Draft Environmental Assessment

Port of Tillamook Bay
New Construction Projects

Tillamook, Oregon
FEMA Public Assistance Program
FEMA-1733-DR-OR

January 2012

FEMA

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LIST OF ACRONYMS

APE	Area of Potential Effects
BMPs	Best Management Practices
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
cy	cubic yards
DEQ	Oregon Department of Environmental Quality
DSL	Oregon Department of State Lands
EA	Environmental Assessment
EFH	Essential Fish Habitat
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
GLO	General Land Office
LF	linear feet
MBTA	Migratory Bird Treaty Act
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge and Elimination System (permit)
NR	National Register
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
ODFW	Oregon Department of Fish and Wildlife
OEM	Oregon Office of Emergency Management
ORS	Oregon Revised Statute
PVC	polymerized vinyl chloride
RV	recreational vehicle
SF	square feet
SHPO	State Historic Preservation Office/Officer
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOCs	volatile organic compounds

1.0 INTRODUCTION

The Port of Tillamook Bay (POTB) has applied through the Oregon Office of Emergency Management (OEM) to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for alternate project funding to improve the POTB industrial and transportation facility located at the former United States Naval Air Station (NAS) Tillamook. Funding for the alternate project stems from damages incurred to the POTB railroad line during severe storms, flooding, landslides, and mudslides that occurred from December 1-17, 2007. The event was declared a Presidential disaster on December 8, 2007 (FEMA-1733-DR-OR).

The POTB Board of Commissioners determined the public would not be best served by repairing the damaged railroad line and requested funding to develop the alternate project. The alternate project includes a number of projects to repair, rehabilitate, adapt, or demolish buildings and structures within the POTB complex, and to construct new facilities and infrastructure. FEMA is proposing to fund 75 percent of the alternate project through its Public Assistance Program, per funding provisions for alternate projects included in Title 44 of the Code of Federal Regulations (CFR), Part 206.203(d)(2). This draft Environmental Assessment (EA) addresses four new independent construction projects included under that funding.

1.1 Authority and Jurisdiction

The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1973 (Stafford Act), as amended, provides federal assistance programs for both public and private losses sustained in disasters. In accordance with the National Environmental Policy Act (NEPA) of 1969, FEMA must evaluate the environmental consequences of proposed actions on the natural and human environment before deciding to fund an action, including evaluating alternative means of addressing the purpose and need for a federal action. The President's Council on Environmental Quality (CEQ) has developed a series of regulations for implementing NEPA. These regulations are included in 40 CFR, Parts 1500–1508. This draft EA will address the environmental issues associated with four new construction projects that are proposed for the POTB. The four projects are part of approximately 16 additional projects the POTB is planning to complete under FEMA alternate project funding. The other projects are excluded from further environmental documentation either statutorily under the Stafford Act or by FEMA regulations for categorical exclusions. However, other environmental laws still apply to those projects.

This draft EA is prepared in accordance with both CEQ and FEMA regulations for NEPA (44 CFR Part 10) to determine whether to prepare a Finding of No Significant Impact (FONSI) or a Notice of Intent to prepare an Environmental Impact Statement for the proposed alternate project.

2.0 PURPOSE AND NEED

The purpose of the Stafford Act is to provide a wide range of federal assistance for states and local governments significantly impacted by disasters or emergencies or both. The purpose of FEMA's Public Assistance grant program is to provide assistance to state, tribal, and local governments, and certain types of private nonprofit organizations, so that communities can

quickly respond to and recover from major disasters or emergencies declared by the President. The purpose of this project is to fund the construction of four new independent construction projects at the POTB to assist the POTB in their recovery from the loss of their economic base.

The POTB has a need to reestablish their economic sustainability that was lost from the destruction of the railroad and to leverage future economic growth to its overall operations. The destruction of the POTB's railroad line has put a significant financial strain on the POTB. The POTB has determined there is a need to promote commercial growth by increasing the leasing capacity at their 1600-acre industrial and transportation facility in Tillamook. Many existing structures at the facility are in need of repair. In addition, there is a need to construct new facilities and the necessary infrastructure to maintain and operate all facilities within the POTB complex. The new construction projects that make up the Proposed Action Alternative are consistent with the POTB's long range plans as described in their Strategic Business Plan adopted on December 15, 2009. The Proposed Action Alternative is the applicant's request to meet their needs.

3.0 LOCATION AND BACKGROUND

3.1 Location

The POTB industrial and transportation facility is located approximately two miles south of the City of Tillamook and four miles southeast of Tillamook Bay in Tillamook County, Oregon. The land owned by the POTB measures 1.75 by 2.25 miles across and covers approximately 1,600 acres that are zoned for industrial and airport uses. The POTB main office is located at 4000 Blimp Boulevard within the complex. The core where most of the development is located is approximately 75 acres. Figure 1 (below) shows the location of the POTB facility.

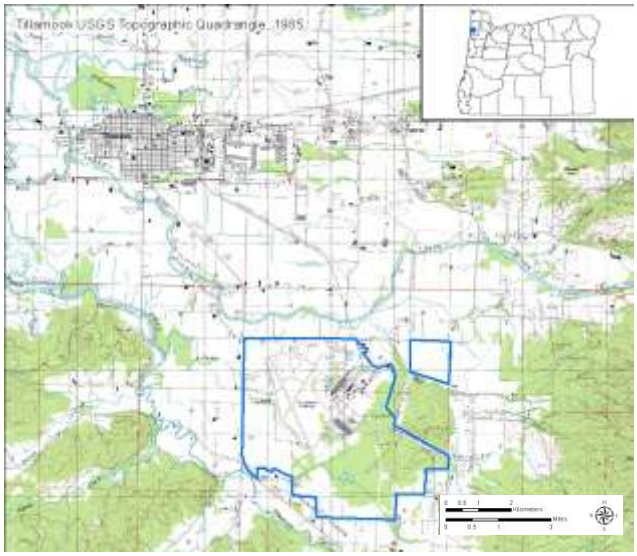

Figure 1. Port of Tillamook Bay Transportation and Industrial Facility (outlined in blue).

The site is located in Township 2 South, Range 9 West, in Sections 4, 5, 8, and 9, at approximately Latitude 45.42^{o} North, Longitude -123.80^{o} West. The facility is located on land

that was formerly occupied by the NAS Tillamook, which was the home of a blimp squadron during World War II. Tillamook is 74 miles west of Portland.

3.2 Background

The POTB is the largest full service industrial park on the Oregon Coast and currently has approximately 179 industrial and government tenants. It is a Special District organized under the Oregon Revised Statute (ORS) 198.010 and operates under ORS Chapter 777, which enables the formation of port districts in Oregon and defines their expected purposes, activities, and financial abilities. The statutes provide expansive powers to Oregon port districts by providing broad venues within which ports may acquire, own, and operate facilities and services. This includes transportation facilities (water, rail, and air), acting as utility providers for their industrial customers (water, sewer, and electric power), and owning businesses such as processing facilities and industrial parks. The broad leeway is emphasized in the statutes to assist ports in the promotion of maritime shipping, aviation, and commercial interests.

The POTB has a five-member Port Commission that is vested with control and management of POTB operations, with day-to-day operations managed by a General Manager. The Commission has authority over all personnel administration through its ability to adopt budgets, ordinances, resolutions, policies, etc., but delegates "broad discretion in all aspects of personnel and employee relations" to the General Manager.

The NAS Tillamook base was decommissioned in 1948 with the surrender of Japan during World War II. With the departure of the Navy, the former base came under the jurisdiction of the new Tillamook County Airport Commission. In 1953, the Port of Bay Ocean, an Oregon municipal corporation originally formed in 1911 to manage land at the entrance to Tillamook Bay, held a special election to incorporate the NAS Tillamook into its jurisdiction. The site included two blimp hangars, the airport, and other buildings and infrastructure. On November 4, 1953, the name of the district became the Port of Tillamook Bay.

Along with the other NAS facilities, the POTB obtained jurisdiction of the Navy's 5.5-mile railroad spur, which connected to the Southern Pacific Railroad in downtown Tillamook. The Southern Pacific line along the coast range was built between 1906 and 1911, stretching 95 miles from Tillamook, up the coast to Wheeler, then east through the Coast Range to the Portland area. Southern Pacific Railroad began to step away from that railroad line in later years and the POTB began operating it in 1983 from Tillamook to Batterson, Oregon, located approximately six miles east of Wheeler. When Southern Pacific decided to abandon their operation in 1990, the POTB purchased the entire line to Schefflin, Oregon, located northeast of Forest Grove in Washington County, with help from Oregon state lottery funds.

The railroad hauled freight six days a week, carrying lumber and feed grains as it hugged the mountainsides along the Salmonberry River and included river crossings and wooden trestles up to 200 feet high. The POTB continued operating the railroad until December 2007, when flood waters from the major storm declared a federal disaster under FEMA-1733-DR-OR destroyed large sections of the railroad in the mountainous area of the Salmonberry River Canyon.

The current POTB facility south of Tillamook includes a large industrial park, the Tillamook Municipal Airport, and recreational attractions, including the Tillamook Air Museum and a recreational vehicle (RV) park with 52 campsites and spaces for self-contained RVs. The POTB owns and operates the airport which is a Category IV general aviation facility, based on having more than 2,500 annual operations or more than 10 based aircraft. The airport includes a Fixed Base Operator facility that provides radio contact with arriving and departing aircraft, and on-the-ground presence, as needed.
The industrial park tenants include wood products manufacturing and storage, cabinet makers, warehousing and distribution centers for national companies, and a variety of governmental functions. This includes Stimson Lumber mill, which is one of the largest employers in the county. The POTB operates the Hooley Digester in the remnants of the former NAS Tillamook Hangar A, which is a bio-gas methane digester that converts cow manure to marketable products for landscaping applications and agricultural operations (such as bedding material for cows) while generating power back to the electrical grid. The industrial park also houses high-tech industries, including Near Space Corporation, which provides services in support of high altitude balloon, airship, and unmanned aerial vehicle flight operations, and Hallco Industries, Inc., which is headquartered in Tillamook and designs and manufactures a full line of bulk materials handling solutions for trucks, trailers, and stationary conveyor and bin systems.

The POTB offers water, sewer, and electrical service as a utility provider to its existing tenants, and extends such utility lines to new industrial clients upon demand. It serves as the principal septage receiving station for the county, including not just municipal sludge but all materials from septic haulers, which it charges fees by the gallon. In addition, it operates a landfill which receives wood waste from local mills for a fee.

The mission of the Strategic Business Plan developed for the POTB in December 2009 was to promote a fiscally sustainable POTB that contributes to the economic health of the county through responsible management of the POTB's assets, resources, and capabilities. The overall management goal stated was to achieve continued success in fulfilling the stated mission of the POTB by developing and maintaining necessary organizational and physical resources. The environmental goal identified was to exhibit conscientious stewardship of all lands, facilities, and waters under the POTB's control. A specific financial goal listed was to facilitate appropriate use of FEMA funds and utilize a Master Plan to guide future investments, with a strategy to prepare a Master Plan on a timeline consistent with the needs to direct FEMA funds and to borrow funds to do so. To date, a Master Plan has not been developed. The Strategic Business Plan can be viewed at the POTB's website at www.potb.org/aboutus/strategicanalysis.html.

4.0 ALTERNATIVES

In accordance with federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of alternatives and a discussion of the potential environmental consequences. This draft EA includes the analysis of two alternatives. Alternative 1 is the No Action Alternative, which would entail no new construction. Alternative 2 is the Proposed Action Alternative and includes the construction of four independent new construction projects at the POTB facility to improve its leasing capacity and associated infrastructure.

4.1 Alternative 1 – No Action

Inclusion of a No Action Alternative in the environmental analysis and documentation is required under NEPA. The alternative evaluates the effects of not providing eligible assistance for a specific action and provides a benchmark against which other alternatives may be evaluated.

Under the No Action Alternative, FEMA would not provide funding to the POTB for the proposed new construction projects included in this draft EA. The POTB would not have the necessary funds to proceed with the proposed projects and the proposed locations for the new construction would remain undisturbed and reflect current conditions. The No Action Alternative would not meet the overall long term needs of the POTB, nor the POTB's objectives and goals.

4.2 Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

For the Proposed Action, the POTB would complete the construction of four independent projects at their industrial and transportation facility. Each of the four proposed individual construction projects are summarized below. Complete architectural and engineering designs are available upon request. The individual environmental impacts associated with each of the proposed projects are addressed throughout this draft EA.

4.2.1 Construction of New Airport Business Park

Figure 2. Architectural Design of Proposed New Airport Business Park (LRS Architects, Inc.)

The POTB proposes to build a new Airport Business Park that would include three new structures to be used as leasable space. The structures would be built on an approximately 18-acre undeveloped site located on the north end of the Tillamook Municipal Airport, south of Long Prairie Road and east of the NAS Tillamook blimp mooring pads.

The structures would consist of a commercial hangar connected to an observation tower by a covered breezeway that would be integrated with the remainder of the facility. The observation

tower would be located directly west of the hangar and 54 feet east of the existing blimp pad. The third and largest structure would contain administrative offices and a manufacturing area with storage and delivery functions. The combined space of all structures making up the new facility would be 32,300 square feet (SF). A new 30' wide double lane access road would be built to connect the site to Long Prairie Road. An asphalt parking area would be located on the east side of the main building and a concrete walkway and curb would be located along the

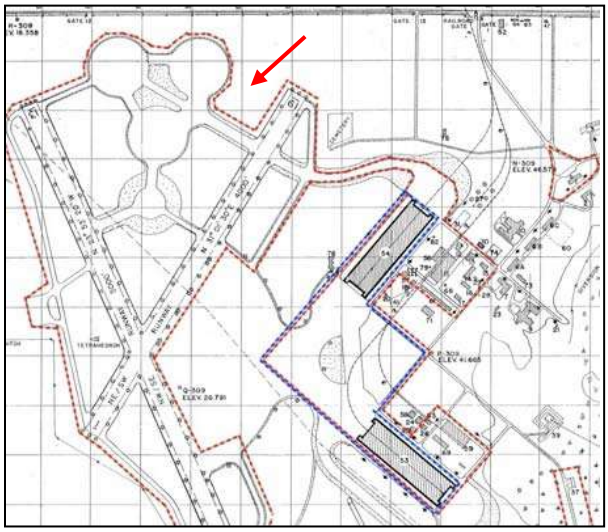

Figure 3. New Airport Business Park proposed location.

Figure 4. Proposed Airport Business Park site photo (2011).

western side of the parking area. Concrete walkways would also run along the eastern and southern ends of the main building. The proposed site would be disturbed to construct permanent utilities (water, sewage, and electrical) prior to the construction of the new structures and associated access road and parking area. Architectural site plans for this project are included in Appendix H.

4.2.2 Construction of New Port Shops Facility

Figure 5. Architectural design of proposed Port Shops (LRS Architects, Inc.).

The proposed construction of a new Port Shops facility for the storage and maintenance of POTB equipment would be located on a two-acre undeveloped site northeast of the Hangar A remnants (current Hooley Digester facility) and outside of the eligible NAS Tillamook Historic District boundary.

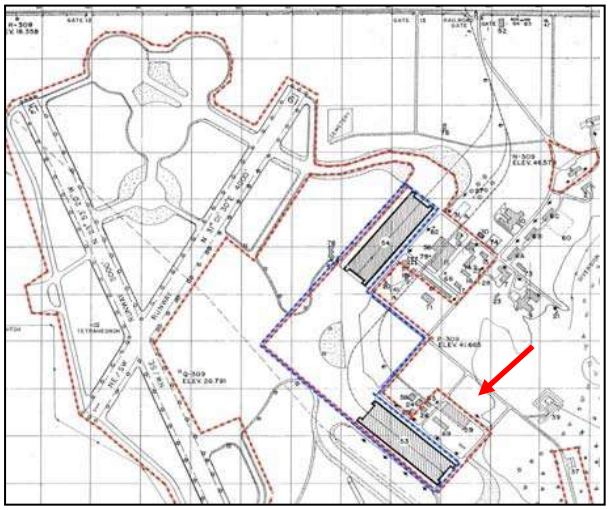

Figure 6. Port Shops proposed location.

Figure 7. Port Shops proposed lot site photo (2011).

The Port Shops would include three new pre-fabricated metal buildings on a concrete base three feet high that would include a mechanic's shop with an overhead crane, a maintenance equipment storage facility, and other associated wood shop and metal shop areas. The three structures would be 5,580 square feet (SF), 6,540 SF, and 3,570 SF in size. The proposed structures would be constructed to create two interior courtyards for vehicular and equipment maneuvering. The project also includes construction of office space, an employee parking area, and security fencing around the site perimeter that would include an alarm system and lighting. Water and sewer utilities would be extended to the site from adjacent connections. Two new driveways 25 feet wide would access the site, with one driveway extending from C Street (former Sorensen Avenue) and the other from 4th Street (former Airship Avenue).

The existing POTB maintenance shop located in the former NAS Tillamook Men's Mess Hall (Building 7) is planned to be demolished. It is located outside of the eligible NAS Tillamook Historic District boundary and has been determined to be non-contributing to the historic district due to lost integrity from incompatible alterations, materials, and additions.

The proposed location has been determined by the POTB to be the best location due to the visibility and ease of accessibility to all POTB properties within the industrial park, the ease of access to the Port Shops facility from both C Street and 4th Street allowing for a circular traffic flow when moving large equipment, and the proximity of existing power, sewer, and water utility hook-ups. Architectural site plans for this project are included in Appendix H.

4.2.3 Water Loop Improvement Project

The water loop improvement project would make upgrades and extend the current water system to better serve the POTB's current and future industrial properties. The water distribution

system for the POTB complex connects to the City of Tillamook water system at a single point where it distributes water through the POTB property. Water service is provided for domestic consumption, fire protection, and process flows required by some tenants.

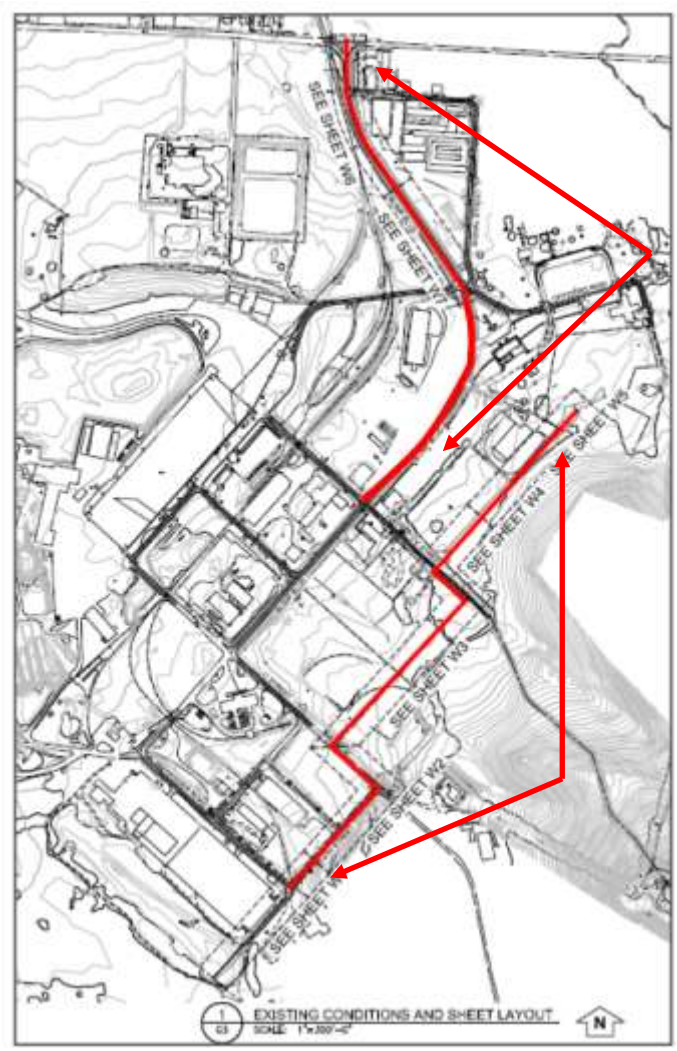

Figure 8. First two water line segments.

The water system infrastructure was installed in the 1940s and originally connected to a water reservoir located on the hill southeast of the base. This was disconnected when the POTB property was connected to City of Tillamook water. The current distribution system uses mainlines ranging from 3" to 12" diameter pipes that are constructed primarily of cast iron, although some additions to the system in the 1970s and 1980s were reported to use plastic polymerized vinyl chloride (PVC) pipe. Most of the original hardware installed in the 1940s remains in service, including fire hydrants, valves, and fittings. The materials and construction methods, including jute and lead joints, are no longer available or are no longer standard industry practice. The water system does not extend to all areas of buildable space at the current facility and the POTB plans to extend the system to supply additional areas for future leasable space.

Improvements to the existing water distribution system would include installing approximately 13,100 linear feet (LF) of 12" mainlines made of PVC C-T900 pressure-rated pipe (or equivalent) with ductile iron fittings and valves to increase the hydraulic efficiency and provide better water services, including better flow for fire protection. Construction would consist of improving two sections of the waterline within the core of the POTB complex, along with extending the water service along the northern edge of the property as follows:

1. 2,900 LF segment along Blimp Blvd running from the south end of D Street to E Street and north to the intersection of Blimp Boulevard and Long Prairie Road;

2. 4,400 LF segment along the eastern portion of the industrial grounds along 4th Street from Hangar A Road, extending generally northeast to the original mainline located in the field immediately east of the former Officers Quarters site (demolished years ago); and

3. 5,800 LF segment extending westerly along the south side of Long Prairie Road from the intersection of Blimp Boulevard to U.S. Highway 101, where the water line would connect to the City of Tillamook water line.

Much of the water line would be constructed in existing utility corridors. Some re-alignment includes crossing areas that are and have been historically disturbed grass fields and open space (i.e., northeast of Hangar A and the current ball fields). Installation would be accomplished by using a combination of open trench digging and directional boring to avoid impacts to wetlands and surface water drainage. The depths would vary between 36 and 60 inches. With the exception of water valve boxes and minor markings, none of the proposed water system improvements would be visible after construction and the surface is restored to grade. Disturbed areas following construction and trenching of the waterline would be re-seeded using native seeds and restored to their previous condition. Where the new alignment crosses existing roadways, the asphalt pavement would be saw cut to remove the existing pavement and then replaced with an asphalt patch after construction.

Figure 9 (below) shows an aerial photograph outlining the proposed extension of the water line along Long Prairie Road.

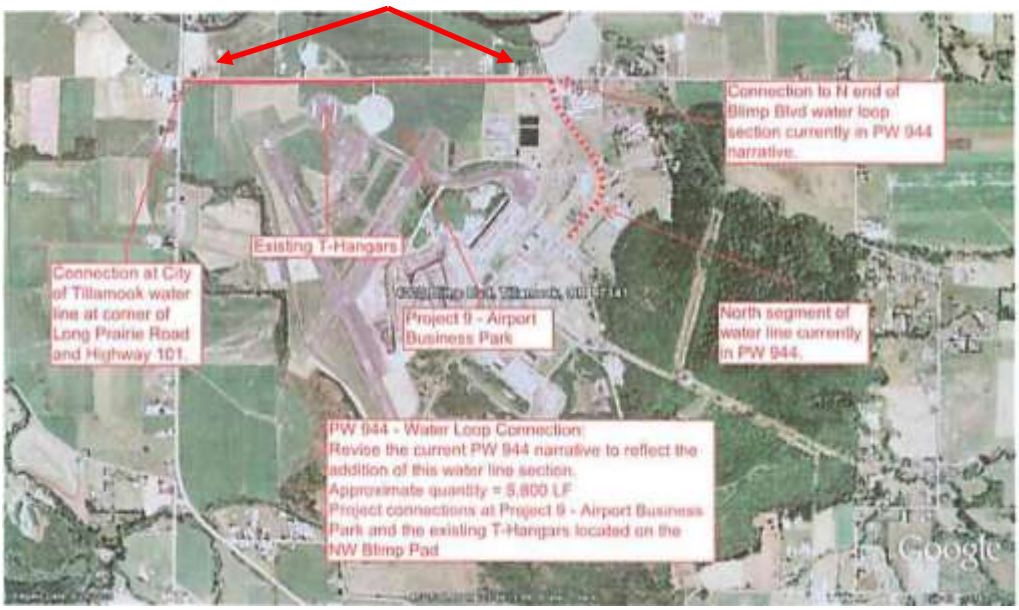

Figure 9. Proposed water loop improvement extension along Long Prairie Road.

4.2.3 Construction of New Greenhouses

The POTB proposes to install three 20' wide x 96' long or 36' wide x 100' long (or a combination thereof) greenhouses southwest of the Hooley Digester facility (former NAS Tillamook Hangar A site) for use as a for-lease facility.

The greenhouses would be installed in a rectilinear alignment south of the Hangar A slab near the Hooley Digester in an approximate 250’ wide x 330' long area currently used as a community garden. The proposed site would be cleared of dirt, debris, and vegetation (including some trees) to uncover an asphalt tarmac surface expected to occur at a depth of approximately six inches below the current surface. The greenhouses would be installed upon the asphalt base and piping from the Hooley Digester would be extended to the greenhouses to provide additional heat to the structures. If the asphalt base is not found or is only partially existing, a layer of gravel would be

Figure 10. Proposed location of new greenhouses.

put down where there is not paving to create a relatively flat, even surface for the greenhouses. Due to the existing system of dirt roads in the vicinity of the proposed site, no new access roads will be constructed.

The three new greenhouses would be pre-fabricated and erected on site. They would be steel pipe structures with either constructed lumber endwalls or prefabricated steel endwalls. The covers over the endwalls would either be clear poly, shade cloth, or rigid clear poly carbonate. No bright color or highly reflective surfaces would be used. The shape of the greenhouses would either be a semi-gable form, a half-round “Quonset” form, or a half-round over vertical sidewalls “low profile Quonset” form. A more detailed site plan for this project is included in Appendix H.

The POTB determined this to be the best location due to ease of construction utilizing the existing paving in this area, along with the ease of access to the Hooley Digester for digestate effluent as fertilizer, fiber source for mulching, and piping of heat from the cow manure digestion process to heat the new greenhouses.

4.3 Alternatives Considered and Dismissed

The specific alternatives that were considered and dismissed for the four independent construction projects are listed below.

4.3.1 Construction of New Airport Business Park

Alternate Location #1:
The original location planned for the new Airport Business Park was located immediately adjacent to the proposed site running parallel to the taxiway at the north end of the airport facility. The proposed facility fell outside of the FEMA 100-year flood inundation line, but a significant amount of the needed access road construction fell within the inundation line. Further, this proposed location would have resulted in direct impacts to identified wetlands. Based on these factors, the POTB dismissed this location as a viable option.

Alternate Location #2:
An additional location was considered to the north and west of Hangar B (the current Air Museum) on the north side of the paved runway taxiway serving this structure. This site was also considered for future executive aircraft hangars. The area is slightly crescent shaped, measures approximately 213 x 1,444 feet, and covers six acres in a heavily developed portion of the POTB. A gravel road runs along the northern border, with a cemetery, the training grounds for the Tillamook County Sheriff's Department, and the sewage treatment ponds all located north of this road. The far eastern end of the site is completely flat and graded. It contains two large metal structures, a gravel road leading to the structures from the east, graveled parking areas, garden beds, and a small mowed grassy area. The remainder of the site to the west of the metal structures is completely covered in tall, thick blackberry bushes with some Scotch broom growing on the northern face. The site was dismissed from further consideration as the location was not functional for the anticipated use by the identified lease tenant, Near Space Corporation.

4.3.2 Construction of New Port Shops Facility

Alternate Location #1:
One alternative dismissed was to repair the existing Port Shops facility located on the southeast corner of the intersection of Blimp Boulevard and E Street. The existing facility is in need of significant repairs, making the option of renovating this facility for use as the new Port Shops facility economically unfeasible. Further, the overall property location consists of prime real estate immediately adjacent to Blimp Boulevard and would be better utilized for future lease income.

Alternate Location #2:
The former NAS Tillamook gunnery training building (Building 69) located at 6100 Hangar A Road was considered as a possible alternative site to house the Port Shops. The building was ruled out as a viable option because the footprint is too small to accommodate the needed office and equipment storage space, and the expansion of the footprint would not be possible without removing historic railroad lines located immediately adjacent to the building.

Alternate Location #3:
A vacant lot located at the southwest corner of Blimp Boulevard and C Street that was originally slated to be used to construct a secure truck storage facility was considered when that project was removed. However, it is considered prime leasable real estate by the POTB due to its location

immediately adjacent to Blimp Boulevard. The POTB is currently working with a potential lease tenant for future use of this location.

4.3.3 Water Loop Improvement Project

Alternate Location #1:
A larger expansion route to the west was considered that extended the water line along the POTB westernmost property boundary along the east side of U.S. Highway 101 before moving inland at the southwest corner to connect to the existing main water line near the southwest corner of the Hooley Digester Facility. The route would run from the intersection of Long Prairie Road and U.S. Highway 101 for approximately 6,700 feet south. The water line would then continue in an easterly direction approximately 100' north of Raccoon Creek for approximately 2,400 feet towards the Tillamook Gun Club lease area before continuing approximately 3,500 feet in a northeasterly direction within the utility corridor of Blimp Boulevard along the southern end of the Tillamook Municipal Airport. This alternative was dismissed due to being cost prohibitive until at such time the POTB has a firmer indication of future development that will or will not occur in the area that this route would provide service to.

4.3.4 Construction of New Greenhouses

Alternate Location #1:
The POTB considered an additional location for the new greenhouses on a remnant of the Hangar A concrete slab located just north of the existing Hooley Digester facility. This potential site was rejected as a viable alternative location because the same area will be needed for proposed future expansion of the Hooley Digester facility.

5.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

The NEPA compliance process requires federal agencies to consider direct and indirect impacts to the environment. For each resource category, the impact analysis follows the same general approach in terms of impact findings. When possible, quantitative information is provided to establish impacts. Qualitatively, these impacts will be measured as outlined below.

Impact Scale	Criteria
None/Negligible	The resource area would not be affected, or changes would be either non-detectable or if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, although the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.
Moderate	Changes to the resource would be measurable and have both localized and regional scale impacts. Impacts would be within or below regulatory standards, but historical conditions are being altered on a short-term basis. Mitigation measures would be necessary and the measures would reduce any potential adverse effects.

Impact Scale	Criteria
Major	Changes would be readily measurable and would have substantial consequences on a local and regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected.

Impacts are disclosed based on the amount of change or loss to the resource from the baseline conditions and may be direct or indirect. Direct impacts are caused by an action and occur at the same time and place as the action. Indirect impacts are caused by an action and occur later in time or are farther removed from the area, but are reasonably foreseeable. Cumulative impacts are discussed in Section 6.0.

Noise was not analyzed further in this document as no significant impacts are anticipated beyond short-term increases during construction. The site is located in a rural industrial area with few residences in the project vicinity.

The following subsections discuss the regulatory settings and the environment and existing conditions for each alternative. The discussion is broad and regional in nature. It does not include a complete inventory of each resource, but does provide information to characterize those resources. This section also identifies the potential effects and environmental consequences of the two alternatives considered.

5.1 Physical Resources

The POTB industrial and transportation facility is located within the Oregon Coast Range which consists of a band of moderately high mountains and coastal headlands that extend south from Grays Harbor, Washington, to the Middle Fork of the Coquille River in southern Oregon. The range is bounded on the west by the Pacific Ocean and is approximately 200 miles long and between 30 and 60 miles wide. Elevations range from near sea level to generally between 1,476 and 2,460 feet. The highest peak in the range, Mary's Peak, reaches 4,097 feet in elevation.

The POTB location has been cleared of timber; extensively cut, filled, and graded; and then actively used for nearly 70 years, first as the NAS Tillamook and then for industrial and commercial purposes. It is surrounded primarily by farmland and undeveloped forestland.

5.1.1 Geology and Soils

The regional geology of the Tillamook Bay area is comprised of sedimentary rock formations which have been overlain with sediments that range in size from fine-grained silts and clays to larger particles of sand and cobbles. Like other locations along the coastal plains of Oregon, Tillamook Bay Valley is an alluvial plain comprised of loose, unconsolidated (not cemented together into a solid rock) soil and sediments Derived from basalt and sandstone-shale bedrock, the deep, level soils of the coastal floodplain have been eroded, deposited, and reshaped by water over thousands of years by streams and rivers.

Mapping from soil surveys conducted by the Natural Resources Conservation Service (NRCS) indicates over 750 acres located at the POTB facility consists of Urban Land-Udorthents complex, a soil complex that generally refers to cut and fill soils. The complex is generally found on floodplains and stream terraces and includes soils that are somewhat excessively drained and do not flood. Although a large portion of the POTB facility has been mapped as Urban Land-Udorthents, it should be cautioned that NRCS soil surveys are mapped at a 1:24,000 scale, and the boundary between soil types (in this case, fill soils versus native soils) is intended to be a generalization.

An online NRCS Custom Soil Resource Report of the POTB property in Tillamook, dated October 2011, indicates the overall soils consist mostly of the following.

Map Unit Symbol	Soil Types	Approximate % of Site
100B	Urban Land-Udorthents complex, 0 to 7% slopes	72.1%
81B	Quillamook complex, 0 to 7% slopes	12.3%
173B	Tillamook-Ginger medial silt loams, 0 to 7% slopes	7.6%
74A	Nehalem silt loam, 0 to 3 % slopes	4.9%
1A	Brenner Silt Loam, 0 to 1 % slopes	1.7%

Tillamook Bay is influenced by seismic activity due to its location about 40 miles east of the Cascadia Subduction Zone (CSZ). The CSZ is a region off of the west coast of North America where the Pacific plate, comprised of the Juan de Fuca and Gorda plates, subduct beneath the North American plate. The reverse fault at the center of the CSZ parallels the coastline from British Columbia, Canada, to Northern California. Subduction of the Pacific plate imposes substantial strain on the edge of the American plate as the edge of the continent becomes "locked" to the Pacific plate, causing it to fold, warp, and move along fault lines.

As the continental crust flexes, some regions experience millimeters of uplift while others sink gradually or drop abruptly with the release of crustal pressures. Great thrust earthquakes of a magnitude 8.8 or higher are often associated with this release of pressure. Such an earthquake would have the immediate potential to create an on-shore rush of large waves, or tsunamis, formed by the sudden displacement of the seafloor. Depending upon the size of the event, Tillamook Bay waters would reach farther into the coastal plain and the estuary would likely be drastically altered. Plant and animal communities around the bay would likely take decades to recover. The last documented CSZ earthquake occurred in 1700 AD and is associated with tsunami deposits found in estuaries and coastal lakes along the length of the CSZ.

5.1.2 Air Quality

The Clean Air Act (CAA) requires states to adopt ambient air quality standards. The standards have been established to protect the public from potentially harmful amounts of pollutants. Under the CAA, the U.S. Environmental Protection Agency (EPA) establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of "sensitive populations such as people with asthma, children, and older adults". Secondary air quality standards protect public welfare by promoting ecosystems health and

preventing decreased visibility and damage to buildings and crops. The EPA has set national ambient air quality standards for the following six criteria pollutants: ozone, particulate matter, nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead. According to the EPA (2011), Tillamook County and the POTB facility are in an attainment area for all criteria pollutants.

5.1.3 Climate and Climate Change

Tillamook is located within a mild climatic region that experiences an average temperature of 50.5 degrees Fahrenheit (°F). July through September are the warmest months with temperatures averaging in the mid to high 60s. December and January are the coldest months with temperatures averaging 36°F. The area has an annual precipitation of 90.4 inches. A rainy season occurs from November and March averaging between 13.7 inches of precipitation in November to 9.9 inches in March, with a high of 13.9 inches in December. July and August are the driest months with an average of 1.64 and 1.42 inches of rain per month, respectively (Oregon Climate Service, 1971-2000). Mild winter temperatures means snowfall is rare along the coastal plain, with an annual average for Tillamook from 1971 to 2000 of 1.4 inches.

The CEQ has released guidance on how federal agencies should consider climate change in their decision making process for actions. The suggested threshold for when quantitative analysis should be done in NEPA documents is for an action to release over 25,000 metric tons of greenhouse gases per year (CEQ 2010). Given the nature of the Proposed Action considered and the lack of greenhouse gas releases, no further analysis was completed on climate change because it would not meet the established threshold warranting further consideration.

5.1.4 Consequences of Alternatives

Alternative 1 – No Action

Under the No Action alternative, no construction activities would occur that would potentially impact physical resources and the existing sites would remain unchanged. There would be no impacts to geology, soils, or air quality.

Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

The new Port Shops and greenhouses would be located entirely in Urban Land-Udorthents complex soils; the new Airport Business Park is located in portions of the Urban Land-Udorthents complex, Nehalem silt loam, and the Quillamook complex soils; and the water loop improvement project would encompass a combination of the NRCS-listed soils. The existing topography and soils at these sites have all been extensively excavated, filled, and graded, followed by being actively used for nearly 70 years for industrial purposes.

For the most part, construction vehicles would use the existing road infrastructure to access the sites, therefore reducing the short-term direct impacts to physical resources during the construction period. Soil stability would increase where buildings are added due to hardening of the ground surface. The infiltration capacity of soils would decrease where natural vegetation is

replaced by above-ground structures and would lead to long-term indirect effects related to ground saturation rates from precipitation.

Based on the scale of the new construction included in the Proposed Action, the impact intensity from the ground disturbing activities would be measurable but would be minor and would occur at localized areas within the existing industrial facility. Topsoil may be temporarily moved to level and reach the planned elevations of the proposed structures and parking areas, but no topsoil is anticipated to be hauled off-site. Best Management Practices (BMPs) required by local and state permits and authorizations would ensure adequate measures are applied before, during, and after construction to stabilize soils, minimize soil erosion and sedimentation, and control stormwater runoff.

Short-term minor impacts to air quality would occur during construction activities. To reduce impacts, the construction contractors would be required to wet down construction areas as needed to reduce dust. Emissions from fuel-burning engines (i.e., heavy equipment and earthmoving machinery) could also temporarily increase the levels of some of the criteria pollutants. The limited construction period in conjunction with the limited number of pieces of equipment needed for the Proposed Action construction activities would result in criteria air pollutants well below EPA thresholds.

In addition to non-criteria pollutants, volatile organic compounds (VOCs) emitted as gases from certain solids or liquids from a wide array of products may occur during or following construction. Examples of VOCs include paints and lacquers, cleaning supplies, pesticides, building materials and furnishings, and office equipment such as copiers and printers. While the construction of new buildings and structures may result in an increased release of VOCs, the amount released would be within normal ranges and would not pose a concern beyond what is typically found in such structures.

5.2 Water Resources

Projects funded by FEMA must comply with permit requirements for the U.S. Army Corps of Engineers (USACE) under the Clean Water Act (CWA) of 1972, as amended, and the River and Harbors Act of 1899. This includes any project that involves the excavation or the placement of fill material into waters of the United States, particularly when work will be conducted below the ordinary high water mark of a water body or in a wetland. Regulations also require that any fill material used is obtained from a permitted borrow location or approved upland source, unless otherwise authorized by the USACE.

The current tidal movement of sea water in Tillamook Bay occurs through a natural channel on the northern end of the spit, west of the city of Garibaldi. Sedimentation patterns within the bay have been altered significantly over the last 200 years by the modification of river channels, several devastating forest fires, timber harvesting, agricultural activity within the alluvial plain, and the construction of two jetties. The Tillamook alluvial plain periodically experiences large-scale flooding due to heavy rain, melting snow, high tides, and strong winds that drive the high ocean tides farther inland, even with the use of tidegates to help control the tidal influence throughout the area. Since the late 1890s, 19 large-scale floods have occurred in the Tillamook

Bay area, several of which had the potential to reach the POTB facility due to its location between the Tillamook and Trask rivers.

5.2.1 Surface, Ground, and Water Quality

The POTB facility is located within the Tillamook Basin, which encompasses about 338,000 acres and drains the watersheds of five rivers, including the Miami, Kilchis, Wilson, Trask, and Tillamook. The watershed consists of a winding network of river channels and 405 miles of tributary streams. Over the last 20 years, various government agencies, including the DEQ, sampled the five rivers in the Tillamook Bay watershed and identified potential bacterial sources from livestock operations, wastewater treatment plants, and failing septic tanks.

The rivers closest to the POTB facility include the Tillamook and Trask rivers. The Tillamook River flows south to north about 0.75 miles to the west of the POTB boundary. It has a channel length of approximately 17 miles and a drainage area of 38 square miles. The river merges with the Trask River for its last river mile, which is located north of the POTB facility and is separated from the complex by Long Prairie Road. The main stem of the river is 18 miles from where its two forks join.

Mill Creek and Anderson Creek run through the POTB facility. Mill Creek cuts across the eastern and northeastern portion of the property and Anderson Creek begins within the western portion of the property and flows for about 2.5 miles before merging with the Tillamook River. Anderson Creek follows a straight, canal-like path along the southwestern edge of the airport runway and continues a course east of Highway 101. Another shorter branch of the creek also starts west of the airport. Historically both of these creek branches appear to have flowed through the center of the POTB property, making roughly two-thirds of the area making up the NAS complex extremely marshy, supersaturated, and unusable ground. Because of this, more than 2.3 million cubic yards of fill was imported in the 1940s to make the area suitable for construction in order to support the numerous NAS structures and features constructed. In the process, Mill and Anderson creeks were re-routed to their current locations that largely avoid impacts from activities within the industrial complex.

The POTB industrial park has its own on-site wastewater treatment plant. Each tenant of the POTB campus has a septic tank with separate wastewater lines that are gravity pulled to the wastewater treatment plant. The POTB has an above ground, permitted lagoon system that stores the water decanted off the septic system. The overflows are sent to two lagoons through underground PVC pipe. Since 1999, the Port has replaced all sewer lines with PVC pipes, installed a new step system, and repaired the lagoons. Overall sewage flow at the complex is approximately 6,000 gallons per day, which accounts for 1% of the total capacity allowed by their wastewater permit (0.56 million gallons per day).

The POTB is required to comply with National Pollutant Discharge Elimination System (NPDES) general permits that apply to construction activities, including clearing, grading, excavation, and materials or equipment staging and stockpiling that will disturb one or more acres of land. The POTB is required, as a condition of FEMA funding, to obtain and comply with all needed NPDES permits through the DEQ prior to initiating construction activities.

5.2.2 Wetlands

Executive Order (EO) 11990 for the Protection of Wetlands requires federal agencies to follow avoidance, mitigation, and preservation procedures with public input before implementing construction that has the potential to affect wetlands.

U.S. Fish and Wildlife Service (USFWS) national wetlands inventory mapping indicates there are no wetlands located on the proposed Port Shops Facility site and the proposed location of the new greenhouses. The USFWS wetlands inventory mapping indicates the presence of wetlands adjacent to the proposed location of the new Airport Business Park and at various locations of the proposed water loop improvement project. In addition to the USFWS mapping, some areas of the POTB complex have been previously delineated for known wetlands in anticipation of future construction projects and these sites have been certified by the Oregon Department of State Lands (DSL).

5.2.3 Floodplains

EO 11988 for Floodplain Management requires federal agencies to take action to minimize the occupancy and modification of floodplains and to avoid adverse effects and incompatible development in the floodplain. The community of Tillamook participates in the National Flood Insurance Program and the area is mapped for floodplains on the FEMA Flood Insurance Rate Map (FIRM) Community Panel No. 4101960170 C, dated August 20, 2002.

In recent years, FEMA has revised the FIRM maps for Tillamook County. The mapping is preliminary and has not been adopted. It is currently under appeal by the county and a decision on the appeal and the final flood map is expected to be forthcoming in January or February 2012. The appeal involves changes to the floodway only and not the 100/500-year flood limits within the vicinity of the POTB. The currently effective flood maps from 2002 have a larger boundary for the 100-year floodplain of the Trask River to the north of the POTB complex and would impact the proposed Airport Business Park more than the pending revised flood maps. For purposes of EO 11988, FEMA also considers the preliminary revised mapping for best available data, whether adopted or not. However, if the floodplain is projected to shrink (as in the case for the Airport Business Park vicinity), FEMA, for purposes of EO 11988 review tends not to follow the preliminary mapping until a Letter of Final Determination has been issued.

5.2.4 Coastal Zone

Projects in the Oregon coastal zone, including most inland anadromous rivers and streams in that zone, must be consistent with the Oregon Coastal Management Program (OCMP). The lead agency responsible for applying the standards of the OCMP is the Oregon Department of Land Conservation and Development (DLCD). The DLCD reviews projects that affect coastal resources and makes the consistency determination, including any associated requirements. A copy of the letter from the DLCD to the POTB that no further review is required for the four new construction projects is included in Appendix E.

5.2.5 Consequences of Alternatives

Alternative 1 – No Action

The No Action alternative does not include any FEMA action. Therefore, no FEMA funded construction activities would occur that would disturb the earth surface and potentially impact water resources or the floodplain. However, depending upon how successful the POTB is in executing their Strategic Business Plan, other non federal projects would still occur and potentially impact water resources.

Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

There is not any visible perennial surface water (streams or rivers) located at the proposed locations of the Airport Business Park, Port Shops, greenhouses, or water loop improvement sites. The Trask River is separated from the POTB property by Long Prairie Road and the sites are not near Mill or Anderson creeks. BMPs required by the POTB's NPDES permit would significantly reduce the potential for effects to water resources in the vicinity from stormwater runoff. No direct or indirect effects to streams or rivers are anticipated from the Proposed Action. In addition, there are no wells located on the proposed construction sites, as the City of Tillamook supplies the POTB with treated potable water.

The proposed site for the new Airport Business Park project contains DSL designated wetlands. The wetlands are located in the southwest corner and northwest quadrant of the site. The proposed building footprint, walkways, and all paved areas would remain clear of the designated wetlands. Erosion control methods would be used to protect the wetlands during construction and the wetland area itself will be flagged and protected with erosion control fencing to ensure their protection. Any potential impacts would be negligible.

From site visits conducted by FEMA along the proposed water loop extension routes, the 4,400 LF segment along the eastern portion of the industrial grounds north of Hangar A extending generally northeast through the fields until it connects to D Street contains visible wetlands that have not been delineated. SHPO concurrence for this segment requires underground directional boring through the fields where wetlands have been noted. Therefore, potential impacts to wetlands would be minor related to the entry and exist locations for the directional boring. Prior to any construction activities taking place, the DSL has requested the POTB meet the following requirements and compliance with DSL is required as a condition of FEMA funding to ensure wetlands are not impacted by construction:

- An updated wetland delineation report will be required for routes of the proposed water lines. The study area needs to cover the full length of the proposed water lines and should be wide enough to cover the construction corridor, including temporary soil stock piling, etc., that will occur along the route.

- After the new wetland delineation report is completed, the POTB will need to obtain any required DSL and USACE permits.

- The DSL permit application should include a plan view and cross-section drawings of any trenching through wetlands, including equipment operation and soil stockpiling

areas, and depth of excavations and materials to be put in the backfill. If non-native material (i.e., gravel bedding) will be in the backfill, the DSL will require that clay or concrete "plugs" be placed at the entry and exit points of each encountered wetland.

- If all impacts to wetlands will be temporary, then compensatory wetland mitigation will not be required. The POTB should anticipate that their DSL permit, will, however, require one or more monitoring reports to "prove" that the temporarily impacted wetlands were successfully restored.

- For the sections using directional boring, if directional bore entry and exit locations can be placed outside of the wetland boundaries, no permit would be required. If directional boring is completed under surface waters or wetlands, the POTB application to the DSL needs to show the entry and exit points for the directional bore are in uplands and that the bore is deep enough below the bed so as to 1) be below the scour depth of the waterway; and 2) otherwise deep enough so as not to allow bentonite to leak into waterway should the boring fracture.

The proposed locations for the Port Shops and greenhouses are located outside the 100-year floodplain. The construction footprint for the proposed Airport Business Park will also be located outside of the 100-year floodplain, including the new access road to connect to the new Airport Business Park. The access road has been designed to follow the curve of the established floodplain remaining clear of the line by a minimum of 30 feet before running along the eastern edge of the site to the proposed development. No part of the proposed development, including the new road, parking area and building footprint, will impede or alter drainage of the flow of floodwaters or impact the floodplain.

The proposed locations of the 2,900 LF and 4,400 LF sections of water loop improvements are located outside the 100-year floodplain. However, the 5,800 LF segment extending the water line along Long Prairie Road from the intersection of Blimp Boulevard to U.S. Highway 101 of the proposed water loop expansion would encounter portions of the 100-year floodplain. However, impacts would be minor. Construction activities to complete this stretch of water line would be temporary and underground. The project would not impede natural floodplain uses or be considered incompatible development. It would not alter drainage of the flow of floodwaters and would not cause adverse effects or any change to pre-existing floodplain values. A complete evaluation of the 8-step decision making process for floodplain management is included in Appendix G.

5.3 Biological Resources

A large portion of Tillamook County is covered by forestlands owned by county, state, and federal agencies and private companies. Agriculture in the county is dominated by the dairy industry. Although there has been an increase in the number of cattle over the last several decades, there has also been a decrease in the number of farms and land area used for farming. Despite these changes, the dairy industry continues to contribute significantly to the local economy and to shape the rural landscape in Tillamook County.

5.3.1 Vegetation

The Tillamook Bay basin falls within a coastal vegetation zone that generally includes Sitka spruce (*Picea sitchensis*) and other coniferous forest species, including western hemlock (*Tsuga heterophylla*), western red cedar (*Thuja plicata*), coast Douglas fir (*Pseudotsuga menziesii*), grand fir (*Abies grandis*), Pacific silver fir (*Abies amabilis*), and shore pine (*Pinus contorta*). Euroamerican settlement, farming, flood control, and land reclamation in the basin have largely altered most native vegetation areas in the vicinity of the POTB property. General Land Office (GLO) maps of the property show the land as level and timbered with fir, pine, spruce, hemlock, maple, and alder, with dense undergrowth (GLO 1857), prior to clearing of the tree for its use as farmland and development of the NAS Tillamook.

The entire 1600-acre POTB property is zoned M-1 General Industrial and in recent decades has been developed accordingly. Portions of the property that are undeveloped consist primarily of grass fields with some trees. The land surrounding the POTB facility is primarily rural residential, pastures, and farmland.

5.3.2 Fish (including Essential Fish Habitat)

Fish species present in the Trask River located north of the POTB property include Chinook salmon (spring/fall runs; *Onchorhynchus tshawytscha*), coho salmon (*O. kisutch*), chum salmon (*O. keta*), steelhead (summer/winter runs; *O. mykiss)*, cutthroat trout (resident/sea-run; *O. clarkii*), and lamprey (*Lampetra tridentate*). The Oregon Department of Fish and Wildlife (ODFW) stocks fall and spring Chinook, coho, and rainbow trout in the watershed out of their Trask Hatchery, located on Gold Creek upstream of the POTB. Other native fish present include sculpin and stickleback species. Chinook and coho salmon species are designated as Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act of 1996, as amended. The Act requires all federal agencies to protect fisheries habitat from being lost due to disturbance and degradation and to consult with the National Marine Fisheries Service (NMFS) when an action has the potential to adversely affect EFH.

While EFH species are known to occur in the Trask River and may occur in the creeks that occur at the POTB complex, none of these water resources would be affected by Proposed Action. No further review regarding EFH species or critical habitat is required.

5.3.3 Wildlife

Habitat in the immediate vicinity of the POTB complex offers very limited habitat for wildlife due to the site's industrial nature. Roosevelt elk (*Cervus elaphusroosevelti*) live in the coastal range and may wander through the area. During the summer they are found in high, open mountain meadows and in the winter they move to lower wooded slopes, often in dense woods. They also like to graze in the grass fields located on POTB property west of the airport and east of U.S. Highway 101. While they can be seen year-round, certain times are better for viewing than others. The best month is September, when the males (bulls) are trying to establish dominance for mating rights with the females (cows).

5.3.4 Migratory Birds

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, provides federal protection for migratory birds, their nests, eggs, and body parts from harm, sale, or other injurious actions. The MBTA includes a "no take" provision. Consultation with the USFWS is required if an action is determined to cause a potential take of migratory birds and determines measures to minimize or avoid these impacts.

The POTB property is located in the statewide Pacific Flyway path for migratory birds. However, there is very limited nesting habitat for migratory birds within the POTB industrial complex, as there are few forested areas and the undeveloped grass fields are regularly mowed by farmers who are allowed to harvest hay and to maintain safety for the existing airfield. There is substantial forestland to the east, south, and west of the complex that provides much better habitat for birds in the area.

5.3.5 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) of 1973 directs federal agencies to consult with the USFWS and NMFS when an action has the potential to affect any federally-listed threatened, endangered, or proposed species, or would result in the destruction or adverse modification of designated or proposed critical habitat.

According to FEMA environmental mapping (ENVAS) and based on current ESA species lists for both the USFWS and NMFS, the Trask River is listed as having an Oregon Coast coho salmon evolutionary significant unit (ESU) which is listed as threatened under the ESA. The river is separated from the POTB complex by Long Prairie Road and would not be affected by any of the proposed new construction projects. The creeks on the POTB property also may contain listed coho, but the fish would not be affected by any of the proposed new construction. No further review regarding ESA species or critical habitat is required.

5.3.6 Consequences of Alternatives

Alternative 1 – No Action

Under this alternative, no FEMA funded construction would occur and biological resources would not be impacted from ground disturbing activities. Other non federal actions may still occur and could potentially impact biological resources.

Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

The land where the Airport Business Park, Port Shops, and water loop improvements are proposed consists of largely undeveloped grass fields and road right-of-ways. No tree clearing will be done to complete these projects and the amount of vegetation loss would be minimal. Construction of the greenhouses would involve some tree and brush clearing of the vegetation that has grown at the site to the south of the Hooley Digester. The trees are largely alders and the site would be classified as a scrub forest.

Overall, changes to vegetation and habitat from the proposed new construction projects would be small and localized, with relatively minor effects to native plant species population. There is substantial wildlife habitat available in the surrounding area and the effect would be negligible to short or long-term natural processes sustaining wildlife populations. Any replanting for each of the projects would be seeded with native vegetation and the implementation of BMPs and compliance with permitting requirements would ensure the surrounding habitat would not be affected by the construction activities. The impacts to these resources would be minor.

Consultation with Tami Tate-Hall, USFWS migratory bird permit specialist, was conducted for the tree and brush clearing proposed for the construction of the greenhouses. She stated while it would be unlikely for birds to nest next to the Hooley Digester due to the industrial activities in the immediate vicinity, they could still occur. For tree clearing that occurs from March until late August/early September, the site would need to be surveyed a few weeks prior to construction by a wildlife biologist. Any identified active nests need to be flagged and construction would need to proceed with caution and work around the nest(s) until the birds have fledged and moved to a new location. If an active nest is destroyed, it is an unlawful take. However, once the nest is empty and the birds have moved, it's okay to remove or alter the structure the nest is built in or on and destroy the nest. Empty or abandoned nests cannot be taken into possession without a permit. A condition is included in Section 8.0 to ensure compliance with the MBTA.

5.4 Cultural Resources

The National Historic Preservation Act (NHPA) requires that federally-funded actions take into account cultural resources in and around a project site, in cooperation with the state, tribes, and local governments. Section 106 of the NHPA and its implementing regulations (36 CFR 800) outline the procedures to be followed in the documentation, evaluation, and mitigation of impacts to historic places listed on, or eligible for listing on, the National Register of Historic Places (NRHP), including buildings, structures, archaeological sites, etc. The State Historic Preservation Officer (SHPO) is responsible for administering state-level programs. For purposes of this analysis, the term "archaeological resources" is used to refer to prehistoric or historic subsurface sites or objects, and the term "historic resources" is used to refer to above-ground historic structures and sites.

As the federal funding agency, FEMA also has primary responsibility for conducting Native American tribal consultation for undertakings occurring on or affecting historic properties a tribe attaches religious and cultural significance to. FEMA has recognized the Confederated Tribes of the Grand Ronde Community of Oregon (Grand Ronde) and the Confederated Tribes of Siletz Indians (CTSI) as consulting parties in the Section 106 process for undertakings proposed at the POTB.

The cultural context for work proposed at the POTB complex has been described at length within two reports previously provided to the POTB related to archaeological resources. This includes a report prepared to obtain an industrial site certification from the Oregon Economic and Community Development Department in 2007 (SWCA 2007) and an archaeological investigations report prepared by Historical Research Associates, Inc., (HRA) in December 2010

for investigations conducted September 13-14, 2010for the POTB's FEMA alternate projects. Copies of these reports are available upon request.

In addition to the archaeological investigations, FEMA, in cooperation with the SHPO, completed a Section 106 Reconnaissance Level Survey for the POTB complex to identify historic resources. The survey recorded a total of 63 properties within the Area of Potential Effects (APE), based on their ties to the NAS Tillamook. In addition to Hangar B that was already listed on the NRHP, the Headquarters Building was determined to be eligible as significant to the NRHP as it was once bustling with command activity and considered to be the core to all administration functions of the NAS Tillamook. Of the 63 buildings, structures, and sites surveyed, Hangar B and the Headquarters Building are considered significant resources. In addition, 27 (43%) appear to retain sufficient integrity to be eligible for listing as a Historic District on the National Register as contributing properties. Of the remaining resources, 11 (17%) were determined to be non-contributing due to lack of integrity and 23 (37%) were out-of-period and lacked the age necessary for listing. The SHPO concurred with the eligibility findings and proposed a Historic District boundary on September 10, 2010 (SHPO Case No. 10-0669; see Appendix D).

The eligible Historic District is approximately 400 acres, or about ¼ of the entire 1600-acre property. The area includes the airport, Hangars A and B, a "city block" of buildings to the east of Hangar B, and the outlined area of the historic ammunition bunkers to the eastern/southern portion of the property. It is up to the POTB, with input from the public, whether to nominate the Historic District and/or the Headquarters Building for listing on the National Register.

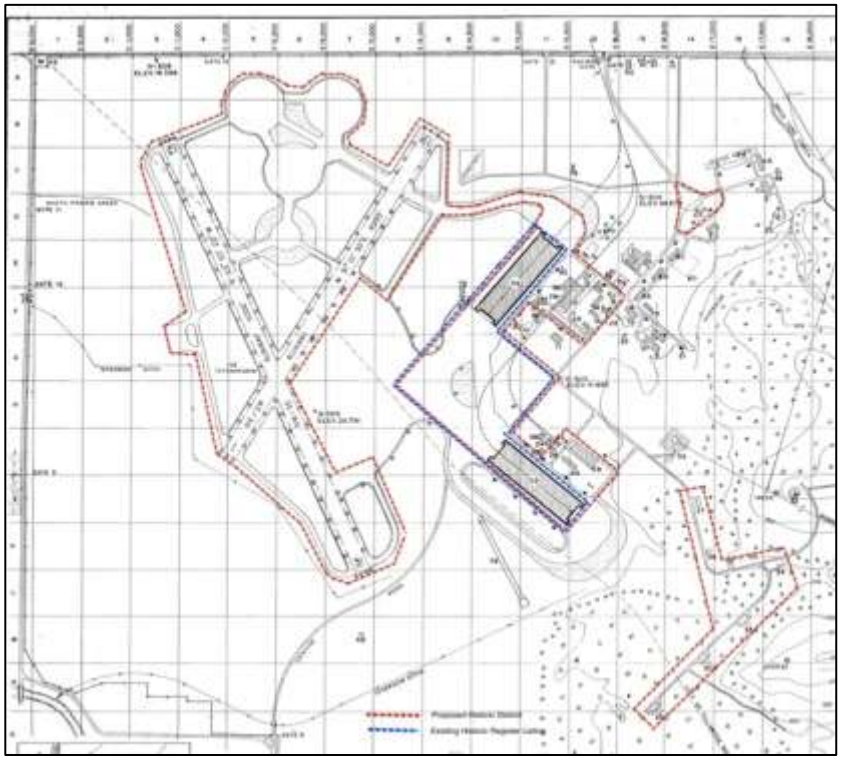

Figure 11. Naval Air Station Tillamook Eligible Historic District Boundary (red).

The POTB, FEMA, OEM, and SHPO acknowledged that the implementation of POTB construction projects would be more efficient if a Programmatic Agreement (PA), pursuant to 36 CFR § 800.14(b), is in place to specify procedures and define the roles and responsibilities in the historic review process, particularly due to the complex being located on a former World War II Naval air base. Through a collaborative effort that included these agencies and the Advisory Council on Historic Preservation (Advisory Council), the PA was developed, finalized, and implemented on February 7, 2011. The Grand Ronde and CTSI tribes were invited the tribes to sign as Concurring Parties in the PA, with the CTSI choosing to participate. The PA was designed to eliminate the need for SHPO review of certain routine activities with little potential to adversely affect historic properties and to streamline reviews so that the effect of undertakings on historic properties may be considered in a manner that minimizes delays to the delivery of funding assistance.

5.4.1 Prehistoric Context (American Indian/Religious Sites/Tribal Interests)

The prehistory of northwestern Oregon is incomplete. The working model is based on five cultural sequences outlined by Ames and Maschner (1999). These periods are as follows: a Paleoindian period (11,000 to 10,500 BC), for which no sites have been located; an Archaic period (10,500 to 4,400 BC), for which a few sites have been documented; an Early Pacific Period (4,400 to 1,800 BC), marked by a use of microblades and an increased use of shellfish; a Middle Pacific period (1,800 BC to 500 AD), discerned by the utilization of more resources; and a Late Pacific period (500 AD to 1775 AD), of which there are a large number of sites containing fewer chipped-stone and more bone tools.

The general area where the POTB complex is located has been the historical home to the Tillamook, a Native American population that occupied lands within the project area and the region. The Tillamook traditionally inhabited land between Tillamook Head and the Siletz River basin to the south. The eastern extent of their territory included much of the Wilson, Trask, Tillamook, Nestucca, Salmon, and Siletz River basins. The Tillamook were noted for their marine, riverine, and estuarine-based subsistence. Their settlements varied in size and were located near the mouth of rivers and large creeks. Each settlement consisted of several buildings and may have included a sweathouse, menstrual huts, and a graveyard that traditionally consisted of canoes raised on supports. Economic activities included berry and root collection; fishing; hunting for whales, sea lions, and elk; and gathering shellfish.

5.4.2 Historic Context and Resources

The first known Euroamerican landing at Tillamook Bay was Captain Robert Gray when he anchored his sloop, the Lady Washington, on August 14, 1788. Gray was searching for the "great river of the West" (the Columbia River) previously described by both Spanish and British sailors. At first he thought he had found it. After discovering his mistake and having a hostile encounter with the local natives where one of Gray's crew and several natives were killed, he left the area after one week's stay. He would not discover the mouth of the Columbia River until his second trip up the Pacific Coast in 1792.

The first settler in the vicinity was Joseph Champion, who arrived in 1851 and was best known for living in a hollowed-out spruce tree he called his "castle" (Oregon State Archives 2010). Other single men continued to settle in the area. By 1852, two families arrived, and each successive year brought more families. Tillamook County was created in 1853 and by 1854 the first school was opened and the first census had been taken. In 1862, the town of Tillamook was platted and the first store opened. In 1866, the first post office was opened and the town was permanently named Tillamook. An election in 1873 chose Tillamook as the county seat and the first public building, a jail, opened. The city of Tillamook was incorporated in 1891, and the County Courthouse and City Hall were built in the early 1890s.

The main source of income in the early days of Tillamook County was the fishing industry, although the rich grasslands and mild climate made the area ideal for dairy herds. In 1894, Peter McIntosh of Canada arrived and, together with local dairymen, built small cheese factories around the county. Today, world famous Tillamook Cheese is a living testament to the standard of quality set by early pioneers in the dairy industry.

Due to the predominance of the dairy industry, logging was not a thriving business in the early days of Tillamook County. "The settlers looked at the forest and saw only a stumbling block to the development of their farms and dairies" (Tillamook County Online 2002). By the 1890s, however, logging and milling operations rapidly developed. The logging industry continued to boom when railroad service, initially constructed by the Pacific Railway and Navigation Co. in 1911 and taken over by the Southern Pacific in 1915, connected Tillamook with Portland and points beyond.

Outside of the town of Tillamook, development progressed slowly. In the project area, the landscape remained primarily wooded through at least the turn of the nineteenth century. By 1939, aerial photos of the land now owned by the POTB show a moderate amount of cultivated farmland. However, the area remained primarily undeveloped with dense forests occupying the bulk of the landscape.

On December 7, 1941, the United States formally entered World War II following the attack on Pearl Harbor. Upon realization that the West Coast was vulnerable to another Japanese strike, the U.S. quickly drafted a series of defense plans, including a re-investigation into Lighter-than-Air (LTA) blimp airships. The formal announcement that the Navy would construct an airbase at the NAS Tillamook site came in June 1942. The site had relatively flat land surrounded by a semi-circle of rolling hills, an abundance of timber, and proximity to both the Pacific Ocean and the mouth of the Columbia River (a major supply line), making it an ideal site for a LTA base and the Navy's new fleet of K-class blimps needed hangars.

Hangars for the blimps were traditionally constructed of steel; however, the national steel reserve was engaged in other vital war preparations, leading to a shortage of the building material and the need to develop an alternative. Tillamook, with its abundance of timber, became home to two free-standing wooden hangars. Two and a half million board-feet of lumber were required for each hangar, with nearly another 5.5 million for ancillary support buildings. More than a dozen buildings comprised the base, many of which continue to be occupied by POTB tenants.

The immense amount of lumber required for construction of the LTA hangars dramatically changed the topography of the project area. The once dense forest was completely harvested within the project area, and local farms were graded for the newly appointed NAS Tillamook facility. Aerial photos from 1953 show the degree to which the heavy ground disturbance altered the project area in the 1940s.

Ten different Naval Air Stations were created during World War II to house LTA dirigible blimps in hangars, with a total of 17 hangars constructed in a little over a year. The wooden hangars constructed are considered the world's largest free-span wooden buildings, with each being over 1/5 of a mile long, over 21 stories high, a football field wide, and covering 7 acres. Only eight of the hangars remain today at five locations. Five were torn down due to lack of use, three were destroyed by a hurricane, and one (Hangar A at the POTB) burned to the ground. Where properly maintained, the remaining eight hangars continue in useful service today under different capacities. The hangar at Santa Ana, California, has been designated as a National Historic Landmark.

Blimp patrols served a vital function in World War II by conducting shoreline strategic search missions to locate enemy fleet positions. During the entire war, not one ship in a convoy escorted by a blimp was ever lost to a submarine attack. Blimps launched from Tillamook patrolled the coastline from the California border to the Strait of Juan de Fuca along the Canadian border. The historic period of significance for the NAS Tillamook extends from 1942, when the Naval air station was commissioned, to 1949, when it was deactivated due to the end of the war.

In 1949, the Rosenberg Lumber Company and the Angel Lumber Company constructed lumber mills in Hangars A and B. The entire site was deeded to the Port of Tillamook Bay in 1966, and various lumber interests continued to occupy the site into the 1980s until an economic downturn led to decreased lumber orders and operations were closed in 1982. Throughout the 1980s, the hangars were used independently for research and development of other aircraft. Hangar A was destroyed by fire in 1992, at which time it was being used for hay and straw storage. Hangar B still serves the community as the Tillamook Air Museum and was listed on the NRHP on March 29, 1989, for its engineering and military significance. The Headquarters Building was once bustling with command activity and considered to be the core to all administration functions of the NAS Tillamook.

5.4.3 Archaeological Resources

Prior to the construction of the NAS Tillamook, lands encompassing the area were generally low-lying and marshy, which necessitated extensive grading and filling during construction of the base. The APE for FEMA-funded projects included under alternate project funding is characterized by a wide variety of poorly-drained to well-drained soils typically associated with coastal valley and marine terraces and floodplains. Although most of the natural soil types found within the APE are well-drained and at least potentially suitable for prehistoric habitation and other activities, the presence of the Urban Land Udorthents Complex throughout much of the APE demonstrates the degree to which landforms have been heavily altered by WWII-era air base construction. The soils present have been heavily and deeply mixed and disturbed.

In the archaeological investigations conducted in 2010 by HRA for areas within the APE identified as having potential project-related ground disturbances, no archaeological materials were identified. The large majority of the survey areas were found to be heavily disturbed by development of the NAS Tillamook and subsequent industrial activities. The background research indicated that the land was cleared of timber; extensively cut, filled, and graded; and then actively used for nearly 70 years, first as the NAS Tillamook and then for industrial purposes

Based on archival research, archaeological investigations, and relevant Native American consultation, it was determined that the POTB property exhibits a low sensitivity for containing prehistoric or early historic-era archaeological sites, features, artifacts, or other culturally sensitive or significant properties, which is reflected in the HRA 2010 archaeological survey report submitted to the SHPO under Case No. 10-0669. A letter from SHPO to the POTB, dated December 22, 2010, indicated the SHPO's concurrence with the 2010 survey's general findings, including the proposed SHPO clearance area (see Figure 12 below). This is also based on the implementation of a SHPO-approved inadvertent discovery plan included in the PA.

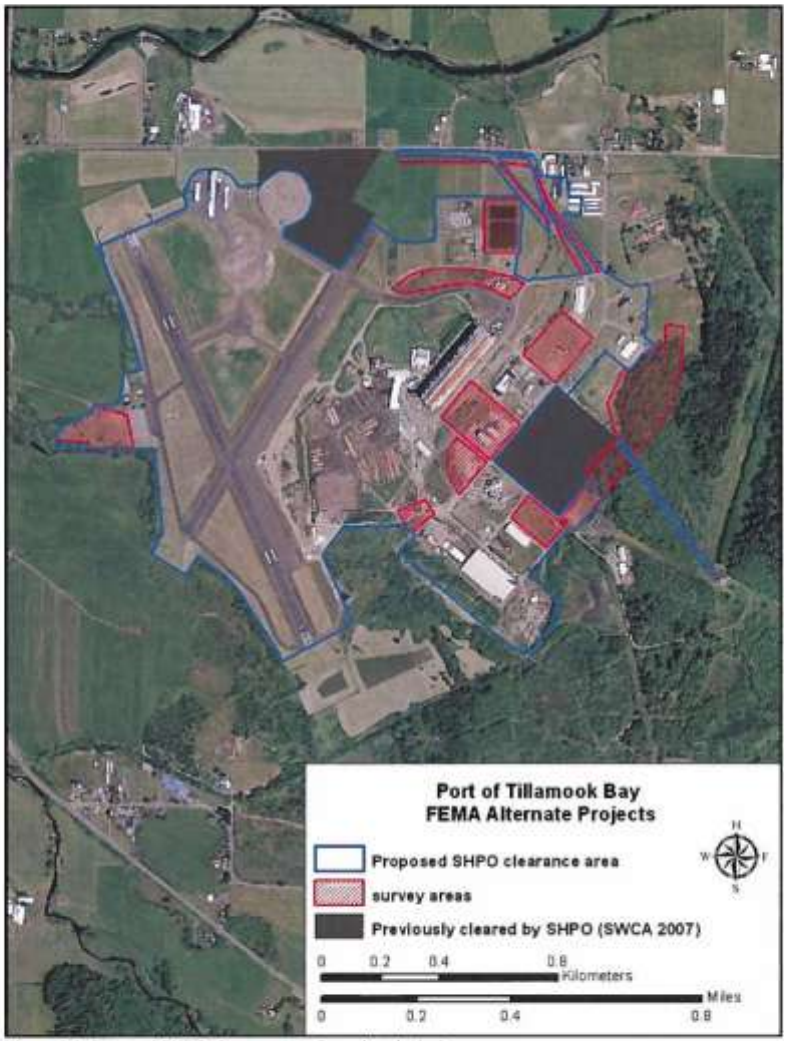

Figure 12. Archaeological survey areas and proposed SHPO clearance area.

The SHPO clearance area measures 480.5 acres and covers only the areas of the POTB core that can be generally assessed as disturbed. It encompasses the airport, each of the runways, and all the associated hangars and buildings, as well as the main facilities of the industrial park, including various buildings and warehouses, the logging yard, and the sewage treatment ponds. Projects in the proposed SHPO clearance area that extend deeper than about 0.9 meters (3 feet) and also have extensive horizontal disturbances may have the potential to disturb archaeological resources. For such projects, additional archaeological investigations may be warranted and FEMA would consult with the SHPO to determine if any additional archaeological investigations are warranted.

5.4.4 Consequences of Alternatives

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding for new construction and no ground disturbing activities would occur that would potentially affect cultural resources. Alteration of existing buildings and new construction would continue to occur as the POTB executes its Strategic Business Plan. Since no Management Plan is in place to guide present and future investments and impose limitations on current and future tenants regarding alterations to existing historic resources and viewsheds, the probability of continued deterioration of the historic properties is expected. Once a Management Plan is implemented per the Strategic Business Plan, the potential deterioration will be minimized depending upon when it is implemented.

Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

For the proposed new construction projects, ground disturbances are likely to encounter primarily disturbed soils and the likelihood of the presence of any unreported archaeological resources in the APE is very low. The SHPO concurrence that no historic properties would be affected under SHPO Case No. 10-0669 would apply to all four projects, with the exception of the water loop extension along Long Prairie Road to U.S. Highway 101. An inadvertent discovery clause would be required as a condition of project approval to further mitigate the potential for adverse effects to cultural resources. The impact intensity to archaeological resources is expected to be negligible. However, in the event an unanticipated discovery of a potential cultural resource occurs during construction, this would elevate the level of impact. The intensity would be determined by the nature of the discovery.

For above ground historic resources, FEMA provided the POTB authorization to proceed with standard review by the SHPO and tribes for the construction of the New Airport Business Park, Port Shops, and the greenhouses, in accordance with the PA and previous delegated authority by FEMA to the POTB to assume this type of consultation responsibility for undertakings on its behalf. The water loop improvement project does not require above ground review. The authorization to proceed with standard review was based on the findings and supporting documentation provided by Peter Meijer Architect PC (PMA) in a narrative provided for each project. PMA meets the *Secretary of Interior's Standards for Professional Qualifications Standards* pursuant to 36 CFR Part 61, Appendix A, as outlined in the PA.

The SHPO concurred on September 20, 2011, that the proposed construction of the Port Shops would not have an adverse effect on historic resources under SHPO Case No. 11-1681. The concurrence was based on the compatible design of the new buildings and the site's location outside of the eligible historic district and away from the primary view sheds in the district. The SHPO noted that generally a larger setback than the one designed would be appropriate, but the location allows for buildings to be set closer to the existing roads.

The SHPO concurred on November 30, 2011, that construction of the New Airport Business Park would not have an adverse effect on historic resources under SHPO Case No. 11-1757. This was based on the finding that the proposed construction is appropriate in scale, massing, and materials, and that the project's location outside of the northern edge of the eligible historic district is sufficiently set back from the edge of the district and the blimp pad so that it does not block key view sheds or detract from the district's historic feeling or association.

The SHPO concurred on January 3, 2012, that construction of the greenhouses would not have an adverse effect on historic resources under SHPO Case No. 11-2177. This was based on the finding that the proposed construction will be located at least 40-50 feet from the southernmost edge of Hangar A and would allow for a clear visual break between the eligible historic district and new construction.

PMA has completed a preliminary Finding of Effect for the water loop expansion for the POTB and concluded that the project would not affect historic resources or have an adverse effect to the eligible historic district due to the project's underground alignment. The findings and supporting documentation will be used by the POTB to proceed with the standard review process. A Finding of No Significant Impact will not be issued for the projects included in this draft EA until concurrence has been received from the SHPO regarding the water loop extension and any applicable conditions applied. A copy of each applicable SHPO concurrence letter is included in Appendix A.

Tribal consultation was conducted concurrently with the SHPO for each of the four projects in recognition of tribal sovereignty, per Stipulation III in the PA for tribal consultation and consistent with 36 CFR Part 800.2(c)(2). The POTB requested review of each new construction project by the Confederated Tribes of the Siletz Indians (Siletz Tribe) and Confederated Tribes of the Grand Ronde Community (Grand Ronde Tribe) to identify any sites of traditional cultural and religious importance. Neither tribe had any comments or concerns regarding the new construction projects included in the Proposed Action.

5.5 Socioeconomic Resources

The U.S. Census Bureau 2010 data for Tillamook County, Oregon, lists a total population of 25,250, of which 91.5 percent are white, 1 percent are American Indian and Alaska Native, .9 percent are Asian, .3 percent are African-American, .2 percent are Native Hawaiian and Pacific Islander, and 2.4 percent are of some other race or two or more races. In addition, the 2010 Census lists 9 percent of the population as having Hispanic or Latin origin. In 2009, 15.6 percent of the population was listed as persons living below the poverty level. Census data from 2000

included a population of 24,262, indicating a 4.1 percent growth rate for the county. No disproportionately high concentration of minority or low income populations were identified near the proposed project site.

5.5.1 Environmental Justice

EO 12898 for Environmental Justice directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations in the United States resulting from federal programs, policies, and activities. Socioeconomic and demographic data for residents in the project vicinity, as described in the introductory paragraph of this section, was reviewed to determine if minority or low-income persons have the potential to be affected by the alternatives considered.

5.5.2 Economic

As the largest industrial park on the Oregon Coast, the POTB facility contributes significantly to the economic base of Tillamook County. The City of Tillamook, as the county seat, is the center of business in the region and the crossroads from which visitors can reach Tillamook County's many beaches, parks, and recreational opportunities. The community has been built around the area's timber, dairy, fishing, and tourism industries. In downtown Tillamook, classic buildings are being refurbished and new ones are being built as part of an urban renewal program.

5.5.3 Traffic

U.S. Highway 101, also known as the Oregon Coast Highway, is a major highway that runs north to south at the western edge of the POTB complex. Long Prairie Road, a paved two lane road, located at the northern edge of the POTB property provides access to the facility, with entry into the core of the complex provided by Blimp Boulevard. A substantial amount of traffic exists on the access roads, particularly related to truck traffic for Stimson Lumber and the Hooley Digester.

5.5.4 Public Services and Utilities

The POTB serves as its own utility provider and provides electrical, water, and sewer services to all occupants, including extending utility lines to new industrial clients upon demand. The POTB also serves as the principal septage receiving station for Tillamook County, including not just municipal sludge but all materials from septic haulers, which it charges a fee for. Other public services and utilities provided by the City of Tillamook include fire protection and medical facilities. The Tillamook County Sheriff's office provides law enforcement for the complex, as it is located outside the city limits for Tillamook.

5.5.5 Public Health and Safety

The general public health and safety for the POTB relates to potential health impacts to workers during construction of new projects, along with health and safety considerations with respect to occupancy and use of the facility. The Occupational Safety and Health Act of 1970 (OSHA)

seeks to prevent work-related injuries, illnesses, and deaths by issuing and enforcing standards for workplace safety and health. The health, safety, and security of construction workers, area residents, and the general public as related to the project alternatives are considered in this section.

5.4.6 Consequences of Alternatives

Alternative 1 – No Action

Under the No Action Alternative, no construction activities would take place. While neither minority nor low-income populations exceed the thresholds of significance in the project area, not increasing the economic base at the POTB facility would continue to affect residents of the community by the loss of employment opportunities the railroad operation had previously provided. The indirect impacts to socioeconomic resources would be localized and considered minor on an impact scale, but significant to those households.

Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

The Proposed Action would promote economic development and would assist the POTB in attaining their goal of increasing their leasing capacity to reestablish the economic base that was lost from the destruction of the railroad. The new construction would provide employment opportunities to area populations, including low-income and minority groups. It is anticipated that the proposed action would not disproportionately adversely impact low income and minority groups. It is also anticipated that a direct beneficial effect to the population of Tillamook County would occur from the creation of temporary and permanent jobs. This would provide a short term and potentially long-term social and economic beneficial impact to the community as a whole.

Impacts anticipated from traffic would be minor with impacts primarily related to short-term increased traffic during construction. The nature of the new construction projects proposed does not greatly increase the overall traffic volume for the area. The Airport Business Park would provide expanded facilities to an already existing tenant that currently operates out of the southern section of the Hangar B Air Museum. The Port Shops would provide a facility for existing POTB maintenance staff. While the size of that operation may increase due to the increased leasing capacity of the complex, it would not contribute significantly to existing traffic patterns. The types of vehicles that would likely use the community garden proposed for the greenhouses would be largely household passenger vehicles and would not increase the large truck volume currently using the access roads for industrial purposes. The site is located in a rural industrial area with few residences in the project vicinity and the impacts associated with traffic are estimated to be minor. No increase in traffic is anticipated with the water loop expansion.

No impacts are anticipated to public health and safety; all construction activities would be done in accordance with industry standards and POTB standards associated with industrial and commercial facilities. The POTB manages many of the maintenance projects at the industrial

site and would have oversight of the construction activities and associated use of the structures proposed.

5.6 Hazardous Materials

Hazardous materials and wastes are regulated in the U.S. under a variety of federal and state laws and include regulations governing the assessment, transportation, and disposal of hazardous materials and wastes. Potential hazardous materials have previously been addressed in a Phase 1 Environmental Site Assessment previously conducted for the POTB complex. The investigations for this assessment did not reveal the presence of any potential hazardous waste sites or contamination in or near the Proposed Action sites.

Project construction would involve the use of potentially hazardous materials (i.e., petroleum products, cement, caustics, acids, solvents, paint, electronic components, pesticides, treated timber, pesticides, and fertilizers) and may result in the generation of small volumes of hazardous wastes.

5.6.1 Consequences of Alternatives

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding for construction activities and there would not be an impact related to hazardous materials.

Alternative 2 – New Construction of Four Independent Projects (Proposed Action)

A FEMA contractor, Ryan Lawless, conducted a site reconnaissance of each of the proposed sites on October 6, 2011. No visible evidence of dumping or improper disposal of hazardous substances or petroleum products was observed on the proposed sites. This includes no evidence of liquid or solid waste dumping, discolored flowing or ponded water, abnormal odors, or hazardous substance or petroleum containers. A reconnaissance of the adjoining properties was also performed during the site visit to determine if evidence of off-site sources of contamination existed that could have impacted the proposed sites. No visible signs of contamination or other evidence that hazardous substances or petroleum products have been used, stored, or disposed of on the adjoining properties in such a manner that they might impact the proposed site were observed.

Under the Proposed Action, no solid waste or hazardous materials related impacts are anticipated. The proposed construction activities are temporary and should not expose or produce hazardous materials. However, any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, state, and federal regulations.

6.0 CUMULATIVE EFFECTS

Cumulative effects are those that result from the incremental effect 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 an action. Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time.
Along with the four proposed projects described in this document, the other FEMA funded projects currently approved for the POTB Tillamook complex include facility improvements to septage receiving, truck scales, the Administration Building (most recently used as school district offices), the POTB main offices, the Hooley Digester, Stimson Lumber, and the airport fixed base operator facility, along with construction of an industrial warehouse business park at the site for the former NAS Tillamook recreation hall.

Cumulative impacts to cultural resources from reasonably foreseeable future actions related to the continuing expansion of the transportation and industrial facility will occur. Through the coordination and consultation with the SHPO for above ground resources for FEMA projects, it has been determined that an eligible historic district exists. This includes the former NAS Tillamook Headquarters Building being eligible as individually significant for the NRHP and Hangar B listed on the National Register.

In addition, of the 27 buildings, structures, and sites determined to be contributing resources to the Historic District, Warehouses A and B (Buildings 59 and 11), the Cold Storage Building (Building 12; current Service Master building), and the road system are moving forward for rehabilitation and/or improvements under the funding. Other than what is described above, no additional projects are currently identified for FEMA funding at this time.

Reasonably foreseeable non FEMA funded projects slated for construction include:

- Continued improvements to the airport (some of which receive federal funding assistance from the Federal Aviation Administration), including overlay of the runway proposed for the Spring of 2012, reduction of the width to 75 feet, additional hangars in two spots adjacent to the current FBO area and expansion of the apron near the United Parcel Service site adjacent to one of the blimp mooring pads;
- Development along land owned by the POTB just east of U.S. Highway 101 that may include a potential brew pub, a new facility for the Air Museum, and potentially 200 acres zoned commercial for future use;
- Mining of the wood waste landfill; and
- Relocation of the Tillamook Animal Shelter to the area behind the Administration Building (Building 5) on the southeast portion of the POTB property adjacent to the treeline.

Under the No Action Alternative, no FEMA funded construction would occur. The POTB's mission in their 2009 Strategic Business Plan to promote a fiscally sustainable POTB would be hampered, at least initially, and the POTB would have a slower recovery from the loss of their railroad line. Until such time the POTB can increase their lease capacity, there would be less marketability for existing and future tenants. The lack of improved water services would also reduce the potential for future development within the complex.

The Proposed Action is expected to have minimal cumulative impacts to physical resources, water resources, biological resources or socioeconomic resources. Overall construction would create temporary disturbance to soil, but the areas of disturbed soil would be properly compacted to eliminate future settling and erosion issues. Local and state required Best Management Practices, along with permitting conditions would reduce the potential for runoff and erosion to adjacent areas and water resources. Increased traffic associated with construction and leasing would create an incremental increase in vehicle related pollution, but it is anticipated to be minimal. There would be an increased potential for long-term economic gain to the POTB by having an increased leasing capacity and the infrastructure to support it. The proposed action may be an impetus for future growth and leasing at the POTB.

With regard to the historic properties, the POTB currently has no plans to rehabilitate the former NAS Tillamook Headquarters Building and any repair plans for Hangar B are also on hold pending further cost reviews. With no rehabilitation plans foreseeable for the Headquarters Building, the structure will continue to deteriorate and eventually lose its historic integrity due to non-use and delayed maintenance. If the decision is made to not proceed with historically sensitive repairs for Hanger B, then it will also continue to deteriorate and eventually lose its historic integrity. The continued deterioration of these two mainstays in the historic district will also put the integrity of the eligible historic district and its contributing structures at risk.

Given past development efforts, along with non federal present and future projects proceeding at the POTB that are not required to meet the Secretary of Interior Standards for Rehabilitation of Historic Properties, the potential for additional degradation to the integrity of the existing historic resources and associated view sheds may occur. This includes physical changes to structures by tenants at existing facilities identified as being contributing to the eligible historic district and new construction within the POTB complex that does not take into account historic view sheds. Without a management plan in place and explicit landlord-tenant rules identified in lease agreements, the potential for adverse effects exists for these non FEMA funded actions.

Nevertheless, the proposed action is anticipated to have no adverse cumulative impacts due to the efforts previously discussed regarding repairs and improvements that are sensitive to the historic properties. In order to minimize those potential adverse cumulative impacts associated with non FEMA funded projects, FEMA recommends that the POTB expedite development and implementation of a management plan per the recommendation stated in their Strategic Business Plan. This will help stem the potential incremental decline to the integrity of the historic resources and the eligible historic district. The plan should incorporate guidelines outlined in the Secretary of Interior's Standards for Rehabilitation of Historic Properties to ensure current and future non federal projects are conducted with sensitivity to the historic properties.

7.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

Several state and federal agencies, in addition to Grand Ronde and CTSI tribes, were consulted throughout the draft EA process to gather valuable input and to meet regulatory requirements. Agencies coordinated with, either directly by the POTB or by FEMA, include the SHPO, USACE, DSL, DEQ, ODFW, and DLCD.

An extension scoping invitation was sent out by FEMA on October 14, 2011, for this draft EA with a 14-day public comment period. The public was invited to participate in the NEPA scoping process by reviewing and commenting on the four proposed new construction projects to assist FEMA in the preparation of the draft EA. The public was asked for assistance in identifying other alternatives that would meet the POTB's need, identifying any issues and concerns that require attention, and identifying potential impacts of implementing the proposed alternatives. No substantive comments were received. The scoping distribution list is included in Appendix

FEMA's draft EA is being released and a public notice is being posted in the community of Tillamook, on the POTB's website at www.potb.org, and on FEMA's website at www.fema.gov/plan/ehp/envdocuments/index.shtm for a 15-day public review and comment period. The reduced public comment period is allowed due to previous public outreach efforts conducted by FEMA and the POTB, along with an extensive scoping invitation sent out by FEMA on October 14, 2011. A copy of the public notice is included in Appendix A.

The initial public notice will also serve as the final public notice for this draft EA. All recipients are notified that after the public comment period ends, provided no substantive comments are received, no further public involvement will be conducted.

8.0 PERMITTING, PROJECT CONDITIONS, AND MITIGATION MEASURES

Implementation of the Proposed Action shall comply with the individual scopes of work included for each in the respective FEMA project worksheets. The following mitigation measures are required as project conditions for FEMA funding:

1. The POTB is required to obtain and comply with all local, state, and federal permits and authorizations prior to implementing the Proposed Action, including but not limited to county permits, DEQ, DSL, and the USACE. Failure to obtain all appropriate permits and authorizations may jeopardize federal funding.

2. The POTB is responsible for selecting, implementing, monitoring, and maintaining appropriate BMPs to control erosion and sediment, reduce spills and pollution, and provide habitat protection. Erosion controls must be in place before any significant alteration of an area takes place. If fill is stored on site, the contractor is required to cover and contain it appropriately. Areas of disturbed soil need to be properly compacted to eliminate settling and erosion issues. Access roads and work areas must use existing access ways whenever possible and minimize soil disturbance. BMPs such as silt fencing and reseeding using native species are required, as needed, to eliminate the potential for runoff and erosion to adjacent areas.

3. No construction material or debris shall be staged or disposed of in a wetland, even temporarily. Excess and unsuitable excavated material shall not be sidecast into or placed upslope of wetlands environments and shall be disposed of at an authorized disposal location.

4. To ensure compliance with the Migratory Bird Treaty Act, for any tree or brush clearing conducted for the greenhouses between March and late August/early September, a bird survey must be conducted by a qualified wildlife biologist prior to removal to ensure any nesting birds have fledged. During the survey, any identified active nests shall be flagged and construction shall proceed with caution and work around the nest(s) until the nesting birds have fledged and moved to a new location. If an active nest is destroyed, it is an unlawful take. However, once the nest is empty and the birds have moved, it is permissible to remove or alter the structure the nest is built in or on and destroy the nest. Empty or abandoned nests cannot be taken into possession without a permit.

5. If hazardous materials or contamination is found during site work, the POTB shall handle, transport, and dispose of hazardous materials and/or toxic waste in accordance to the requirements and to the satisfaction of the governing local, state, and federal agencies.

6. In the event historically or archaeologically significant materials or sites (or evidence thereof) are discovered during the implementation of the project or should any cultural material (i.e., prehistoric stone tools or flaking, human remains, historic material caches) be encountered during construction, the project shall be halted in the immediate area where materials are found and all reasonable measures taken to avoid or minimize harm to property until such time as the applicant and FEMA, in consultation with SHPO and OEM, determines appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act. Under Oregon state law (ORS 358.905-995) it is a class B misdemeanor to impact an archeological site on public or private land, and under state law (ORS 97.740-760) impacts to Native American graves and cultural items are a Class C felony.

7. Any change to the approved scope of work described in this EA will require re-evaluation for compliance with NEPA and other laws and Executive Orders.

9.0 Conclusion

This draft EA evaluates environmental and historic resources that could be affected by both the No Action alternative and the Proposed Action alternative for four independent new construction projects at the POTB. The evaluation did not identify any significant adverse impacts associated with physical, water, biological, cultural, or socioeconomic resources, or hazardous materials. Implementing the Proposed Action, along with any conditions associated with permits or approvals is expected to avoid or minimize effects associated with the action. FEMA anticipates preparing a decision of Finding of No Significant Impact (FONSI) if no significant issues are identified during the public comment period. The decision document will be available at the above FEMA website.

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U.S. Department of Interior, National Park Service. National Register of Historic Places Registration Form, U.S. Naval Air Station Dirigible Hangars A and B, Tillamook Naval Air Station, Port of Tillamook Bay Industrial Park, Tillamook, Oregon. January 30, 1989.

U.S. Environmental Protection Agency. Website at www.epa.gov. Accessed February 2011.

APPENDIX A

Public Notice

PUBLIC NOTICE

The U.S. Department of Homeland Security's
Federal Emergency Management Agency (FEMA)
Draft Environmental Assessment
FEMA-1733-DR-OR
Port of Tillamook Bay
Tillamook, Oregon
Port of Tillamook Bay New Construction Projects

Notice is hereby given that FEMA plans to assist the Port of Tillamook Bay (POTB) by providing partial funding for four new independent construction projects at the POTB industrial and transportation facility located at the former United States Naval Air Station (NAS) Tillamook. Funding for the alternate project stems from damages incurred to the POTB railroad line during severe storms, flooding, landslides, and mudslides that occurred from December 1-17, 2007. The event was declared a Presidential disaster on December 8, 2007 under FEMA-1733-DR-OR. The POTB Board of Commissioners determined the public would not be best served by repairing the damaged railroad line and requested funding to develop the alternate project. Federal financial assistance would be provided pursuant to the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.

FEMA has prepared a draft Environmental Assessment (EA) for the proposed project pursuant to the National Environmental Policy Act (NEPA) of 1969 and FEMA's implementing regulations. The draft EA will be finalized after agency and public review and input. The EA evaluates alternatives for compliance with applicable environmental laws, including Executive Orders No. 11988 (Floodplain Management), No. 11990 (Protection of Wetlands), and No. 12898 (Environmental Justice). Alternative 1 is the No Action Alternative, which would not provide funding. Alternative 2 is the Proposed Action Alternative and would fund four new construction projects, including an Airport Business Park, Port Shops, greenhouses, and water loop improvements.

This notice will constitute as the final notice as required by Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands. If no significant issues are identified during the comment period, FEMA will finalize the EA, issue a Finding of No Significant Impact (FONSI), and fund the project.

The draft EA is available for viewing at the POTB main office and website at www.potb.org,, the City of Tillamook library and City Hall, the Tillamook County Courthouse, and at www.fema.gov/plan/ehp/envdocuments/index.shtm for a 15-day public review and comment period. The reduced public comment period is allowed due to an extension scoping invitation sent out by FEMA on October 14, 2011, for this draft EA with a 14-day public comment period. No substantive comments were received. Please submit your written comments to Mark Eberlein, FEMA Region X Environmental Officer, no later than midnight on February 2, 2012. Comments can be submitted by:

1. By mail to: U.S. Department of Homeland Security
   FEMA Region X
   130 228th Street SW
   Bothell, WA 98021-9796
2. Fax at: (425) 487-4613
3 E-mail at: mark.eberlein@fema.dhs.gov

After the public comment period ends, the final EA and the FONSI will be available for viewing at: http://www.fema.gov/plan/ehp/envdocuments/archives_index.shtm.

APPENDIX B

Cultural Resources Concurrence Letters

Oregon
John A. Kitzhaber, MD, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0671
Fax (503) 986-0793
www.oregonheritage.org

November 30, 2011

Mr. Aaron Palter
Port of Tillamook Bay
4000 Blimp Blvd
Tillamook, OR 97141

RE: SHPO Case No. 11-1757
Alternate Project 9, Airport Business Park; FEMA-1733-DR-OR

Dear Mr. Palter:

Thank you for submitting materials on the project referenced above. The Oregon SHPO re-affirms that the Tillamook Naval Air Station is eligible for listing in the National Register of Historic Places as a historic district. Our office also finds that the proposed building is appropriate in scale, massing, and materials, and that the project's location outside the northern edge of the district is sufficiently set back from the edge of the district and the blimp pad so that it does not block key view sheds or detract from the district's historic feeling or association.

Unless there are changes to the project, this concludes the requirement for consultation with our office under Section 106 of the National Historic Preservation Act (per 36 CFR Part 800) for above-ground historic resources. Please feel free to contact me if you have any questions, comments or need additional assistance.

Sincerely,

Ian P. Johnson
Historian
(503) 986-0678
ian.johnson@state.or.us

cc: Mark Eberlein, FEMA Region X
Julie Slevin, Oregon Emergency Management
Robert Kentta, Confederated Tribes of Siletz
Eirik Thorsgard, Confederated Tribes of Grand Ronde Community of Oregon

Oregon
John A. Kitzhaber, MD, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0671
Fax (503) 986-0793
www.oregonheritage.org

September 20, 2011

Mr. Aaron Palter
Port of Tillamook Bay
4000 Blimp Blvd
Tillamook, OR 97141

RE: SHPO Case No. 11-1681
Port of Tillamook Bay, FEMA Alternate Projects: Building 12, 59, 11, and Port Shops

Dear Mr. Palter:

We have reviewed the materials submitted on the project referenced above, and we concur with the determination that the Tillamook Air Station is eligible for listing in the National Register of Historic Places as a historic district, and that buildings 11, 12, and 59 are contributing properties within the district. We also concur that the location for the proposed new Port Shops is outside of the eligible district. The Oregon SHPO agrees with the Federal Emergency Management Administration (FEMA) and the Port of Tillamook Bay (POTB) that the proposed projects will have no adverse effect on historic resources.

As noted in the documents sent to our office, the proposed rehabilitation of buildings 11, 12, and 59 meet most of the exemptions of the Programmatic Agreement signed between the Oregon SHPO, FEMA, and POTB. The removal and/or replacement of deteriorated additions; additional paving; and installation of new gutters, among other items, are not covered by the agreement, but the proposal does meet the Secretary of the Interior's Standards for Rehabilitation. Our concurrence for the Port Shops is based on the compatible design of the new buildings and the site's location outside the district and away from the primary view sheds in the district. Generally, a larger setback would be appropriate, but this location allows for buildings to be set closer to the existing roads.

Unless there are changes to the project, this concludes the requirement for consultation with our office under Section 106 of the National Historic Preservation Act (per 36 CFR Part 800) for above-ground historic resources. Please feel free to contact me if you have any questions, comments or need additional assistance.

Sincerely,

Ian P. Johnson
Historian
(503) 986-0678
ian.johnson@state.or.us

cc: Mark Eberlein, FEMA Region X
Julie Slevin, Oregon Emergency Management
Eirik Thorsgard, Confederated Tribes of Grand Ronde Community of Oregon
Robert Kentta, Confederated Tribes of Siletz

RECEIVED
SEP 23 2011
FEMA REGION X

Oregon
John A. Kitzhaber, MD, Governor

RECEIVED
DEC - 2 2011
Oregon Emergency Management

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0671
Fax (503) 986-0793
www.oregonheritage.org

November 30, 2011

Mr. Aaron Palter
Port of Tillamook Bay
4000 Blimp Blvd
Tillamook, OR 97141

PW# 954

RE: SHPO Case No. 11-1757
Alternate Project 9, Airport Business Park; FEMA-1733-DR-OR

Dear Mr. Palter:

Thank you for submitting materials on the project referenced above. The Oregon SHPO re-affirms that the Tillamook Naval Air Station is eligible for listing in the National Register of Historic Places as a historic district. Our office also finds that the proposed building is appropriate in scale, massing, and materials, and that the project's location outside the northern edge of the district is sufficiently set back from the edge of the district and the blimp pad so that it does not block key view sheds or detract from the district's historic feeling or association.

Unless there are changes to the project, this concludes the requirement for consultation with our office under Section 106 of the National Historic Preservation Act (per 36 CFR Part 800) for above-ground historic resources. Please feel free to contact me if you have any questions, comments or need additional assistance.

Sincerely,

Ian P. Johnson
Historian
(503) 986-0678
ian.johnson@state.or.us

cc: Mark Eberlein, FEMA Region X
Julie Slevin, Oregon Emergency Management
Robert Kentta, Confederated Tribes of Siletz
Eirik Thorsgard, Confederated Tribes of Grand Ronde Community of Oregon

Oregon
John A. Kitzhaber, MD, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0671
Fax (503) 986-0793
www.oregonheritage.org

January 3, 2012

Ms. Michele Bradley
Port of Tillamook Bay
4000 Blimp Blvd
Tillamook, OR 97141

RE: SHPO Case No. 11-2177
FEMA-1733-DR-OR Project 2.14 Greenhouses

Dear Ms. Bradley:

We have reviewed the materials submitted on the project referenced above, and we concur with the determination that the Tillamook Naval Air Station Historic District is eligible for listing in the National Register of Historic Places. We also concur with the finding of no adverse effect for the proposed project, provided the following condition is met: The greenhouses are located at least 40-50 feet from the southernmost edge of Hanger A. This distance has been previously established for other alternate projects, and will allow for a clear visual break between the district and new construction.

If accepting this condition, we ask that the Port of Tillamook Bay submit a letter describing the planned changes for the proposed project and a new site plan. Please feel free to contact me if you have any questions, comments, or need additional assistance.

Sincerely,

Ian P. Johnson
Historian
(503) 986-0678
ian.johnson@state.or.us

cc: Mark Eberlein, FEMA Region X
Julie Slevin, Oregon Emergency Management
Robert Kentta, Confederated Tribes of Siletz
Eirik Thorsgard, Confederated Tribes of Grand Ronde Community of Oregon

APPENDIX C

Port of Tillamook Bay Programmatic Agreement

(*included as separate attachment***)**

APPENDIX D

SHPO Reconnaissance Level Survey

Oregon
Theodore R. Kulongoski, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0671
Fax (503) 986-0793
www.oregonheritage.org

September 10, 2010

Mr. Mark G. Eberlein
Regional Environmental Officer
U.S. Department of Homeland Security
Bothell, WA 98021-9796

RE: SHPO Case No. 10-0669
Port of Tillamook Bay Alternative Projects FEMA-1733-DR-R
4000 Blimp Blvd, Tillamook, Tillamook County

Dear Ms. Bradley:

We have reviewed the materials submitted on the project referenced above, and we concur with the determination that portions of the Tillamook Naval Air Station are eligible for listing as a National Register Historic District in accordance with 36 CFR Part 60.4. Additionally, we concur with the conclusions drawn in the report concerning the district boundary and the National Register eligibility of individual buildings. Copies of the final documents for this project are included with this letter.

Our response here is to assist you with your responsibilities under Section 106 of the National Historic Preservation Act (per 36 CFR Part 800). Please feel free to contact me if you have further questions, comments or need additional assistance.

Sincerely,

Ian P. Johnson, Historian
(503) 986-0678 or ian.johnson@state.or.us

Encl.

cc. Ms. Michele Bradley, Port of Tillamook Bay

RECEIVED
[illegible] 2010
FEMA REGION X

Cover Sheet

for

Reconnaissance Level Surveys

Submit this Cover Sheet to the Oregon SHPO along with all survey materials (see checklist below).

Survey Project Name Port of Tillamook Bay — **Survey Start Date** 3/8/2010

City Tillamook — County Tillamook — **Survey End Date** 5/12/2010

SurveyType Section 106 RLS — **Year Completed** 2010

Survey Sponsor FEMA Region X: 130 228th St., Bothell, WA 98021 — **Date Submitted to SHPO** 5/13/2010

Surveyor Name John Callan, AIA: 612-817-7776: johncallanaia1@me.com

 # Elig. properties 29 **# Ineligible properties** 34 **Acreage Surveyed** 1600 (approx)

Survey Boundaries The area surveyed lies inside the former perimeter fence of the NAS Tillamook and is generally rectangular. It is bounded by Highway 101 to the West, Long Prairie Road to the North, Brickyard Road to the East, and South Prairie Loop Road to the South. It is situated within the Tillamook U.S. Geological Survey (USGS) topographic quadrangle map, Township 2 South, Range 9 West, Sections 4, 5, 8, and 9, and is located approximately two miles south of the city of Tillamook. The proposed Historic District is approximately 400 acres, or about ¼ of the entire 1,600-acre property.

Survey Summary/ Comments This architectural survey canvassed 1,600 acres and included 63 buildings, structures and sites. The original use by the NAS Tillamook was comprised of 32 defense, eight industrial, five government, four transportation, three commercial, three agricultural, three residential, two recreation and culture, one education, one utilitarian and one funerary (a cemetery). The proposed Historic District is approximately 400 acres, or about ¼ of the entire 1,600-acre property, and the boundary includes all structures related to the period of significance for the NAS Tillamook from 1942 to 1949. There are numerous structures that generally postdate the period of significance by 40 years or more and are industrial rather than military in character. Few of these if any have the potential to become historic in their own right. The sharp contrast between the industrial and military structures aids in distinguishing the historic buildings from non-historic. These structures are generally located adjacent to or away from the historic buildings, rather than becoming infill. Initial survey results indicate that a Historic District may be possible. In lieu of a Historic District nomination, the Administration building may be individually listed, or groupings of related properties may be listed under a single Multiple Property Submission document.

To Be Completed by SHPO Staff

SHPO Evaluation of Survey Project

- ✓ Approved
- ___ Conditionally Approved
- ___ Returned for Corrections

SHPO Comment on NR Eligibility Evaluations

- ✓ Concur
- ___ Do Not Concur
- ___ Returned for Additional Data

SHPO Comment on Effect Determinations

- ✓ Concur
- ___ Do Not Concur
- ___ Returned for Additional Data

Checklist of Required Items:

See 106 File

1. ✓ Completed "Cover Sheet" (in data base and hard-copy)
2. ✓ Research Design (highly recommended prior to field work)
3. ✓ Survey data submitted in electronic format
4. ✓ Properly labeled photos (digital photos incl. with data)
5. ✓ Properly marked survey map
6. ✓ Copy of USGS Map Showing Location of Surveyed Area
7. ✓ Final Report

Optional Items

- N/A Completed Survey Forms (Field Forms)
- ___ Expanded Final Report, including outline of relevant historic contexts

SHPO Staff Signature — Date 9/10/2010

Comments:

APPENDIX E

Agency Consultation Letters

Oregon
John A. Kitzhaber, MD, Governor

Oregon Coastal Management Program
Department of Land Conservation and Development
635 Capitol Street, Suite 150
Salem, Oregon 97301-2540
Phone (503) 373-0050
FAX (503) 378-6033
http://www.oregon.gov LCD OCMP

November 8, 2011

Aaron Palter
Project Coordinator
Port of Tillamook Bay
4000 Blimp Boulevard
Tillamook, Oregon 97141

Project: Port of Tillamook Bay Alternate Projects (multiple projects)
Federal Assistance: FEMA Public Assistance Program
Location: Tillamook County

Dear Mr. Palter,

Thank you for contacting the Oregon Department of Land Conservation and Development (DLCD) regarding Federal Emergency Management Agency (FEMA) funding for projects eligible under disaster declaration 1733-DR-OR. The projects undertaken with this funding are anticipated to improve the Port of Tillamook Bay transportation and industrial facilities. Specific projects include construction of a new Airport Business Park and Port shops, expansion of a water distribution system, and installation of three greenhouses.

DLCD is the state's designated coastal zone management agency, and conducts consistency reviews to ensure that federal activities affecting any coastal use or resource are consistent with the enforceable policies of the Oregon Coastal Management Program (OCMP). Federal activities include federal financial assistance to local governments and related public entities, as well as projects that require federal licenses or permits. To be consistent with the enforceable policies of the OCMP, federal activities must be consistent with: 1) Oregon's statewide planning goals; 2) the applicable acknowledged city or county comprehensive plan; and 3) selected state authorities (e.g. those governing removal-fill, water quality, and fish & wildlife protections).

These projects are located in Oregon's coastal zone, and may affect coastal resources. It is my understanding that the projects will either avoid wetland areas completely, or will employ directional drilling to avoid adverse impacts to wetlands. It is also my understanding that the Port has been in contact with the local planning department, and the projects will comply with the Tillamook County comprehensive plan and land use regulations.

If the federal nexus is limited to providing project funding DLCD does not object to the federal funding under our CZMA authority, provided the applicant receives and complies with the conditions of all necessary local, state, and federal permits. If the project requires a federal license or permit,

such as one from the U.S. Army Corps of Engineers, DLCD will conduct a full consistency review as part of the permitting phase. If the project qualifies under the Corps nationwide permit program, DLCD has provided conditional advance concurrence. Conditions generally require compliance with local planning requirements and state agency regulatory authorities. If the project requires an individual permit, we will provide our detailed consistency determination through the Corps process.

If you have any questions about this federal consistency review or the coastal management program, please contact me at 503-373-0050 ext. 253 or by e-mail at: *juna.hickner@state.or.us*.

Sincerely,

Juna Hickner, Coastal State-Federal Relations Coordinator

Oregon
John A. Kitzhaber, MD, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregonstatelands.us

RECEIVED
JUL 11 2011
BY

July 5, 2011

Aaron Palter
Project Coordinator
Port of Tillamook Bay
4000 Blimp Blvd
Tillamook, OR 97141

Re. Wetland Delineation Report for Port of Tillamook Bay
Industrial Park – Parcel 1, Tillamook County; T 2S R 9W S 5
TL 5300 (portion); WD #11-0222

Dear Mr. Palter:

Pursuant to Oregon Administrative Rule (OAR 141-090-0045 (4)), the Department has reviewed the recently expired wetland delineation (WD #2005-0409) for a portion of the referenced site. Based on that review and a site visit by staff on June 22, 2011, we concur with the wetland and waterway boundaries as illustrated in Figures 1 and 2, attached. Please note that this concurrence is only for that portion of the tax lot illustrated in Figure 1. Also note that wetland "E" was re-delineated in the field; the revised boundary for wetland "E" is illustrated in Figure 2.

These wetlands and waterways are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

The jurisdictional determination is valid for five years from the date of this letter, unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. Please phone me at (503) 986-5320 if you have any questions.

Sincerely,

Kirk D. Jarvis
Economic Revitalization Liaison

Approved by

Anna Buckley
Acting Wetlands Program Manager

Enclosures

ec: Steve Gagnon, Corps of Engineers, Portland
Carrie Landrum, DSL

APPENDIX F

Draft EA Preliminary Scoping Distribution List

POTB EA SCOPING DOCUMENT DISTRIBUTION LIST

October 14, 2011

Prepared by Barbara Gimlin, FEMA Environmental Specialist

From the 10/18/2010 open house held for POTB projects, the following participants included their email (the ones that could be made out):

Matt Mumfad, Tillamook County Transportation Dept. – mmumfad@tillamookbus.com
Phil Robertson, T&L Septic – phillylphil@msn.com
Alene Allen, City Engineer – gsgranny@embargmail.com
Jon Carnahan, TBCC – carnahan@tillamookbay.cc
R. Schild, Tillamook School District No. 9 – schildr@tillamook.k12.or.us
Melanie Olson, OBDD – Melanie.olson@state.or.us
Linnen Burden, Burden's Towing – burdenstowing@oregoncoast.com
Mark Ten Eyck, Case Power and Equipment – markt@casepower.com
Peggy Ray, OED – peggy.l.ray@state.or.us
Deborah Boone, State Rep. HD 32 – rep.deborahboone@state.or.us
Mark Labhart, Tillamook County – lavick8@aol.com
John Ponce, self – cowburg@embargmail.com

One distribution list was sent out for the above, with a cover message that said this is a follow-up to the meeting they attended last year.

******

Tillamook Headlight Herald
(Short news release submitted with link to POTB website for viewing.)
Publisher/Editor
Samantha Swindler
sswindler@countrymedia.net

******

The following contacts also received a copy of the scoping document by email:

SHPO
Ian Johnson
Above Ground Review and Compliance Program
(503) 986-0678
ian.johnson@state.or.us

Dennis Griffin, Ph.D.
State Archaeologist
(503) 986-0674
dennis.griffin@state.or.us

Advisory Council on Historic Preservation
Jaime Loichinger

jloichinger@achp.gov
(202) 606-8529

Tribes
Robert Kentta, Cultural Resources Director
Confederated Tribes of Siletz Indians
rkentta@ctsi.nsn.us

Eirik Thorsgard, Cultural Protection Coordinator
Confederated Tribes of Grande Ronde Community
(503) 879-1630
eirik.thorsgard@grandronde.org

USACE
Clatsop and Tillamook Counties:
Steve Gagnon
(503) 808-4379
steven.k.gagnon@usace.army.mil

U.S. Fish and Wildlife Service
Kevin Maurice, Fish and Wildlife
Biologist
(503) 231-6179
Kevin_Maurice@fws.gov

USFWS – Migratory Bird Contact
Tami Tate-Hall
Migratory Bird Permit Office
911 NE 11th Ave
Portland, OR 97232-4181
(503) 872-2715
Tami_TateHall@fws.gov

NMFS

Clatsop, Lincoln, and Tillamook Counties:
Jeff Lockwood
(503) 231-2249
Jeffrey.Lockwood@noaa.gov

FAA
Cayla Morgan, Environmental Protection Specialist
Seattle Airports District Office (covers Tillamook)
Federal Aviation Administration
(425) 227-2653
Cayla.Morgan@faa.gov

ODFW

Clatsop and Tillamook counties:
Chris Knutsen
(503) 842-2741
Chris.J.Knutsen@state.or.us

Oregon Department of State Lands
Kirk Jarvie
Department of State Lands
(503) 986.5320
kirk.jarvie@state.or.us

Oregon Department of Environmental Quality
DEQ Headquarters Office
811 SW 6th Avenue
Portland 97204-1390
Deq.info@deq.state.or.us

Oregon Department of Transportation
Transportation Development Division
555 13th Street NE
Salem, OR 97301

Andi Bridge, Planning Section
(503) 986.4254
andrea.bridge@odot.stat.or.us

Transportation Data Section
Laura Strauch
(503) 986.4251
laura.m.strauch@odot.state.or.us

Historic Preservation League of Oregon (recommended by the SHPO)
24 NW First Avenue
Portland, OR 97209
503-243-1923
Peggy Moretti, Executive Director
PeggyM@HistoricPreservationLeague.org

Oregon Military Museum (recommended by the SHPO)
(Museum is currently closed for transition to a new facility)
Building 6101, Camp Withycombe
15300 SE Industrial Way, Clackamas, OR 97015
(503) 683-5359
Senator Ron Wyden
fritz_graham@wyden.senate.gov

State Senator, District 16
Betsy Johnson (D-Scappoose)
Sen.betsyjohnson@state.or.us

Tillamook Area Chamber of Commerce
The Chamber has agreed to send it out via their distribution list to local organizations (i.e., Elks, Eagles, Kiwanis, I.O.F., VFW; Ryan Lawless will be cc'd on the distribution.)
3705 Highway 101 North
Tillamook, OR 97141
Attn: Tammy Samagaio, Office Manager
tillchamber@oregoncoast.com

City of Tillamook
Paul Wyntergreen
City Manager
(503) 842-2472 Ext. 3460
pwyntergreen@tillamookor.gov

David Mattison
City Planner
(503) 842-2472 Ext. 3465
dmattison@tillamookor.gov

Tillamook County Commissioners
Charles Hurliman, Chair
churliman@co.tillamook.or.us

Tillamook Air Museum
(503) 842-1130
info@tillamookair.com

Tillamook County Pioneer Museum
2106 Second Street
Tillamook, Oregon 97141
(503) 842-4553
director@tcpm.org

Tillamook County Pioneer Association
503-842-4553
ruby@tcpm.org

Tillamook County Community Development (includes the Planning Commission)
Valerie Soilihi, Director
vsoilihi@co.tillamook.or.us

Tillamook County Public Works
Liane Welch, Director (Roads)
lwelch@co.tillamook.or.us

Veterans of Foreign Wars and Tillamook County Veterans Service
Steve Weld (Steve is also Tillamook County's Veterans' Services Officer)
(503) 842-4358
Diane Niflis
dniflis@co.tillamook.or.us

Veterans of Foreign Wars: Ladies Auxiliary
Anita Hall, President
(503) 355-2436
Vfw2848@gmail.com

Tillamook County Historical Society
Attn: Ione Downey
(503) 842-3642
director@tcpm.org (same contact e-mail as Pioneer Museum)

Economic Development Council of Tillamook County
4301 Third Street, Tillamook, OR 97141
(503) 842-8222, Ext. 1420
admin@edctc.com

Tillamook County Futures Council
Nehalem OR 97131
Jane Dunkin, Project Coordinator
(503) 368-6770
jane@tillamookfutures.org

Department of Land Conservation and Development (DLCD)—Oregon Coastal Management Program (OCMP)
Juna Hickner, Coastal State-Federal Relations Coordinator
(503) 373-0050, Ext. 253
juna.hickner@state.or.us

Tillamook Elks Lodge 1437
(Note: The Tillamook Elks are sponsoring a Veterans' Day Celebration at the air museum on 11/11/11 with special guest speakers Col. Bill Hatton, USMCR Retired, and Kathryn Miles, WWII WASP.)
elkslodge1437@embarqmail.com

******

Libraries

Six copies were provided to the Tillamook main library for posting of one there and distribution to the other five area libraries. The reference section confirmed there is a posting location at each library and the scoping document would be distributed with a memo that it was for posting.

Tillamook Main Library
1716 3rd St.
Tillamook, OR 97141

(503) 842-4792

Bay City Branch
Bay City Community Hall
Bay City, OR 97107
(503) 377-0231

Garibaldi Branch
Garibaldi City Hall
Garibaldi, OR 97118
(503) 322-2100

Manzanita Branch
571 Laneda
Manzanita, OR 97130
(503) 368-6665

Rockaway Beach Branch
120 N. Coral
Rockaway Beach, OR 97136
(503) 355-2665

South Tillamook County Branch
6200 Camp Street
Pacific City, Or 97135
(503) 965-6163

APPENDIX G

EO 11988 Floodplain Management Compliance

Executive Order 11988 – Floodplain Management 8-Step Decision Making Process
Port of Tillamook Bay New Construction Projects
FEMA-1733-DR-OR

Executive Order 11988 (Floodplain Management) requires federal agencies "to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplain and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative". FEMA's implementing regulations are included in Title 44 of the Code of Federal Regulations (CFR), Part 9, which includes an 8-step decision making process for compliance with this part.

This 8-step process is applied to the four new construction projects that are proposed for the Port of Tillamook Bay (POTB) covered under the draft Environmental Assessment (EA) for those projects. The projects include construction of an Airport Business Park, Port Shops, greenhouses, and expansion of the existing water loop. The community of Tillamook participates in the National Flood Insurance Program and the project area is mapped for floodplains on the FEMA Flood Insurance Rate Map (FIRM) Community Panel No. 4101960170 C, dated August 20, 2002.

In recent years, FEMA has revised the FIRM maps for Tillamook County. The mapping is preliminary and has not been adopted. It is currently under appeal by the county and a decision on the appeal and the final flood map is expected to be forthcoming in January or February 2012. The appeal involves changes to the floodway only and not the 100/500-year flood limits within the vicinity of the POTB. The existing flood maps from 2002 have a larger boundary for the 100-year flood and would impact the proposed Airport Business Park more than the pending revised flood maps. For purposes of EO 11988, FEMA considers the preliminary revised mapping to be best available data, whether adopted or not. However, if the floodplain shrinks (as in the case for the Airport Business Park vicinity), FEMA does not follow the preliminary mapping until a Letter of Final Determination has been issued.

Portions of the Proposed Action area included in the draft EA are within the 100-year floodplain mapped for Tillamook. The steps in the decision making process are as follows:

Step 1 **Determine if the proposed action is located in the 100-year floodplain (500-year floodplain for critical actions) and whether it has the potential to affect or be affected by a floodplain.**

The POTB industrial and transportation facility is located approximately two miles south of the City of Tillamook and covers approximately 1,600 acres that are zoned for industrial and airport uses. The majority of POTB facility is located outside of the 100- and 500-year floodplains.

Of the proposed locations for the four new construction projects covered in the draft EA, the Port Shops and greenhouses are located outside the 100-year floodplain. The construction footprint for the proposed Airport Business Park will also be located outside of the 100-year floodplain, including the new access road to connect to the new Airport Business Park. The access road has been designed to follow the curve of the established floodplain remaining clear of the line by a minimum of 30 feet before running along the eastern edge of the site to the proposed

development. No part of the proposed development of the Airport Business Park, including the new road, parking area, and building footprint, will impede or alter drainage of the flow of floodwaters.

The proposed locations of the 2,900 LF and 4,400 linear feet (LF) sections of the water loop improvements are located outside the 100-year floodplain. However, the 5,800 LF segment extending the water line along Long Prairie Road from the intersection of Blimp Boulevard to U.S. Highway 101 would encounter portions of the 100-year floodplain as identified on Flood Insurance Rate Map Panel # 4101960170C, dated 8-20-2002.

The rest of the 8 step process will only address the Water Loop Improvements project.

Step 2 **Notify the public at the earliest possible time of the intent to carry out an action in a floodplain and involve the affected and interested public in the decision-making process.**

A public notice concerning the four new construction projects included in the draft EA will be published in the *Tillamook Headlight Herald* newspaper on January 18, 2012, together with the notice of availability of the draft EA for viewing and a 15-day public comment period. The *Tillamook Headlight Herald* is the local and regional newspaper for the Tillamook County area. The initial public notice will also serve as the final public notice for this draft EA. All recipients are notified that after the public comment period ends, provided no substantive comments are received, no further public involvement will be conducted.

Step 3 **Identify and evaluate practicable alternatives to locating the proposed action in a floodplain.**

Portions of the Long Prairie Road segment of the water loop expansion for the POTB are located within the 100-year floodplain. In order to connect to the existing waterline owned by the City of Tillamook at U.S. Highway 101, this segment must be located within the floodplain. It would use the existing utility right-of-way immediately south of Long Prairie Road. No practicable alternatives to locating the line outside the floodplain were identified or were alternative actions identified that would meet the need for the project. and there is not a practicable alternative. Construction activities to complete this segment of water line would be temporary and underground, and will therefore have no adverse impacts.

Step 4 **Identify the potential direct and indirect impacts associated with the occupancy or modification of the floodplain and the potential direct and indirect support of floodplain development that could result from the proposed action.**

The Long Prairie Road water loop segment located in the 100-year floodplain would not impede natural floodplain uses or be considered incompatible development. It would not alter drainage of the flow of floodwaters and would not impede or redirect flood flows. The waterline will be placed underground, would not result in fill added to the floodplain, and would have no measurable effect on floodplain functions and values. Due to its underground location, the waterline itself, which is a totally enclosed system, would not be affected by flood waters. All

other components of the projects included in the draft EA would be located outside of the 100- and 500-year floodplains.

Although the extension of the water loop along Long Prairie Road could facilitate an increase in development within the service area, any increase must comply with Tillamook County's applicable ordinances and building codes, including floodplain management. The majority of the POTB buildable lots are located outside the 500 year floodplain.

Step 5 **Minimize the potential adverse impacts and support to or within floodplains identified in Step 4 to restore and preserve the natural and beneficial values served by floodplains.**

The new construction projects in the draft EA have been designed to minimize floodplain impacts. The waterline segment located within the 100-year floodplain would be buried and no above ground structures would be located within the 100-year floodplain. No minimization requirements were identified.

Step 6 **Re-evaluate the proposed action to determine if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain values.**

The only portion of the overall project located in a floodplain (the water loop extension along Long Prairie Road) would not expose any segment of the population to flood hazards because it will be located underground. The project will not aggravate the current flood hazard because the facilities would not impede or redirect flood flows. The project will not disrupt floodplain values because it will not change water levels in the floodplain, and will not reduce habitat in the floodplain. Therefore, it is still practicable to construct the proposed project within the floodplain.

Alternatives consisting of locating the water loop segment outside the floodplain or taking "no action" are not practicable due to the need to connect the water loop to the City of Tillamook's existing mainline at U.S. Highway 101, which is located in the 100 year floodplain.

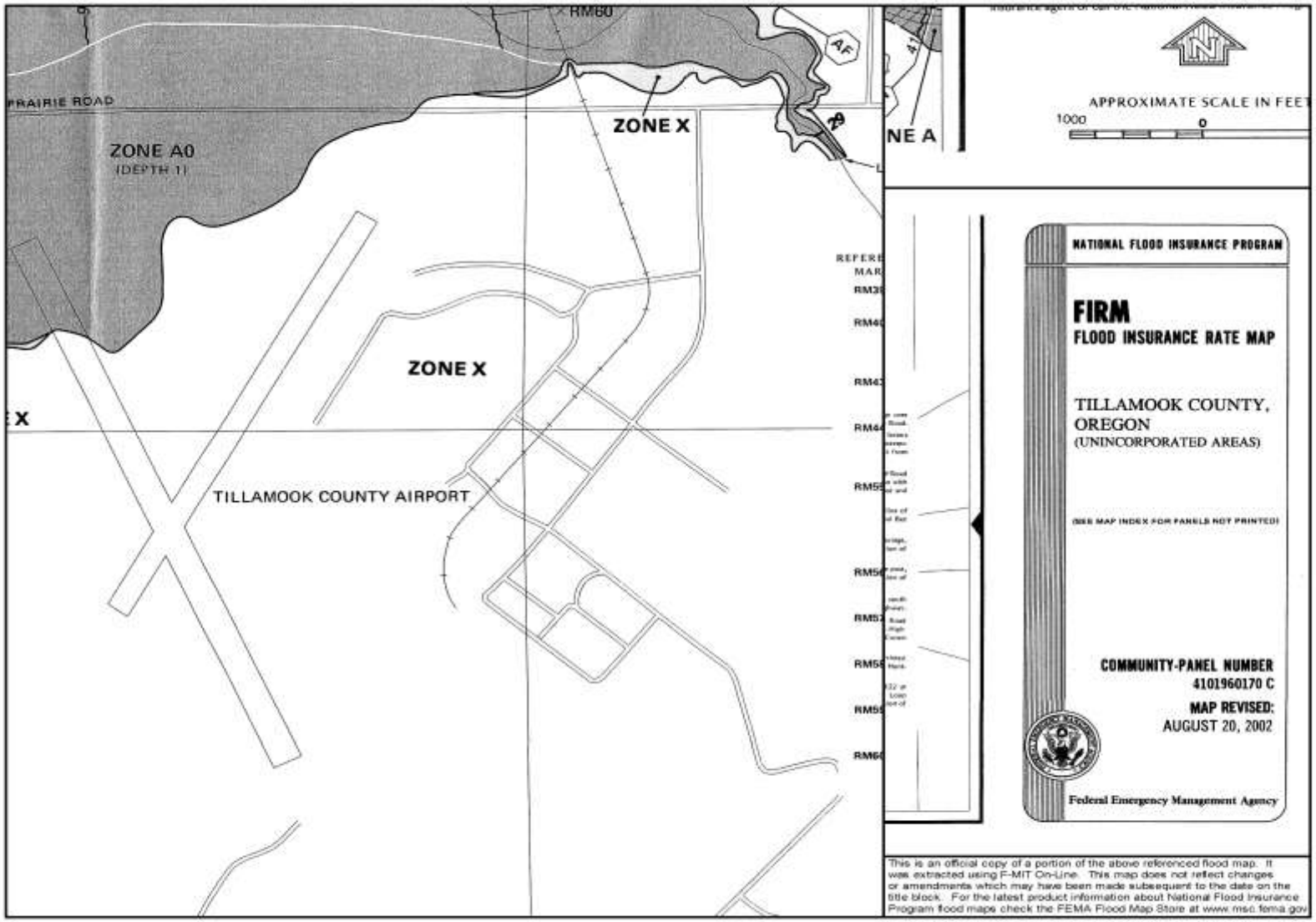
Step 7 **Prepare and provide the public with a finding and public explanation of any final decision that the floodplain is the only practicable alternative.**

After evaluating alternatives for connecting the water loop to the City of Tillamook's existing mainline located at U.S. Highway 101, the POTB determined that the proposed segment to connect the water loop by utilizing the existing utility right-of-way along Long Prairie Road is the most practical alternative. The public notice provided in the *Tillamook Headlight Herald* newspaper on January 18, 2011, together with the notice of availability of the draft EA for viewing for a 15-day public comment period, provides the public with a finding and a public explanation of the final decision and an opportunity to identify any issues or concerns that require attention.

Step 8 **Review the implementation and post-implementation phases of the proposed action**

to ensure that any mitigative actions required for carrying out an action that affects or is in a floodplain are fully implemented.

The proposed new construction projects included in the draft EA for the POTB will be constructed in accordance with applicable local floodplain development requirements. Tillamook County participates in the National Flood Insurance Program and the requirements associated with implementation of the Water Loop Improvement project under this EO review will be met through compliance with the local floodplain permit requirements.


RM60
AF
PRAIRIE ROAD
ZONE A0
(DEPTH 1)
ZONE X
ZONE X
TILLAMOOK COUNTY AIRPORT
NE A
APPROXIMATE SCALE IN FEET
1000
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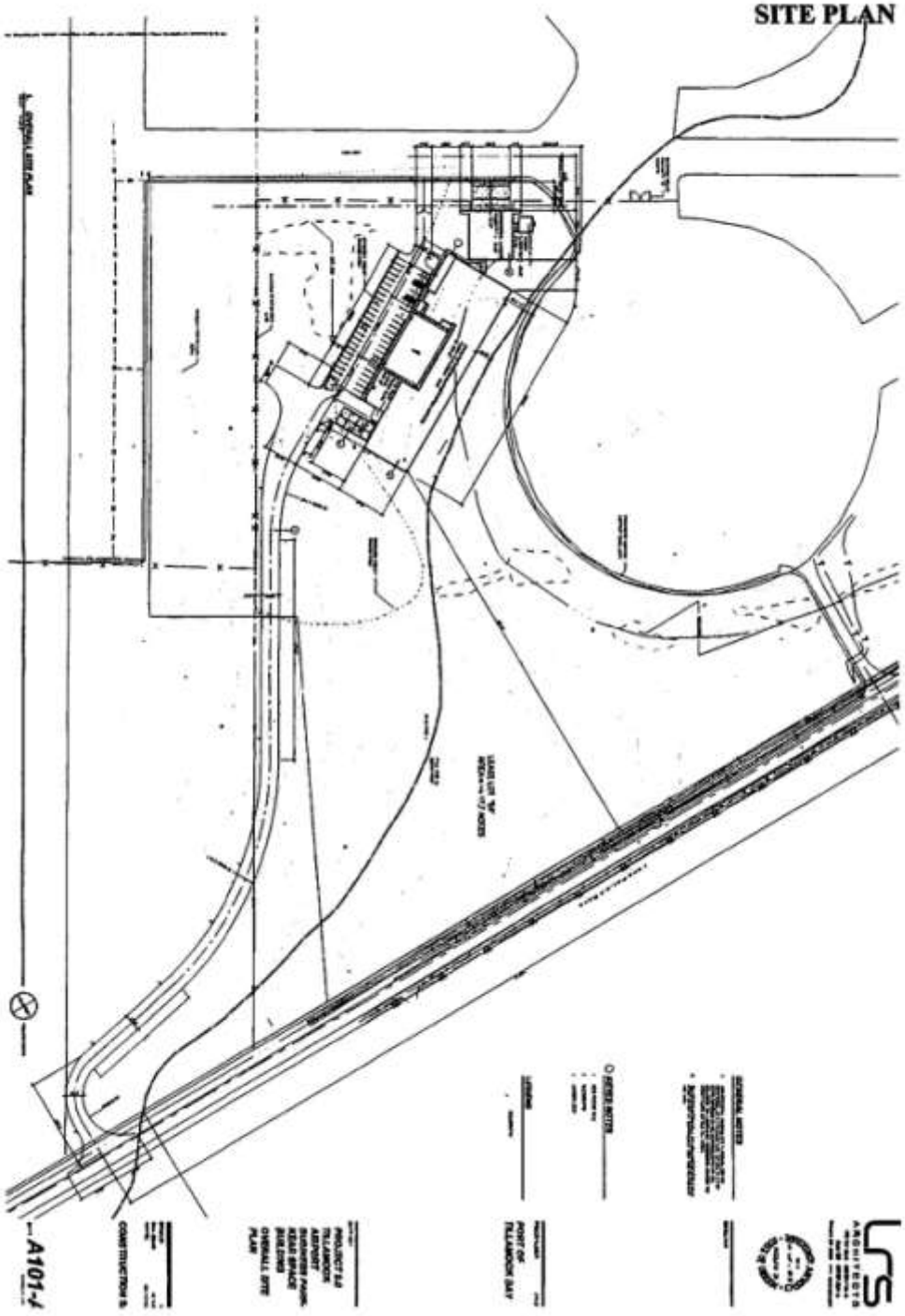
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
TILLAMOOK COUNTY, OREGON
(UNINCORPORATED AREAS)
(SEE MAP INDEX FOR PANELS NOT PRINTED)
COMMUNITY-PANEL NUMBER
4101960170 C
MAP REVISED:
AUGUST 20, 2002
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX H

Architectural Site Plans

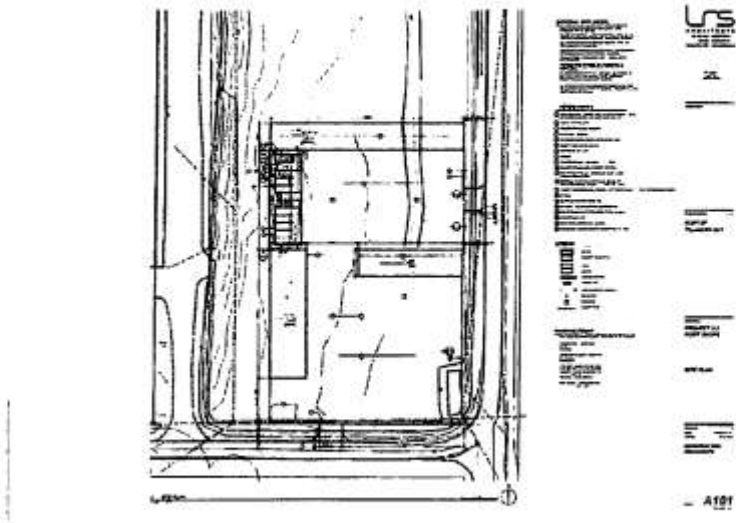
POTB AIRPORT BUSINESS PARK

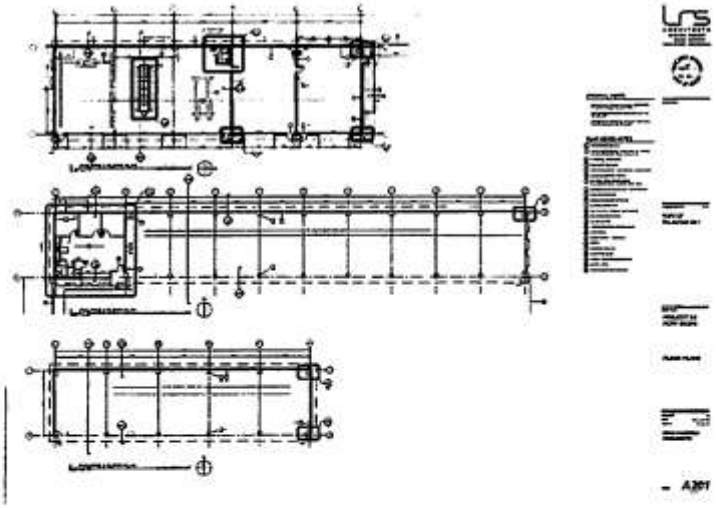
SITE PLAN



POTB PORT SHOPS

SITE PLANS—PAGE 1





POTB Project Narratives
LRS Architects Inc.

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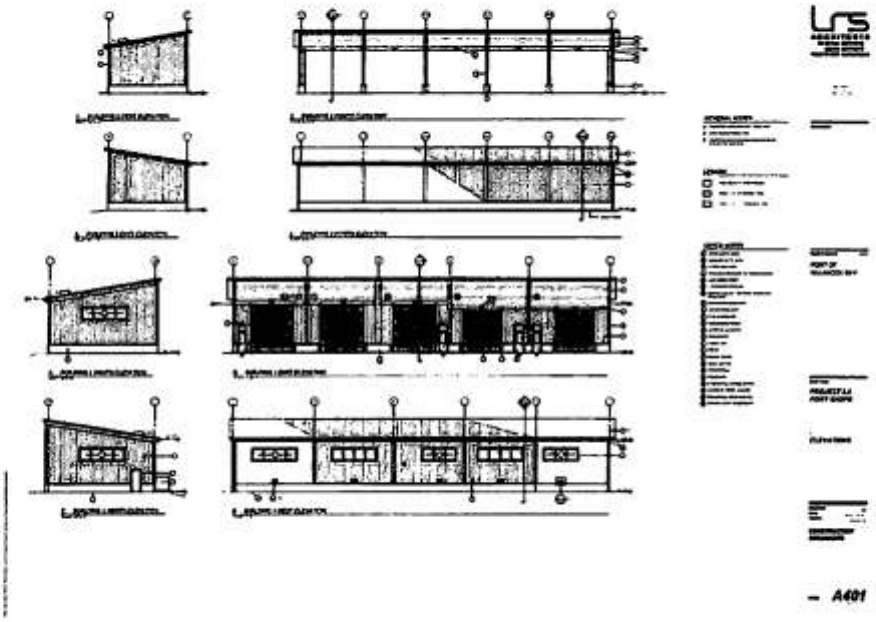
POTB PORT SHOPS

SITE PLANS—PAGE 2



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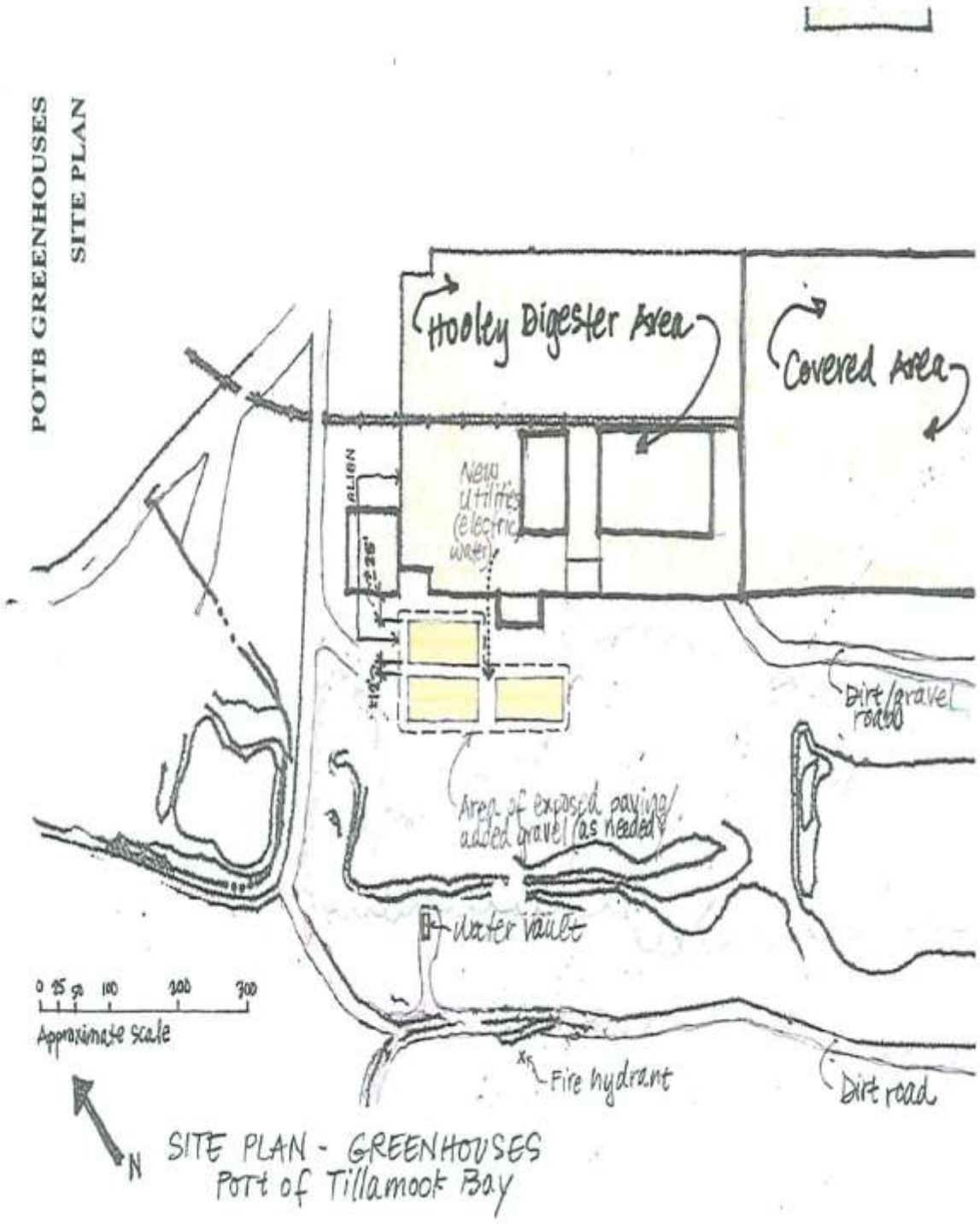
POTB GREENHOUSES
SITE PLAN
Hooley Digester Area
Covered Area
ALIGN
New utilities (electric, water)
Dirt/gravel road
Area of exposed paving/ added gravel as needed
Water vault
0 25 50 100 200 300
Approximate scale
Fire hydrant
Dirt road
N
SITE PLAN - GREENHOUSES
Port of Tillamook Bay