacts

This section describes the current environmental conditions in and surrounding the project area as they relate to each impact topic retained for analysis. These conditions serve as a baseline for understanding the resources that could be affected by implementing the project. This section then analyzes the beneficial and adverse impacts that would result from implementing (no action and the proposed plan) carried forward for detailed analysis in this EA, as described in chapter 2.

3.1 Threatened and Endangered Species

3.1.1 Affected Environment

The U.S. Fish and Wildlife Service (USFWS) provided a list of 14 federally-listed species that have been identified as having the potential to occur within the project area based on their presence within Dare County. The occurrence of these species within the project area depends on the availability of appropriate habitat, life history and other factors of the species in question.

The following federally listed threatened or endangered (T&E) species occurring within Dare county include: West Indian manatee (*Trichechus manatus*), Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*), Shortnose Sturgeon (*Acipenser brevirostrum*), loggerhead sea turtle (*Caretta caretta*), green sea turtle (*Chelonia mydas*), leatherback sea turtle (*Dermochelys coriacea*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), northern long-eared bat (*Myotis septentrionalis*), red wolf (*Canis rufus*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), red-cockaded woodpecker (*Picoides borealis*), roseate tern (*Sterna dougallii dougallii*), and seabeach amaranth (*Amaranthus pumilus*).

Any potential impacts on federally-listed T&E species would be limited to those species that occur in habitats encompassed by the proposed project site. Of these 14 species, none are known to be found in the maritime forest and vegetated secondary dune habitat found within the project footprint.

The North Carolina Natural Heritage Program (NCNHP) indicates the potential presence of the following state-listed plants within the project area.

- › Sand heather (*Hudsonia tomentosa*) (state threatened)
- › Maritime pinweed (*Lechea maritima* var. *virginica*) (state endangered)
- › Chapman's redtop (*Tridens chapmanii*) (state threatened)

A survey by a qualified botanist was performed for these three plant species within the project area. Sand heather and maritime pinweed plants were found as co-dominants on exposed sandy knolls or back dunes totaling approximately 1.3 acres of the 4.6-acre project site.

3.1.2 Impacts of the Alternatives

There would be no impact on threatened and endangered species under the no action alternative. Potential effects to each listed threatened and endangered species under the action alternative are discussed in the following species descriptions.

The West Indian Manatee, Atlantic Sturgeon, and Shortnose Sturgeon are strictly aquatic species whose lifecycles are spent exclusively in aquatic environments. The proposed action is not expected to impact water quality of either the Atlantic Ocean or Currituck Sound; therefore, no impact to these species are anticipated.

Loggerhead sea turtle, green sea turtle, leatherback sea turtle, and Kemp's Ridley sea turtle are marine reptiles that spend most of their lifecycle at sea, with a short terrestrial period of their lifecycle associated with egg-laying. However, all four species nest on beaches or among primary dunes, not maritime forest and scrub habitats on secondary dunes where this project area is located. The nearest suitable nesting habitat for sea turtles is approximately 1,250 feet to the east of the easternmost project boundary. Therefore, the proposed action is not expected to affect these species.

The coastal plains population of northern long-eared bat is found in mature forested swamps and requires large mature trees for maternity and daytime roosts. The stunted trees occupying the xeric, sandy habitats found on-site are not suitable for this species and no impacts are anticipated as a result of the proposed action.

An experimental population of red wolf is found at Alligator River National Wildlife Refuge, across both the Albemarle and Currituck Sounds from Duck. The red wolf is not expected to occur within the vicinity of the project area.

The piping plover and red knot are shorebirds that prefer open beach habitat and primary dunes to loaf, forage and nest near estuaries and the ocean. The project site contains isolated patches of sandy knolls and back dunes surrounded by maritime scrub relatively distant from the Atlantic Ocean. A survey of these areas did not reveal any piping plover or red knot nesting areas.

Red-cockaded woodpeckers require old growth, open pine stands, which are not found on-site. Roseate terns forage over open water and nest on protected islands and sandy shoals. No adverse impacts to these species are anticipated as a result of the proposed action.

The seabeach amaranth (*Amaranthus pumilus*) is a small annual that prefers upper beaches and overwash flats of barrier islands having sandy substrates just above tide levels at elevations 5 to 8 feet where competition from perennial vegetation is sparse. The project site comprises mostly maritime scrub and forest ecosystems scattered among elevated sandy knolls considered too xeric for the species. Furthermore, the site shows no evidence of any recent overwash episodes that would be available for the species to inhabit. Therefore, no impacts to this species are anticipated as a result of the proposed project.

The proposed action would result in the impact of multiple sand heather and maritime pinweed plants where they commonly occur on open sandy knolls and secondary dunes. While the total number of plants that would be impacted is unknown, the alternative is expected to impact approximately 1.3 acres of available habitat where plants have been observed. Once the new building under the action alternative is fully operational, the existing safety building and parking lot will be demolished, and the area will be restored to the open, sandy habitat preferred by these species. The restored area is expected to be approximately 1.4 acres in size and restoration methods are described below.

Restoration of the site after demolition of the existing safety building will consist of grading and contouring of the soil to mimic the local secondary dune structure. Additionally, the restored area will be planted with native herbaceous material appropriate for the habitat. Likely plantings could include, but are not limited to, American beachgrass (*Ammophila beviligulata*), tufted coastal panic grass (*Panicum amarulum*), coastal panic grass (*Panicum amarum*), switch grass (*Panicum virgatum*), seaside goldenrod (*Solidago sempervirens*), sea oats (*Uniola paniculate*), and seaside saltbush (*Iva imbricata*). Additionally, other varieties of shrub and tree plantings will be added these could include: Sand live oak (*Quercus germinate*), Live oak (*Quercus virginiana*), Common persimmon (*Diospyros virginiana*), Wild olive (*Cartrema americana*), Swamp bay (*Persea palustris*), Yaupon (*Ilex vomitoria*), Wax-myrtle (*Morella cerifera*), Eastern red-cedar (*Juniperus virginiana*), and American holly (*Ilex opaca*). Planting will be placed and fertilized as appropriate to mimic and encourage development of the local secondary dune structure.

This restored area will create the niche habitat that sand heather and maritime pinweed require. Known colonies of native vegetation in the area will provide a seed source for establishment of additional herbaceous and woody species in the restored area. The restoration efforts paired with the anticipated natural recruitment of local native species are expected to provide the necessary elements needed to return the site to a native secondary dune structure habitat. This niche habitat is capable of supporting sand heather and

maritime pinweed as well as other native coastal zone flora affected during the construction of the new safety building. Monitoring will be conducted for a minimum of one growing season after planting, to ensure the health and survivability of plants in the revegetated area. Where plants are not healthy or do not survive, native plants will be replanted.

3.2 Terrestrial Resources

3.2.1 Affected Environment

The project area is characterized by a natural maritime forest interspersed with dune scrub-shrub habitat and secondary dunes vegetated with herbaceous species. Vegetation on-site is characteristic of the maritime forest ecosystem, including species such as wax myrtle (*Morella cerifera*), groundsel tree (*Baccharis halimifolia*), Yaupon holly (*Ilex vomitoria*), and southern live oak (*Quercus virginiana*).

Wildlife in this environment includes songbirds, such as northern cardinal (*Cardinalis cardinalis*), eastern towhee (*Pipilo erythrophthalmus*), northern mockingbird (*Mimus polyglottos*), white-eyed vireo (*Vireo griseus*), and Carolina wren (*Thryothorus ludovicianus*); raccoon (*Procyon lotor*); eastern glass lizard (*Ophisaurus ventralis*); and gray fox (*Urocyon cinereoargenteus*).

3.2.2 Impacts of the Alternatives

There would be no impact on terrestrial resources under the no action alternative as there would be no change in the existing developed footprint.

Construction efforts associated with the proposed action would negatively impact existing terrestrial resources. Clearing and grubbing of the existing maritime forest landscape and dune scrub-shrub habitat would occur to support development of the new public safety building. Wildlife would be disturbed during construction activities and would likely avoid the area due to the presence of construction equipment, materials, and activities. These impacts are expected to last the duration of construction, or about 14 to 16 months. However, the species found in this habitat are common to the region and are well-adapted to the presence of human development. The area of disturbed habitat (approximately 1.3 acres) would be relatively small when compared to the roughly 150 acres of similar habitat that would remain available on the ERDC, FRF property.

Although disturbance to terrestrial resources is unavoidable, the existing public safety building will be demolished after the new building is constructed and the area will be restored back to a scrub shrub environment as discussed under Section 3.1.2 above. Wildlife species are expected to return to the area after restoration of the habitat is complete.

3.3 Water Quality

3.3.1 Affected Environment

Aquifers and surface water are often drinking water sources and may be impacted by development. The Safe Drinking Water Act of 1974 requires protection of drinking water systems that are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health. Sole Source Aquifer designations are one tool to protect drinking water supplies in areas where alternatives to the groundwater resource are few, cost-prohibitive, or nonexistent. The designation protects an area's groundwater resource by requiring US Environmental Protection Agency (EPA) review of any proposed projects within the designated area that are receiving federal financial assistance. There are no Sole Source Aquifers within the vicinity of the proposed project.

Existing water is supplied to the site by the Southern Outer Banks Water System (SOBWS) which derives its water from 64 wells. No water will be drawn directly from local aquifers. The North Carolina Department of Environmental Quality (DEQ) Public Water Supply section conducts assessments for all drinking water resources across North Carolina. Assessment reports are available online at www.ncwater.org/pws/swap.

A site survey was conducted on January 28, 2019 by USACE and consultants hired by the Town of Duck. During this site visit, no ditches or surface water features were identified. For more information about this site visit, see Section 3.5 below. As no water features or stormwater management facilities are located onsite, it is assumed that the site drains via overland flow directly into the sandy soils.

The nearest water feature to the proposed site is the Currituck Sound, located approximately 300 feet west of the site. The waters of Currituck Sound are classified by the North Carolina Division of Water Quality (NCDWQ) as SC (tidal salt waters protected for secondary recreation). The NCDWQ identifies best usages of Class SC as "fishing, boating, and other activities involving minimal skin contact; fish and noncommercial shellfish consumption; aquatic life propagation and survival; and wildlife." (NCDEQ 2019). The Currituck Sound drains to the Albemarle Sound and ultimately into the Atlantic Ocean. The Currituck Sound and Albemarle Sound do not have a Total Maximum Daily Load (TMDL) as authorized under the Clean Water Act.

3.3.2 Impacts of the Alternatives

The no action alternative maintains the status quo of water quality from existing conditions, and stormwater is not currently treated by a stormwater management facility. No impacts to the nearby Currituck Sound or to water quality are anticipated because there would be no ground disturbance or changes within the project area.

Under the proposed action, ground disturbance during construction activity has the potential to release loose sediment into nearby waters, particularly during rain and storm events; however, these adverse impacts on water quality would be temporary and minor in nature. To minimize these impacts, dust and erosion control will be considered an integral

part the project. All structural and vegetative erosion and sediment control practices will be implemented and maintained according to minimum standards and specifications of the NC Erosion and Sediment Control Planning and Design Manual, 2013. Erosion controls could include, but are not limited to, construction entrances, silt fence, soil stabilization, and temporary and permanent seeding. The proposed action will result in an increase in impervious surface, but it is unlikely to alter general characteristics of the local aquifer and would not impact groundwater characteristics. Much of the site drains via overland flow and infiltrates into the sandy soils. The proposed drainage patterns will emulate the existing patterns to the maximum extent possible. Stormwater will be reviewed for both water quantity and water quality, and infiltration basins would be used onsite to meet both water quality and quantity requirements. All stormwater will be treated onsite and therefore, no impacts are anticipated to offsite resources, including the nearby the Currituck Sound. Because there is no current treatment of stormwater onsite, proposed implementation of infiltration basins will result in improved water quality even though impervious surface area will increase.

3.4 Air Quality

3.4.1 Affected Environment

The EPA sets National Ambient Air Quality Standards (NAAQS) for criteria air pollutants including ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide. Under the Clean Air Act, the EPA determines whether or not areas of the U.S. meet these standards. If the air quality in a geographic area meets or exceeds the NAAQS, it is called an attainment area. The project is located in the Town of Duck, Dare County, North Carolina, which is in attainment status for all criteria pollutants. The project will follow all local permitting requirements for stationary sources, such as generators, as needed.

3.4.2 Impacts of the Alternatives

The no action alternative would not result in any impacts to air quality as no construction operations would occur, thus eliminating associated emissions.

Temporary impacts to air quality may exist during construction of the proposed project, as temporary increases in vehicle emissions and particulate matter are expected to occur. It is anticipated that traditional types of commercial construction equipment would be used, such as earthmoving equipment, small to medium size cranes, scaffolding, and storage containers. These temporary impacts would only last the duration of construction, which is estimated to be 14 to 16 months. This project is not anticipated to generate sufficient emissions during either construction or operation to have a significant long-term negative impact on air quality.

3.5 Wetlands and Floodplains

3.5.1 Affected Environment

Wetlands are defined by the USACE as “those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (USACE 2010). The National Wetlands Inventory (NWI), a geodatabase that identifies areas likely to be wetlands, does not indicate any wetland features on the project site (Figure 8). Furthermore, a site visit was conducted on January 28, 2019 by two representatives from USACE as well as two wetland scientists and a project manager hired by the Town of Duck. During this site visit, Duck’s consultants took several soil samples throughout the project area, as shown on Figure 9, in both the xeric high dune structure and the lower-lying interdunal swales. Typical soil profiles from the higher xeric areas were non-hydric sandy soils with Munsell color of 10YR and a value and chroma of 4/4, respectively. Soil profiles from the interdunal swales were also non-hydric sandy soils with the only variation from the xeric profile being a thin 10YR 2/1 sandy loam layer at the surface. See representative photographs below. These soil samples identified only upland soils; no jurisdictional wetland features were identified onsite.

FEMA produces annual flood risk maps, known as FIRMettes. The FIRMette shows the existing public safety building as located within Flood Zone X, which signifies 0.2% annual chance of flood hazard (Figure 10).

3.5.2 Impacts of the Alternatives

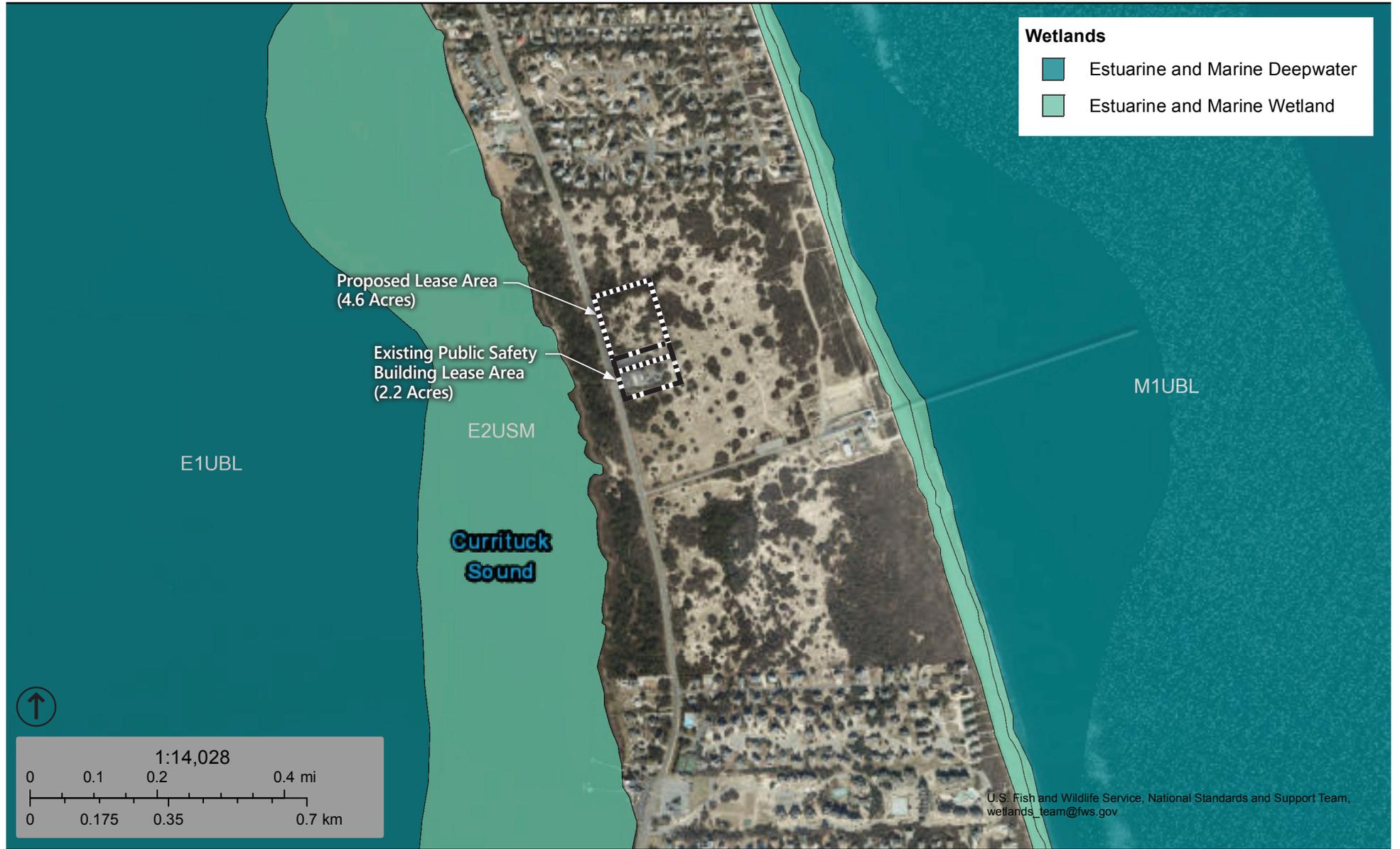
The no action alternative would not result in any impacts to wetlands and floodplains as no changes to the existing environment would occur.

A qualified environmental professional performed an onsite evaluation and found no jurisdictional wetland features, as discussed in Section 3.5.1 above. Therefore, no wetland impacts are expected as a result of the proposed action and this project will be in compliance with Executive Order 11990: *Protection of Wetlands*.

Executive Order 11988: *Floodplain Management* requires federal agencies undertaking or assisting with a project to take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and preserve the natural and beneficial values served by floodplains. The executive order then lays out an eight-step decision-making process related to use of floodplains. The eight steps are: 1) determine if the proposed action is within a floodplain; 2) if the action is in a floodplain, make public the intent to locate a proposed action in the floodplain; 3) if the action is in a floodplain, identify and evaluate practicable alternatives; 4) identify if the proposed action has impacts in a floodplain or supports floodplain development that has additional impacts; 5) if there are impacts in a floodplain, determine ways to minimize these impacts; 6) reevaluate the proposed action taking into account the impacts and efforts needed to minimize impacts; 7) if the agency determines the only practicable alternative is locating in a floodplain, notify the

public of these reasons; and 8) implement the proposed action after a reasonable period to allow for public response.

The construction footprint associated with the proposed action is located entirely within Flood Zone X, which signifies 0.2% annual chance of flood hazard and is outside of the 100-year floodplain. Following above-mentioned eight-step process, it is determined that the proposed action is not located within the 100-year floodplain and the proposed action will not result in impacts to the 100-year floodplain or support development within the 100-year floodplain. Therefore, the proposed project will be in compliance with Executive Order 11988.



- Existing Lease Area
- Proposed Lease Area

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Figure 8
National Wetlands Inventory Map

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Figure 9
Soil Sample Map

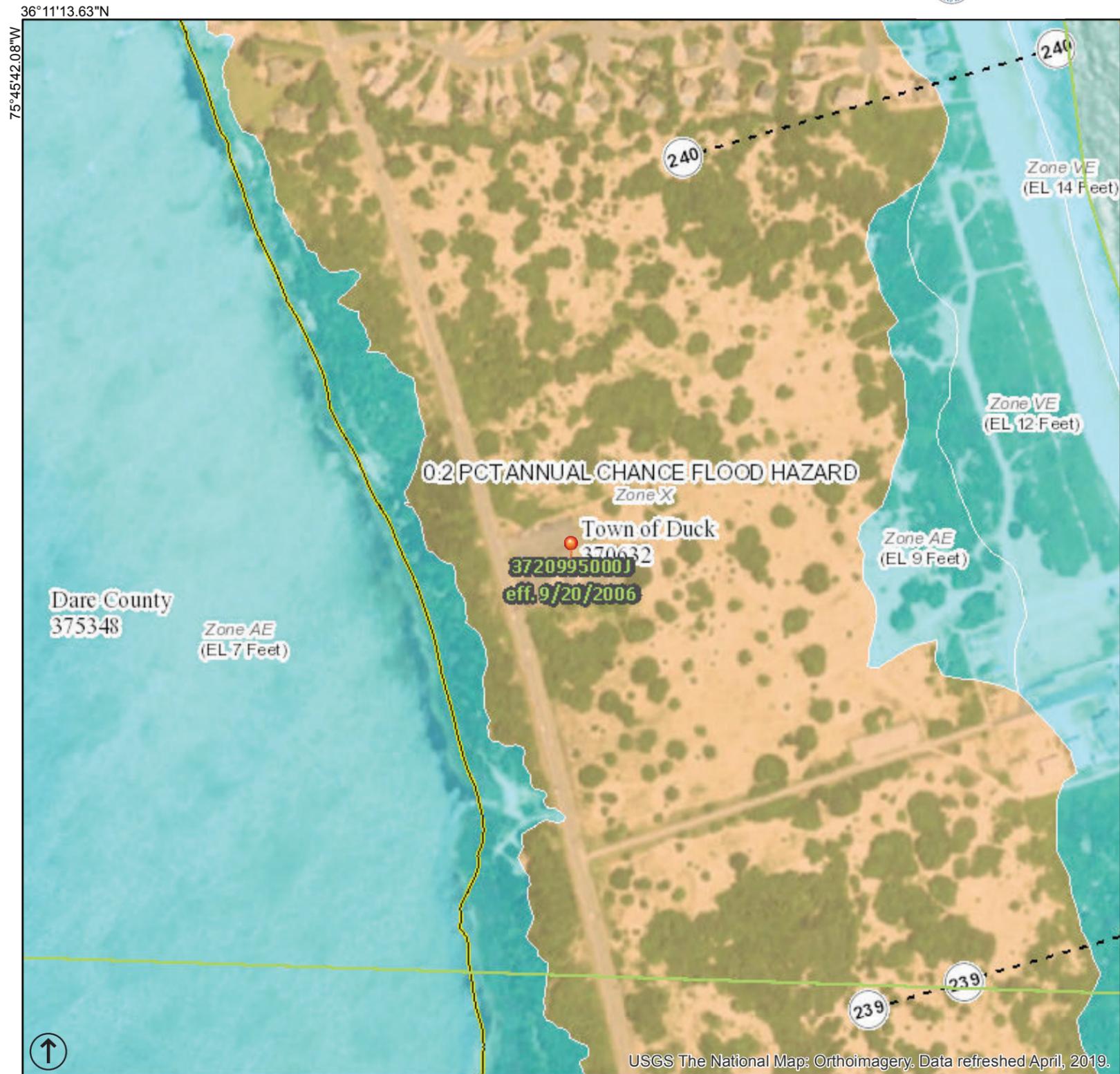


Photograph showing representative 10YR 4/4 fine sand soil sample interdunal habitat.



Representative photograph showing xeric dune habitat.

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

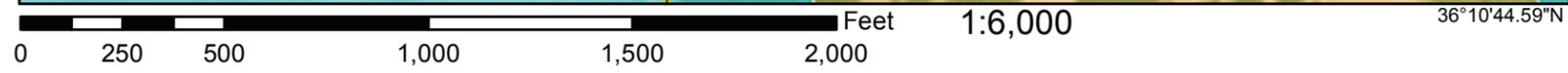
SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/6/2019 at 1:27:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



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Figure 10
FEMA FIRMette



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3.6 Geology and Sediments

3.6.1 Affected Environment

The Outer Banks are a series of barrier islands that form a 160-mile ridge of constantly shifting sand off the eastern coast of North Carolina. It is estimated that this ridge has existed for between 3,500 and 5,000 years, although its exact shape, size, and location shift continuously as sand is removed and deposited by weather events and natural processes.

A desktop review of soils within the project area was conducted using the Natural Resources Conservation Service (NRCS) Web Soil Survey tool. NRCS shows two soil types within the project footprint, Dune land-Newhan complex and Newhan fine sand (Figure 11). Both of these soil types are derived from eolian sands. As a coastal barrier island ecosystem, sandy soils are the expected soil type.

During the January 2019 site visit discussed in Section 3.5 above, several soil samples were taken, both within the xeric high dune structure and the lower-lying interdunal swales. See Figure 9 above for locations. The last rainfall event prior to this site visit was January 25, 2019, according to NOAA Station Duck 0.3SE, NC #US1NCDR0025. Typical soil profiles from the higher xeric areas were non-hydric sandy soils with Munsell color of 10YR and a value and chroma of 4/4, respectively. Soil profiles from the interdunal swales were also non-hydric sandy soils with the only variation from the xeric profile being a thin 10YR 2/1 sandy loam layer at the surface. These upland soils are classified as excessively drained, non-hydric, and not prime farmland.

3.6.2 Impacts of the Alternatives

The no action alternative would result in no impacts on geology and sediments because there would be no ground disturbance or changes within the project area.

Under the proposed action, ground disturbance would be required for construction of the new public safety building. Approximately 4.6 acres of soil would be disturbed during construction. Typical earth-moving equipment would be used to dig, grade, trench, and shape the soils during construction activities. After construction of the proposed building, up to an additional 1.4 acres of soils would be disturbed for demolition of the existing building and parking lot. As a requirement of the proposed action, a state-approved sediment and erosion control plan would be developed, and erosion and sediment control measures such as silt fence would be used during construction and demolition activities. Immediately following construction and demolition activities, disturbed areas outside of the building and surface parking lot would be seeded with a native seed mixture to control erosion. Because these measures would be implemented, no adverse impacts are anticipated to occur on geology and sediments as a result of the proposed action.



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Figure 11
NRCS Soil Map

3.7 Climate Change and Sea Level Rise

3.7.1 Affected Environment

In accordance with ER 1100-2-8162 dated December 31, 2013, potential relative sea level change must be considered in every USACE coastal activity as far inland as the extent of estimated tidal influence. According to this ER, USACE projects are required to have a sea level rise curve analysis completed. However, since this project would not be constructed by USACE, a full sea level rise curve analysis is not required. A review of existing USACE sea level change data was conducted and the elevation of the public safety building site was compared to the predictions, as discussed in Section 3.7.2 below. A review of the EPA's analysis for climate change for North Carolina titled, "What Climate Change Means for North Carolina," states that the sea level rise along the coast of North Carolina is expected to likely rise anywhere from one to four feet in the next 100 years (EPA 2016). The USACE Sea Level Tracker (https://climate.sec.usace.army.mil/slr_app/) calculates relative sea level change projections using historical data from tide gauges. Projections include sea level change rates under low, intermediate, and high rates of sea level rise. According to the USACE Sea Level Tracker, and using data from the Oregon Inlet Marina, NC gauge, by 2040, sea level could rise by 0.35 feet (NAVD 88 and MSL) under the low scenario, by 0.55 feet under the intermediate scenario, and by 1.18 feet under the high scenario. Barrier islands, such as the one on which the project area is located, are likely to experience higher water levels and increased storm surge as the sea level rises. Coastal buildings and infrastructure may experience increased flooding during storm events due to the higher water levels and storm surge.

3.7.2 Impacts of the Alternatives

Neither the no action alternative nor the proposed action would increase the effects of climate change or sea level rise in the project area; however, both alternatives are likely to be affected by climate change and sea level rise in the future due to the location of the project area on a coastal barrier island. Effects of climate change, such as increased storm events and sea level rise, will likely be more dramatic on the barrier island than inland portions of the State. Rising sea levels may affect the proposed action by increasing storm surge during hurricanes and other weather events. Because the existing public safety building does not meet current 2018 NC Building Code, Chapter 16 standards for wind or seismic loads, portions of the building are vulnerable to damage resulting from increased storm intensity. For example, the wood framing of much of the existing wall and roof system are not designed to withstand the larger lateral and uplift loads produced by some hurricanes and other storms. If substantial damage to the building resulted from a future storm, the facility may not be able to remain fully operational. However, the new public safety building under the proposed action would be constructed to meet the 2018 NC Building Code, Chapter 16. Chapter 16 requires a building meet specific wind and seismic loads to withstand the larger lateral and uplift loads that may occur during hurricanes and other storm events. By conforming to Chapter 16, the proposed public safety building would be less vulnerable to catastrophic damage and would be capable of remaining fully operational during these storm

events. Additionally, the location of both the existing and proposed public safety buildings is at an average of 11 feet elevation (NAVD 88), which is higher than the anticipated changes to Duck Code of Ordinances (Title XV, Chapter 150) to a 9-foot-elevation (NAVD 88) requirement when FEMA FIRMs are updated in the spring of 2020 (as discussed in Sections 1.4 and 2.5). Therefore, the proposed public safety building would be outside of Special Flood Hazard Areas and above the base flood elevation, even when projected sea level rise is taken into consideration.

3.8 USACE Engineer Research and Development Center, Field Research Facility Operations

3.8.1 Affected Environment

The USACE ERDC, FRF is a nationally-recognized coastal observatory established in 1977 to support the USACE coastal engineering mission. The ERDC, FRF features a 560-meter-long steel and concrete research pier extending into the Atlantic Ocean used for research into weather, waves, currents, tides, and beach change (USACE 2012). Other research facilities and equipment include a Radar Inlet Operating System, Coastal LIDAR and Radar Imaging System, Coastal Research Amphibious Buggy, and a video tower (USACE 2019). The ERDC, FRF facilities and equipment, as well as research activities, are generally located to the east and south of the existing Duck public safety building, concentrated on the Atlantic Ocean side of the property, as shown on Figure 2. The ERDC, FRF is accessed via Scientists Road, off of Route 12 to the south of the existing Duck public safety building. Access to the existing Duck public safety building is from Route 12 and does not overlap with access to the ERDC, FRF.

3.8.2 Impacts of the Alternatives

Under the no action alternative, there would be no change to the existing public safety building or its operations. The close proximity of the public safety building continues to allow the fire or police department to respond quickly to emergency calls received from the ERDC, FRF. This would be considered an indirect beneficial impact on the ERDC, FRF operations. However, because the deficiencies of the existing public safety building would continue, there would be an indirect adverse impact on ERDC, FRF operations if the police and/or fire departments are unable to adequately respond to emergency situations at the facility. Because there would be no changes to the public safety building, the no action alternative would not result in any direct impacts on ERDC, FRF operations.

Under the proposed action, there would be no direct impacts on ERDC, FRF operations. The proposed driveway for the new public safety building would continue to be along Route 12, separate from the access road used by the ERDC, FRF. There would be no closure or blockage of the ERDC, FRF access road during construction or operation of the proposed new public safety building. Though the proposed lease area for the public safety building would be more than double the existing lease area, it would continue to constitute a relatively small portion of the approximately 175-acre property. Because the ERDC, FRF's

research and facilities are concentrated on the eastern side of the property away from the proposed new public safety building, construction or operation of the new public safety building would not interfere with the ERDC, FRF facilities, pier, or ongoing research. Indirectly, the proposed action would result in beneficial impacts on ERDC, FRF operations because of the close proximity of the public safety building. The new public safety building would allow the police and fire departments to more efficiently and effectively respond to emergency calls at the ERDC, FRF, if needed. During construction, closure and temporary disturbance of a portion of the existing multiuse path along the east side of Route 12 would be required for construction of the new driveways and removal of the existing driveway at the public safety building. The multiuse path would be restored and reopened after construction is complete. Note that noise impacts are addressed in section 3.13. Overall, the proposed action would result in a beneficial impact on ERDC, FRF operations.

3.9 Hazardous, Toxic, and Radioactive Waste (HTRW)

3.9.1 Affected Environment

A search of available environmental records was conducted utilizing the EPA Envirofacts website. Envirofacts provides a single point of access to EPA data about environmental activities that may affect air, water and land anywhere in the United States. There were no EPA regulated facilities located within the vicinity of the project area (Figure 12). An aboveground storage tank (AST) containing diesel fuel for vehicle use and an underground storage tank (UST) containing propane for the buildings generator are located on the existing site.

3.9.2 Impacts of the Alternatives

No reports or indicators of hazardous and/or toxic chemicals were identified within the project area. Under the no action alternative, the existing storage tanks would remain undisturbed in their existing condition. Under the proposed action, both the diesel AST and the propane UST would be removed following applicable federal and state regulations.

Under the proposed action, an ammunition storage space for the police department would be included in the new building. Weapons would not be stored onsite as they are issued to personnel. However, ammunition storage would be located in a fire proof container and locked, only accessible by police staff. Therefore, no impacts on HTRW from implementation of either the no action alternative or the proposed action are anticipated. If any unknown HTRW are uncovered during ground-disturbing activities, all work would halt and coordination with the appropriate agency would occur immediately. The police department will not dispose of any ammunition or firearms under either alternative. Therefore, no impacts from old ammunition or weapons disposal are anticipated.

3.10 Unexploded Ordnance

3.10.1 Affected Environment

The project area is located on land that was part of the former Duck Target Facility. The Duck Target Facility was owned by the U.S. Navy and was used as a bombing and rocket target range between 1941 and 1965. During this time, naval aircraft would fly to the area and conduct practice bombing and rocket runs. In 1973, the land was transferred to the U.S. Army and it is now used as a USACE research facility.

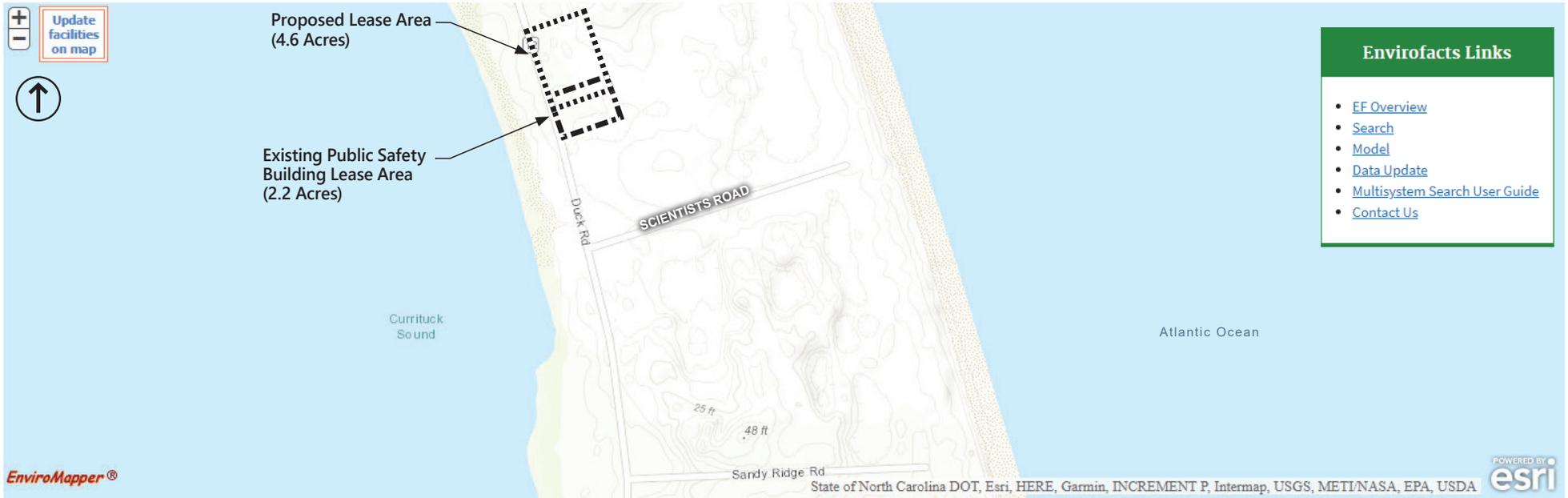
In the decades since the target range was closed, several actions have been undertaken to remove unexploded ordnance that remained on the site. In particular, previously developed areas underwent removal actions prior to construction, including the Route 12 right-of-way, the ERDC, FRF access road, and the existing Duck public safety building compound. While many of these actions cleared areas outside of the project area assessed in this EA, a few actions overlapped with the project area boundary. In 1971, a large effort was undertaken to clear the former Duck Target Facility of unexploded ordnance at a depth of 4 to 12 feet to clear the right-of-way for Route 12. During this effort, approximately 175 acres were cleared, which included land that is now the project area assessed in this EA (USACE 2015).

Between 1999 and 2001, another clearance effort was undertaken for improved site areas including the Route 12 right-of-way and the Duck public safety building compound. During this effort, the site was cleared to 1 foot and included the land encompassing the project area assessed in this EA (USACE 2015).

According to the 2015 Final Remedial Investigation Report for the Former Duck Target Facility, because of the previous investigations and removal actions, as well as extensive soil disturbance and activities within the former Duck Target Facility for development, the probability of encountering an unexploded ordnance within the project area is considered to be low (USACE 2015). However, the 2018 Final Decision Document for the Duck Bombing and Rocket Range Munitions Response Site concluded that unexploded ordnance, likely in the form of intact spotting charges, may be present in surface and subsurface soil and sediment (USACE 2018). The decision document concluded that the selected remedy for the site is implementation of supplemental existing land use controls and five-year reviews of the site. Supplemental land use controls include efforts to limit public access to the site, properly train contractors and other workers involved in ground-disturbing activities, and public education (USACE 2018).

Search Results for:

1259 Duck Rd, Kitty Hawk, North Carolina, 27949



The facility list below is based upon the facilities that are visible with the map above. To refine your search to a more targeted area of interest, please visit the [Envirofacts Multisystem Search Form](#)

-  Existing Lease Area
-  Proposed Lease Area

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3.10.2 Impacts of the Alternatives

There would be no impact on unexploded ordnance as a result of the no action alternative because there would be no ground disturbance. Under the proposed action, there is a potential that unexploded ordnance could be encountered during construction activities in the form of intact spotting charges, which could pose a safety hazard for construction workers (USACE 2018). Although this potential is considered to be low, as described above, proper training and education of construction workers and others on site during ground-disturbing activities would be implemented to minimize risk. The three R's of explosives safety would be taught and employed during construction: recognize—when you may have encountered a munition and that munitions are dangerous; retreat—do not approach, touch, move, or disturb it, but carefully leave the area; and report—call 911 and advise the police of what you saw and where you saw it (DENIX 2019). If an unexploded ordnance is encountered during construction, all activity within the immediate vicinity would be halted until proper authorities are called and the unexploded ordnance is properly handled and disposed.

3.11 Public Safety

3.11.1 Affected Environment

The existing public safety building was constructed in 1982 and houses a combination fire department (includes both career and volunteer firefighters) and a police department serving Duck. The department has a county-wide mutual aid agreement that includes Corolla to the north. The building was originally constructed for the Duck Volunteer Fire Department, which was founded in 1982. Since its establishment, the Town was incorporated and the fire department now includes career staff. The police and fire departments staff 37 firefighters (career and volunteer), 10 full-time police personnel, and an administrative assistant. They provide aid for fire suppression, EMT first response, motor vehicle collisions, weather-related emergencies, ocean rescue, and public service calls. The departments respond to an average of 600 calls for service per year (RRMM Architects 2019; Duck Fire Department 2017 and 2019).

3.11.2 Impacts of the Alternatives

Under the no action alternative, the deficiencies of the existing building would continue to hinder or compromise police and fire operations, which would continue to result in adverse impacts on public safety. Compromised operations occur due to inadequate sleeping quarters for the fire and police staff as well as antiquated alarm systems. There are no dedicated training facilities in the existing building and training space is shared with the kitchen, living room, and break room. There is no adequate space for proper storage of disaster mitigation equipment and no storage areas for stockpiling of disaster supplies such as foul weather gear, tarps, water, rations, generators, and pumps. This limits the fire and police departments' ability to efficiently respond to disaster situations. The fire department operations are also hindered due to inadequate garage bay size for their current fleet of fire

apparatus. Police department operations are hindered due to a lack of adequate space and in many cases, no space, for records management, evidence storage, ammunition storage, maintenance of equipment, detention of suspects, questioning of suspects or meeting with victims of crime. These impacts would continue to be more evident when the population of Duck rises from a year-round population of 531 to over 25,000 during the peak tourist season of April through October (U.S. Census Bureau 2018 and Duck Fire 2017). This increase in traffic and people throughout the town results in an increase in public safety and emergency calls when compared to the off season. Overall, the deficiencies of the existing public safety building would continue to result in inefficiencies in how the Duck police and fire departments respond to public safety calls and emergency situations, particularly during the peak tourist season.

Under the proposed action, there would be a beneficial impact on public safety because the new public safety building would provide the fire and police departments with the facilities needed to more efficiently serve the community. The number of emergency calls received is not expected to change as a result of the proposed new public safety building, but the fire and police departments would be better able to respond appropriately. The new building would be designed to address the known deficiencies of the existing building and would provide adequate sleeping quarters for the fire and police staff, modern alarm systems, and space to accommodate dedicated training facilities for both police and fire department staff. The building would provide ample space for storage and maintenance of vehicle equipment and disaster mitigation equipment such as foul weather gear, tarps, water, rations, generators, and pumps. This would allow the police and fire department to more efficiently and appropriately respond to disaster situations compared with current conditions. The police department would have dedicated space for detention of suspects, investigation rooms, evidence rooms and evidence storage, records management, ammunition storage, maintenance of equipment, and a processing area, all of which are critical for public safety and the safety of building occupants. Adequately sized garage bays are also proposed within the design of the proposed building to accommodate the current fleet of fire apparatus. Overall, the new public safety building would accommodate the unique and distinct programming needs between the fire and police operations. As a result, both departments would be able to more efficiently and appropriately respond to public safety and emergency calls; therefore, the proposed action would result in an overall beneficial impact on public safety.

3.12 Socioeconomics

3.12.1 Affected Environment

Dare County, including the Town of Duck, has an economic base that relies largely on tourism and recreation. Commercial activity contributes to local socioeconomic resources in the form of tourism and associated tourist recreation, surfing, home construction, fishing, landscaping, and other general residential and commercial services. The year-round population of the town is 531, but that population increases to over 25,000 during the peak tourist season of April through October (U.S. Census Bureau 2018 and Duck Fire 2017).

There are 2,906 total housing units in the town including 273 occupied units and 2,633 vacant (vacation) units. The town is also home to a growing retirement population, attracted to the area by the mild climate and beautiful natural surroundings. The median age of the town population is 62.5 years, while the median age of North Carolina and the United States overall is 38.4 years and 37.8 years, respectively (U.S. Census Bureau 2010 and 2018).

The Duck Fire and Police Departments are also tasked with protecting commercial properties located within the town. There are 139 businesses and fifty-one commercial properties within the town limits that are served by public safety personnel. In total, the services provide protection over approximately \$68,937,500 in commercial property value.

From 2010 to 2017, the year-round population of Duck grew at a rate of about 31 percent; in 2010 the population was 369 and in 2017 the population was 531 (U.S. Census Bureau 2010 and 2018). Of the year-round population, the median household income is \$76,875 and 4.4 percent of the population has an income below the poverty level. Approximately 3.2 percent of the population identifies as Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian or Pacific Islander, or Hispanic or Latino (U.S. Census Bureau 2018). Table 1 below compares the population demographics of Duck to the State of North Carolina and the United States overall.

Table 1. Comparison of Population Demographics

	Town of Duck	North Carolina	United States
Median Household Income (dollars)	\$76,875	\$50,320	\$57,652
Population Below Poverty Level (%)	4.4%	16.1%	14.6%
Median Age (years)	62.5	38.4	37.8
Population (persons)	531	10,052,564	321,004,407
White (%)	96.8%	63.6%	61.5%
Black or African American (%)	0.9%	21.5%	12.7%
American Indian or Alaska Native (%)	0.0%	1.2%	0.8%
Asian (%)	0.8%	2.7%	5.4%
Native Hawaiian or Other Pacific Islander (%)	0.0%	0.1%	0.2%
Hispanic or Latino (%)	1.3%	9.1%	17.6%
Two or More Races (%)	0.2%	2.5%	3.1%

Source: U.S. Census Bureau 2010 and 2018

3.12.2 Impacts of the Alternatives

There would be no impact on socioeconomic resources under either the no action alternative or the proposed action. The use of either the existing public safety building or the proposed new building would not result in any impacts on local businesses or changes in revenue from the tourism industry. Because the location of the proposed building would be relatively the same as the existing building, the new building would not result in changes in emergency response time for any portion the town. The existing public safety building would remain fully operational during construction of the new building; therefore, there would be no interruption of emergency services during that time. Implementation of the proposed action would not affect the number of tourists visiting the town and would therefore not affect any socioeconomic resources in Duck or in the Outer Banks as a whole.

Executive Order 12898 requires federal agencies to address environmental justice in relation to proposed actions. Environmental justice is defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The EPA further defines fair treatment to mean that no group of people should bear a disproportionate share of the negative environmental consequences of industrial, governmental, or commercial operations or policies. Furthermore, Executive Order 13045 requires that federal agencies identify and assess environmental health and safety risks that may disproportionately affect children as a result of the implementation of federal policies, programs, activities, and standards.

Neither the proposed action nor the no action alternative would adversely affect environmental justice in minority populations and/or low-incomes populations or

disproportionately affect children. The project will be in full compliance with Executive Orders 12898 and 13045 following completion of the NEPA process.

3.13 Noise

3.13.1 Affected Environment

Ambient noise levels associated with the project site are relatively low due to its rural nature and distance from surrounding development. The primary source of noise is associated with vehicular traffic on Route 12 (Duck Rd). Noise from police and fire operations and training exercises generate temporary noise disturbances when sirens are employed.

3.13.2 Impacts of the Alternatives

No impacts on noise would occur as a result of the no action alternative. The proposed action would result in a temporary increase in noise levels during construction and subsequent demolition activities. It is anticipated that traditional types of commercial construction equipment would be used such as earthmoving equipment, small to medium size cranes, scaffolding, and storage containers. However, construction activities would be limited to Monday through Saturday from 7 am to 6 pm, which is in compliance with the Duck, North Carolina Code of Ordinances, Title IX, Chapter 91, Section 91.36(l). Impacts would be temporary in nature and would revert to existing conditions following completion of the proposed activity. Construction is expected to last about 14 to 16 months. There would be no expected increase in noise generated from police and fire operations or training exercises relative to the existing conditions under the proposed action.

3.14 Recreation Resources

3.14.1 Affected Environment

The project area is surrounded on three sides by land owned by the USACE and used as a research facility. There is no public access or recreational resources within the research facility or the public safety building grounds. On the western boundary of the project area, a paved multi-use path runs parallel to Route 12. This path is approximately six miles long and traverses the entire length of the town. The trail is used by pedestrians, bicyclists, and in-line skaters.

3.14.2 Impacts of the Alternatives

There would be no impact on the multi-use path under the no action alternative. However, the proposed action would require temporary closures or rerouting of the trail during construction activities, particularly during construction of the new driveways accessing the public safety building from Route 12. A specific detour or closure plan would be developed during future design phases of the project. Whenever closures or detours are in place,

signage would be used to inform the public of the closures or detours, and construction fencing would be employed to ensure the public does not enter an active construction zone. This would result in an adverse impact on the recreational value of the multi-use trail if trail users have to be rerouted or share the road with motor vehicles during these closures. However, these adverse impacts would only last the duration of construction (approximately 14 to 16 months) and the multi-use trail would be returned to its current condition at the end of construction activities. There would be no long-term adverse impacts on recreation resources as a result of the proposed action.

3.15 Aesthetic Resources

3.15.1 Affected Environment

The nearby ocean, waterways, coastal marshes, beaches, and dunes in Duck contribute to unique aesthetics common to coastal North Carolina communities. Currently, the existing aesthetic character of the project area consists of a two-story building with a large, paved parking area surrounded by open land consistent with the region's secondary dune habitat featuring scrub brush vegetation. Existing topography and vegetation limit the viewshed to the immediate area; neither the ocean to the east or the Currituck Sound to the west are visible from the project area. The existing public safety building is not visible from public beaches or the nearby residential neighborhoods.

3.15.2 Impacts of the Alternatives

There would be no impact on aesthetic resources under the no action alternative. Implementation of the proposed action would, however, alter the existing appearance of the project area. It would include the addition of a larger building into the project area than what currently exists now. However, the building would not be any taller than the existing building and would be designed in a similar aesthetic. Additionally, the existing building would be demolished after construction of the new building; therefore, there would not be a substantial change in overall development of the project area. Topography and existing vegetation would continue to visually screen the building from nearby residential areas and public beaches. The new building would only alter the appearance of the project area from Route 12 and the adjacent multi-use path directly to the west. The project area would continue to maintain its existing aesthetic of a municipal building with a large parking area surrounded by an open, secondary dune landscape with scrub brush vegetation.

Temporary impacts on aesthetics would occur during construction of the proposed new public safety building. During construction activities, equipment and materials would be located within the project area and would disrupt the visual appearance of the area. However, due to topography and vegetation, construction equipment and materials would only be visible from Route 12 and the adjacent multi-use path and would not be visible from nearby residential areas or public beaches. After construction, any areas cleared would be revegetated and returned to the aesthetic condition that existed prior to implementation of the proposed action.

3.16 Cultural Resources

3.16.1 Affected Environment

The North Carolina State Historic Preservation Office's (SHPO) HPOWEB Map Service was queried to identify known cultural resources in and near the project area (N.C. State Historic Preservation Office 2018). This service provides information such as cultural resources sites listed on the National Register of Historic Places, sites designated as Local Landmarks, and other data useful in considering potential impacts to cultural resources. Figure 13 below shows the results of the HPOWEB Map Service database. As shown on this map, there are no cultural resources within the vicinity of the project area.

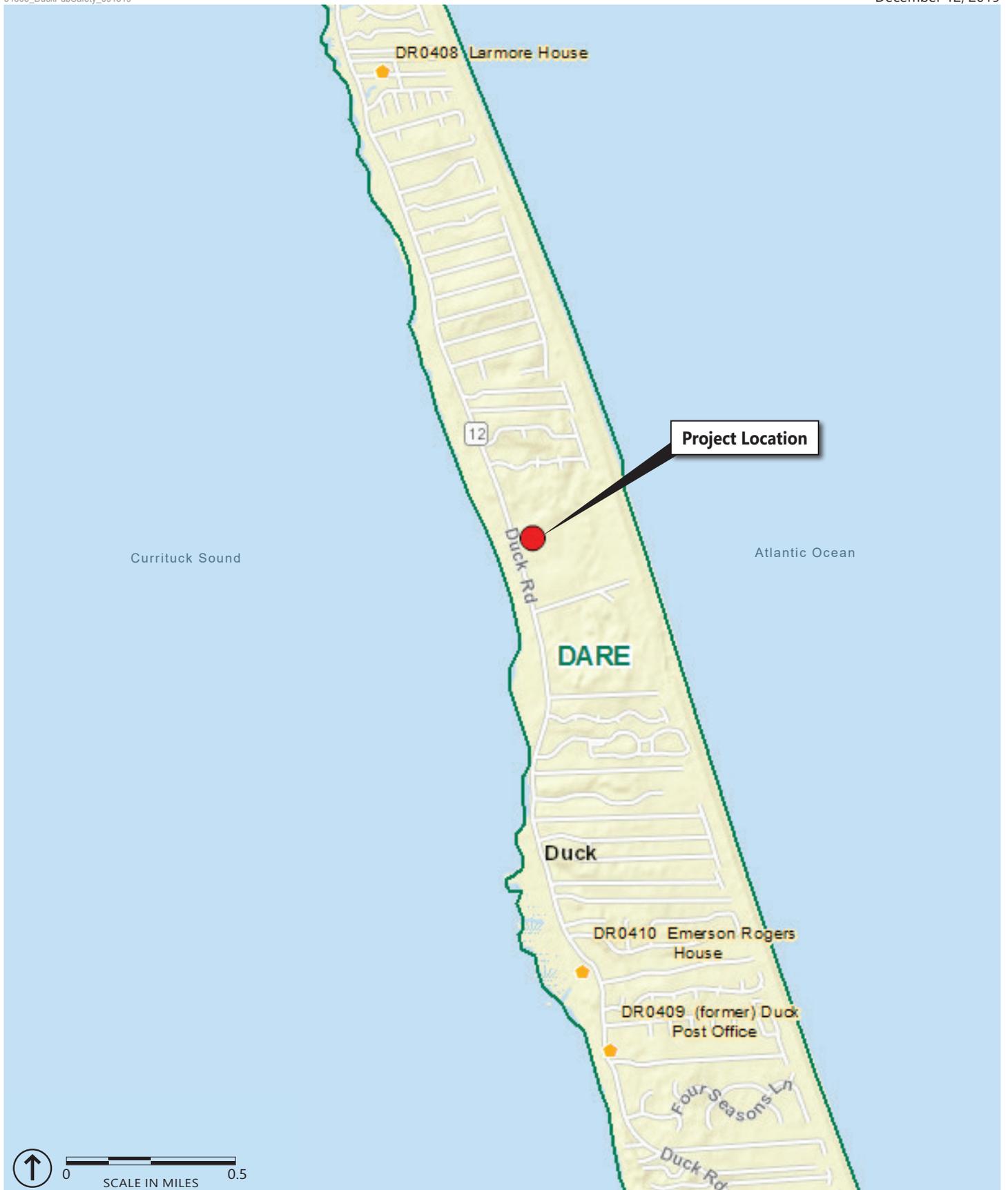
The North Carolina SHPO confirmed this finding via a letter dated April 4, 2019, in which they stated that there are no cultural resources within the vicinity of the project area that would be affected by implementation of the proposed project. Please see appendix A for this correspondence from the North Carolina SHPO.

3.16.2 Impacts of the Alternatives

Executive Order 11593 states that the Federal Government shall provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation.

Federal agencies shall administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations, initiate measures necessary to direct their policies, plans, and programs in such a way that federally owned sites, structures, and objects of historical, architectural, or archaeological significance are preserved, restored, and maintained for the inspiration and benefit of the people, and, in consultation with the Advisory Council on Historic Preservation (16 U.S.C. 470i), institute procedures to assure that federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance.

Because there are no cultural resources within the project area, there would be no impacts on cultural resources from implementation of either the no action alternative or the proposed action. Although archaeological resources are unlikely to occur within the project area, if any unknown archaeological resources are uncovered during ground-disturbing activities, all work in the immediate vicinity of the discovery would be halted until the resources are identified, documented, and an appropriate mitigation strategy developed, if necessary, in accordance with pertinent laws and regulations, including Section 106 of the National Historic Preservation Act. Therefore, neither the no action alternative nor the proposed action would adversely affect cultural resources and the project would be in full compliance with Executive Order 11593 following completion of the NEPA process.



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 Public Safety Building Environmental Assessment
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3.17 Environmental Impact Comparison of Alternatives

Table 2 below provides a brief summary and comparison of impacts to the physical and natural environment for the alternatives considered.

Table 2. Summary Comparison of Potential Impacts

Project Area Resource	Impacts of Alternative 1: No Action	Impacts of Alternative 2: New Public Safety Building (Proposed Action)
Threatened and Endangered Species	No effect	Disturbance to approximately 1.3 acres of habitat for the sand heather and maritime pinweed plant species. After construction, 1.4 acres of habitat would be restored.
Terrestrial Resources	No effect	Disturbance to approximately 1.3 acres of secondary dune habitat. After construction, 1.4 acres of habitat would be restored.
Water Quality	No effect	Potential impacts related to construction and stormwater runoff would be mitigated by installation of stormwater management facilities on site, and through an erosion and sediment control plan during construction.
Air Quality	No effect	Temporary increase in vehicle emissions due to construction equipment; however, no long-term impacts would occur.
Wetlands and Floodplains	No effect	No effect
Geology and Sediments	No effect	Temporary soil disturbance during construction; however, a state-approved sediment and erosion control plan would be implemented, and disturbed areas would be reseeded after construction.
Climate Change and Sea Level Rise	No action would not increase effects of climate change or sea level rise; however, the existing building does not meet 2018 NC Building Code and may be susceptible to damage during storm events.	Proposed action would not increase effects of climate change or sea level rise; however, the proposed building would be more resilient during storm events and would remain fully operational.

Table 2. Summary Comparison of Potential Impacts (continued)

Project Area Resource	Impacts of Alternative 1: No Action	Impacts of Alternative 2: New Public Safety Building (Proposed Action)
USACE Engineer Research and Development Center, Field Research Facility Operations	Indirect benefit because the fire and police department can quickly respond to emergency calls at the FRF due to close proximity. However, police and fire operations continue to be hindered due to deficiencies in existing building, leading to indirect adverse impact.	Additional long-term benefit because the fire and police department would be able to more efficiently respond to emergency calls at the FRF due to proximity, preparation, and equipment access.
Hazardous, Toxic, and Radioactive Waste	No effect	No effect
Unexploded Ordnance	No effect	Temporary potential for impact during construction due to possible intact spotting charges present in surface and subsurface soil. Encounter procedures would be in place to minimize human risk.
Public Safety	Police and fire operations continue to be hindered due to deficiencies in existing building such as inadequate sleeping quarters, alarm system, police operations, and disaster mitigation equipment storage.	Long-term beneficial impact because the fire and police departments would be able to more efficiently respond to emergency calls and disaster mitigation through better preparation and equipment access.
Socioeconomics	No effect	No effect
Noise	No effect	Temporary construction noise limited to Monday through Saturday, 7 am to 6 pm throughout construction, a 14-16-month timeframe.
Recreation Resources	No effect	Temporary closure or detour of multiuse path along Route 12 during construction, a 14-16-month timeframe.
Aesthetic Resources	No effect	Temporary disruption to visual appearance of the area during construction due to presence of equipment and materials.
Cultural Resources	No effect	No effect

3.18 Cumulative Impacts

CEQ defines cumulative impact as “the impact on the environment [that] results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7, National Environmental Policy Act of 1969, as amended).

Other actions that would result in cumulative impacts include the Town of Duck Coastal Area Management Act (CAMA) Land Use Plan Update and the proposed Mid-Currituck Bridge. The CAMA Land Use Plan Update is an in-progress project by Duck to update the 2005 CAMA Land Use Plan to serve as the town's framework to guide the regulation of development and land use decisions.

The CAMA Land Use Plan Update would prepare the town to accommodate forecasted future growth in the area while protecting the health, safety, and welfare of the community. Duck is currently in the initial scoping phase of the project and the CAMA Land Use Plan Update is expected to be adopted in the spring of 2020 (Town of Duck 2019).

The Mid-Currituck Bridge project proposes construction of a new bridge crossing of the Currituck Sound between the communities of Aydlett on the mainland and Corolla on the Outer Banks. It would be a two-lane, 4.7-mile long toll bridge. Although the proposed bridge would be located north of Duck, it would result in changes in traffic flow through the town. Currently, the only crossing of the Currituck Sound in this area is located south of Duck; therefore, residents and visitors heading north to Corolla have to drive through Duck. The proposed bridge would provide another route to the Outer Banks in this area, alleviating traffic over the existing bridge. The proposed bridge would also provide an additional evacuation route in the event of a hurricane or other storm event. The proposed bridge would accommodate future growth in the Outer Banks that is forecasted to continue through 2035 (FHWA 2019).

The proposed action would not contribute to any growth in the area but would allow Duck to adapt to the forecasted future growth in the area by providing ample facilities for the police and fire departments to respond to emergency situations and public safety calls. Although no significant increase in staffing or changes to police and fire command structures are anticipated, the proposed public safety building would also be large enough to support an expansion of staff up to an additional three firefighters/EMTs, two police patrol officers, and two police patrol vehicles if needed in the future as growth in the area continues. The proposed action combined with the CAMA Land Use Plan Update and the Mid-Currituck Bridge would better prepare Duck and the Outer Banks to accommodate the future growth that is forecasted in the area through 2035.

3.19 Conclusion

Based on the above analyses, the proposed action would not result in significant impacts; therefore, an Environmental Impact Statement will not be prepared. If this opinion is upheld following circulation of this EA, a Finding of No Significant Impact will be signed and circulated.

The proposed action would meet the need for a larger public safety building that has adequate facilities operations space to accommodate Duck fire and police departments. Implementation of the proposed action would result in long-term benefits of increased efficiency in responding to emergency calls, disaster response, and public service calls. The new public safety building would allow Duck to continue to meet the public safety needs of year-round residents as well as the high volume of seasonal visitors to Duck and to Dare County. In addition, enhanced protection of commercial properties would enable public safety personnel to better serve the areas businesses, which are valued at approximately \$68,937,500.

4

Status of Environmental Compliance

4.1 National Environmental Policy Act

On April 7, 2019, the USACE sent public scoping letters to agencies, organizations, and other interested parties describing the project and soliciting comments on significant resources and issues of concern with regard to the proposed project. Scoping letters informed the agencies and other interested parties of potential impacts to threatened and endangered species, human resources (such as socio economics recreational, and aesthetic resources) as well as water quality, air quality, potential hazardous, toxic, and radioactive waste, unexploded ordnance, and cumulative effects. The following list of agencies were contacted during this scoping period. See Appendix A for copies of the relevant correspondence.

- › Dare County
- › Cape Hatteras National Seashore
- › National Audubon Society
- › N.C. Department of Environmental Quality, Division of Coastal Management
- › N.C. Department of Natural and Cultural Resources, SHPO
- › N.C. Department of Transportation
- › N.C. Natural Heritage Program
- › N.C. Wildlife Resources Commission
- › U.S. Fish and Wildlife Service

This Draft EA will be circulated for a 30-day public review period. All comments received during the review period will be addressed and considered during development of the final EA.

4.2 Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) requires federal agencies to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve throughout the United States. Because the USACE owns the land that is currently and would continue to be leased to Duck under the proposed action, the Section 106 process was undertaken for this project. The USACE initiated the Section 106 process via a letter dated March 7, 2019 to the N.C. SHPO. The N.C. SHPO responded to the initiation letter on April 4, 2019 in a letter stating that there are no historic resources within the vicinity of the project area that would be affected by the proposed undertaking. Therefore, the proposed undertaking would result in no effect on historic resources. See Appendix A for copies of the relevant correspondence.

4.3 Section 7 of the Endangered Species Act

Given that this project is not likely to adversely affect federally threatened or endangered species or designated critical habitat, informal consultation is required under Section 7 of the Endangered Species Act (ESA) to acquire concurrence with this determination from USFWS. The USACE will reinstate consultation if the project area changes or if federally-listed species are encountered.

4.4 Section 404 and 401 of the Clean Water Act

Section 404 of the CWA (33 CFR 320332) regulates discharges of dredged or fill material into waters of the United States, including jurisdictional wetlands. The CWA requires compliance with the Section 404(b)(1) Guidelines, 40 CFR Part 230, developed jointly by the EPA and USACE. CWA compliance requires a sequential evaluation process, which includes verification that all jurisdictional wetland impacts have been avoided to the greatest extent practicable, unavoidable impacts have been minimized to the greatest extent practicable, and unavoidable impacts have been mitigated in the form of wetlands creation, restoration, enhancement, or preservation.

Under Section 401 of the CWA, any applicant for a federal permit or license for an activity that may result in a discharge to navigable waters must provide the federal agency issuing a permit with a certificate, either from the state where the discharge would occur or from an interstate water pollution control agency, that the discharge would comply with Sections 301, 302, 303, 306, 307, and 316 (b) of the CWA. Applicants for discharges to navigable waters in North Carolina must also obtain a Water Quality Certification from the North Carolina Department of Environmental

Quality (DEQ) as part of the permit approval process. No impacts to waters of the United States are proposed; therefore, no permit issuance is anticipated.

4.5 North Carolina Coastal Zone Management Program

The proposed action addressed in this EA would take place in the designated coastal zone of the State of North Carolina. Pursuant to the Federal Coastal Zone Management Act (CZMA) of 1972, as amended (P.L. 92-583), federal activities are required to be consistent to the maximum extent practicable with the federally approved coastal management program of the state in which their activities would be occurring.

The USACE will be submitting a CZMA consistency determination to the N.C. Division of Coastal Management (NCDCM) in accordance with Section 307 (c) (I) of the CZMA of 1972, as amended. It will be the responsibility of the NCDCM to review and concur with the determination after a public notice period.

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5

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Appendix A: Scoping Letter and Scoping Correspondence Received



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

March 7, 2019

Planning and Environmental Branch

Dear Sir or Madam:

On behalf of the U.S. Army Engineer Research and Development Center (ERDC) Field Research Facility located in Duck, North Carolina, the U.S. Army Corps of Engineers (USACE), Wilmington District is preparing an Environmental Assessment (EA) to address impacts associated with lease of land and construction of a police and fire station located on federal property to service the Town of Duck, North Carolina. The Town of Duck currently leases a 2.2-acre portion of the Field Research Facility property for a police/fire station. Since the establishment of the police/fire station in 1982, community emergency services have grown to the point that the existing building no longer meets the safety needs of the area. The proposed building would jointly house the Town's fire, police, and emergency rescue staff, associated vehicles, and equipment. The proposed project would also include stormwater management facilities and a septic drain field. Assuming the new public safety building is approved for construction, following construction and occupancy, the existing police/fire station would be demolished, removed from the site, and the site would be planted with native vegetation. A map showing the location of the USACE land proposed for lease is enclosed (Figure 1).

The EA is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, and will address the project's relationship to all applicable Federal and State laws and Executive Orders. Resources that may occur in the study area include threatened and endangered species and human resources (including socioeconomic, recreational, and aesthetic resources). Potential impacts to these resources, as well as, water quality, air quality, potential hazardous, toxic, and radioactive waste (HTRW), unexploded ordnance (UXO), and cumulative effects will be fully addressed in the EA. Should there be other issues which you believe should be discussed in the EA, please take this opportunity to bring them to our attention.

We are now requesting comments from you to identify significant resources and issues of concern with regard to the proposed project. Comments received as a result of this scoping letter will be considered during development of the EA.

No formal scoping meetings are currently planned; however, responses to this scoping letter may result in coordination with individuals or agencies on an as-needed basis to discuss certain issues. In order to effectively address any concerns that are raised, we request your input no later than 30 days from the date of this letter. Comments should be addressed to the District Engineer, Attention: Ms. Teresa Russell (CESAW-ECP-PE), U.S. Army Corps of Engineers, Wilmington District, 69 Darlington Avenue, Wilmington, North Carolina 28403.

If you need additional information, please contact Ms. Teresa Russell, Environmental Resources Section, at (910) 251-4725 or at Teresa.e.russell@usace.army.mil.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jennifer L. Owens". The signature is written in black ink and is positioned above the printed name and title.

Jennifer L. Owens
Chief, Environmental Resources Section

Enclosure



Town of Duck Public Safety Building Proposed Lease Site

Town of Duck, North Carolina

Location Map



US Army Corps of Engineers®



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

April 4, 2019

Teresa Russell
US Army Corps of Engineers, Wilmington District
69 Darlington Avenue
Wilmington, NC 28403

Re: Lease Land to the Town of Duck to Construct Police/Fire Station, 1261 Duck Road, Duck,
Dare County, ER 19-0978

Dear Ms. Russell:

We have received notification of the above project.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

A handwritten signature in blue ink that reads "Renee Gledhill-Earley".

for Ramona M. Bartos