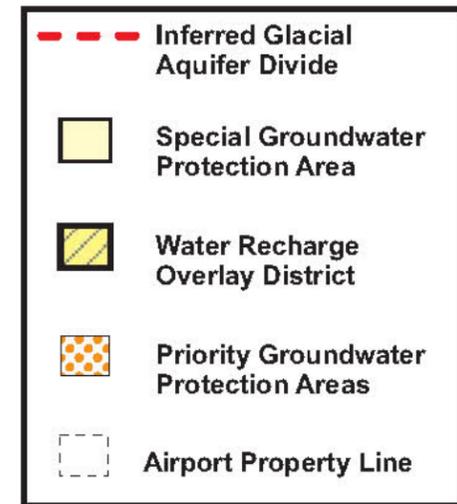


**Town of East Hampton
Groundwater Protection
Zone**

West Section



**Figure 3-9.
Groundwater
Protection Areas**

district are declared to be critical areas of environmental concern and any activity or use is subject to conditions against overclearing of land, landscaping, the use of fertilizers, the manner of disposing of waste materials or any other reasonable condition or restriction necessary to ensure continued integrity of the Town's groundwater. In addition, to the extent practicable, clearing and grading of natural vegetation and disturbance of the natural contours of lands within the overlay district should be minimized.

The property is within the 5-foot glacial aquifer contour.² This has been identified as the primary groundwater recharge area within which the existing Suffolk County Water Authority wells are located and within which future water supply development should take place. In addition, East Hampton is located on the Nassau-Suffolk Sole Source Aquifer, a Federal designation that is regulated by the U.S. Environmental Protection Agency. Since a sole source aquifer is a major source of a safe drinking water, it is important that the quality of this water is maintained and that the aquifer is adequately recharged to maintain water supply.

The East Hampton Zoning Map and code has been revised to incorporate measures that protect the groundwater (i.e., 5-acres and other low-density residential zoning classifications). Protected open space provides the highest quality groundwater recharge and the lowest potential for future contamination of groundwater resources.³ For commercial lots within the Water Recharge Overlay District, the total area which may be cleared of indigenous natural vegetation shall not exceed 10,000 square feet or 50% of the lot area, whichever is greater. No new landfills or private dumping or disposal areas utilized for, but not limited to, disposal of waste and septage shall be permitted in the overlay district.

At the East Hampton Airport, buildings are served by individual septic systems. Potable water to the Airport terminal building is supplied by the Suffolk County Water Authority (water consumption for 2008 was 83,776 gallons). Additional ground wells supply water to the hangars. There have been no issues meeting the demand for potable water.

3.5 Historic, Architectural, Archaeological, and Cultural Resources

The National Historic Preservation Act (NHPA) of 1966 establishes the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places (NRHP) within the National Park Service (NPS). Section 106 requires Federal agencies to consider the effects of their undertakings on properties on or eligible for inclusion in the NRHP. Compliance with section 106 requires consultation with the ACHP and the State Historic Preservation Officer (SHPO).

The National Register of Historic Places website indicates that there are no Historic Properties on the Airport property. Previous communication with the New York State Office of Parks, Recreation and Historic Preservation indicated that proposed on-Airport development would not have effects upon cultural resources in or eligible for inclusion in the National Register of

² From "USGS Water Resources Investigation Report 1997"

³ Town of East Hampton Comprehensive Plan, May 6th 2005.

Historic Places (an updated response has not yet been received).

The Airport is not within any of the Town's historic district overlays – Amagansett, Bluff Road, Springs, or Montauk Association. In addition, previous consultation with the Town of East Hampton's Planning Department indicated that the Airport was in a non-sensitive area regarding historic resources.

3.6 Biotic Communities

Figure 3-10 broadly divides the airport land holdings into three distinct areas – forested areas, cleared land and airport maintenance areas.

Forested lands are portions of the pine barrens which includes Pitch Pine Forest and the Coastal Oak-Heath forest. These areas are stable, protect underlying water resources, provide habitat for native species, resist erosion and are otherwise sustainable. Given these benefits, minimal site disruption will best serve the long term environmental interests and will minimize maintenance costs.

Cleared areas are classed as cut and fill land. Generally, these are sandy sub soils, the top soil having been removed during construction of the facility. It has limited moisture holding capacity, relatively low fertility and cannot support sufficient plant life to fully cover the ground for the majority of the year. Improvement requires extensive cultivation, fertilization and regular management practices such as irrigation. The alternative is passive management. This involves limiting further site disturbance, infrequent mowing, and preservation of the existing plant cover to the extent feasible. Careful management practices to encourage wildlife and breeding success for small birds and mammals are recommended. Although biologic limitations occur, these areas should be naturalized to the extent feasible.

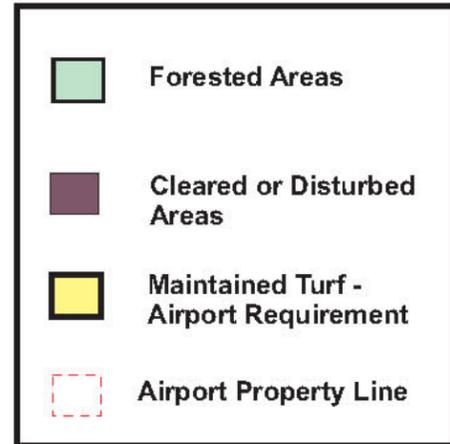
Airport maintenance lands include the terminal area, FBO areas, and areas adjacent to runways and taxiways that need to be actively maintained. The maintenance includes more frequent mowing to maintain visibility, discourage animal habitation and improve appearance. Development of a maintenance plan and procurement of sufficient equipment to execute that plan will improve safety and create an attractive in field landscape.

3.7 Endangered Species of Flora and Fauna

Extensive surveys the flora and fauna found at the East Hampton Airport have been conducted over the last 25 years. These are summarized and documented in Chapter Three of the *Environmental Assessment for East Hampton Airport* (Draft November 15, 2002). In that document, no rare or endangered species protected on the federal level were found to occur at the Airport. The report concluded that the projects reviewed, including the proposed parallel taxiway to Runway 10/28 and the rehabilitation of Runway 4/22, would not adversely impact any species of concern.



**East Hampton
Airport**



**Figure 3-10.
Biotic
Communities**

The flora and fauna found at the Airport were reviewed in the East Hampton Airport Master Plan Report. Three plant species of concern were noted including the Pine Barren Sandwort (*Minuartia caroliniana*), the Bird's Foot Violet (*Viola pedata*), and a *Spiranthes* orchid. Two bird species of concern were also noted, Grasshopper Sparrows (*Ammodramus savannarum*) and Eastern Bluebirds (*Sialia sialis*). The Pine Barren Sandwort is classified as a rare native plant and is protected. The Bird's Foot Violet is considered exploitably vulnerable and is similarly protected. The two bird species noted are not restricted to airport land, but are experiencing decline. The Eastern Bluebird is being actively cultivated on the airport with nesting boxes along the periphery of the forested areas. Neither of these species represents a threat to aircraft operations.

Cleared areas at the East Hampton Airport are essentially open sandy subsoil which has limited ability to support vegetation during the dry months of the year.

3.8 Wetlands

Freshwater wetlands are highly productive natural areas which are necessary to the survival of many species of fish, birds, amphibians, reptiles, and mammals. They provide flood and stormwater control and help to maintain surface water flow and preserve water quality. The only wetlands located on the Airport property is a small (approximately 2 acres), isolated, freshwater wetlands located in the northern portion of the site, just west of Daniel's Hole Road/ Wainscott-NW Road (see Figure 3-11). There are no tidal wetlands in the vicinity of the Airport.

The wetlands are regulated under both State and local law. The wetland is classified as Class II under the New York State Freshwater Wetlands Act, indicating it provides the second highest level of benefits. The wetland is not a known habitat for a threatened or endangered plant or animal species. It is not a tributary to a body of water or adjacent to a reservoir or body of water and has no archaeological or paleontological significance as a wetland. However, it may be hydrologically connected to an aquifer which has been identified by a government agency as a potentially useful water supply; therefore it is categorized as Class II. In order to better protect the wetland against surrounding disturbance, the "adjacent area" (considered within 100 feet of the wetland boundary) is also subject to regulation.

A permit from NYSDEC is required for certain activities within the wetland or adjacent areas. Class II wetlands provide important wetland benefits, the loss of which is acceptable only in very limited circumstances. A permit shall be issued only if it is determined that the proposed activity satisfies a pressing economic or social need that clearly outweighs the loss of or detriment to the benefit(s) of the Class II wetland. Ordinary maintenance and repair of existing functional structures, facilities or improved areas, including roads, is permitted, but expanding or substantially modifying existing functional structures or facilities and any draining, filling, grading, clear-cutting or dredging would not be permitted.

Pursuant to Chapter 255-4-30 of the Code of the Town of East Hampton, construction is prohibited within wetlands (including enlargement or reconstruction of a building or structure). No sewage disposal device or structure shall be constructed, placed, or installed within 150 feet

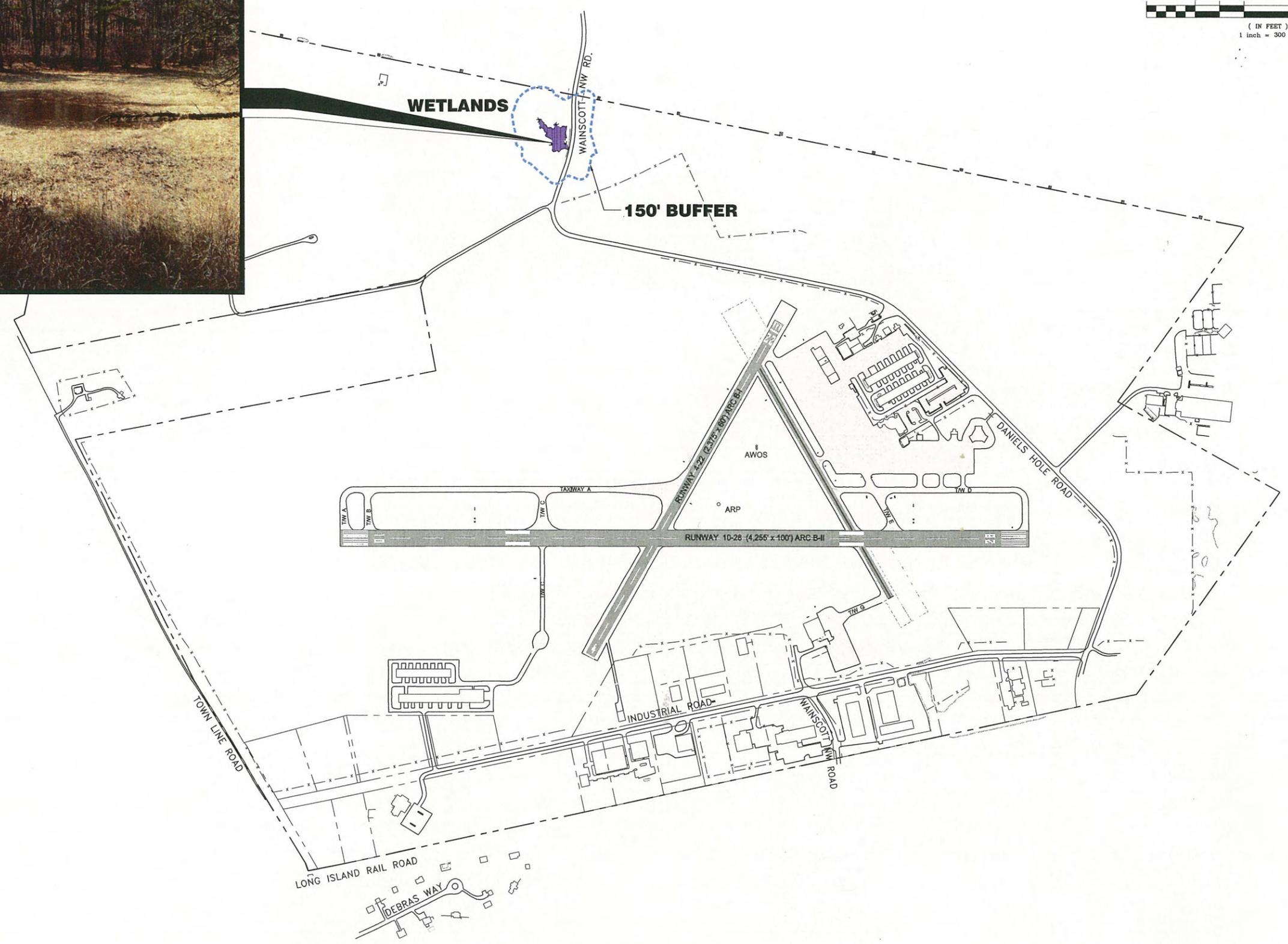
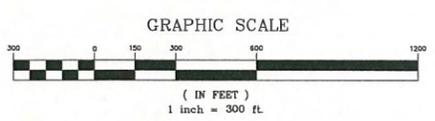


FIGURE 3-11 - FRESHWATER WETLANDS

of the upland boundary of a wetland. In addition, no building or other structure shall be erected, constructed, placed, enlarged, or installed within 100 feet of the upland boundary of a wetland. No clearing of vegetation or the establishment of turf, lawn, or landscaping may occur within 50 feet of the wetland boundary. Pursuant to Chapter 255-4-20 of the Code of the Town of East Hampton, natural resources special permit is required for any filling or altering of a wetlands and for certain activities within 150 feet of any wetland boundary (clearing or grading, digging dredging, or excavating land, or depositing fill or other material upon land, building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement in or upon the land). Within 200 feet of any boundary, a natural resources permit is required for the following activities: constructing or installing any cesspool, septic tank, or other structure, system, or device for the disposal of sewage or other liquid wastes, constructing or installing any structure, system, or device for the receipt or storage of fuel or any other liquid except water.

3.9 Energy Supply and Natural Resources

The following table presents an inventory of the energy resources consumed on the Airport property during 2008.

Table 3-7: East Hampton Airport Energy and Natural Resource Consumption (2008)

| | | |
|---------------------------|------------------------|--------------------|
| Electricity (LIPA) | 214,729 kilowatt hours | |
| Propane | 2,233 gallons | Terminal Building |
| | 975 gallons | Myers Aero Service |
| Aviation Fuel | 48,736 gallons | AvGas |
| | 693,006 gallons | Jet A |

Since there have not been any significant changes to the East Hampton Airport for the past ten years, it can be assumed that these values reflect the typical annual rate of consumption. There have been no shortfalls or issues meeting energy demand. No deficiencies or substandard practices are observed, with the exception of aircraft fuel storage. During the summer months, daily deliveries of Jet A fuel are necessary to satisfy demand. Currently, the only fuel farm on the Airport contains an 8,000 gallon tank for Avgas and a 12,000 gallon tank for Jet A fuel. An additional 12,000 gallon storage tank for Jet A fuel would increase fuel reserves to a more acceptable level.

3.10 Light Emissions

The Town of East Hampton’s Code incorporates provisions “that are intended to control and regulate exterior lighting through the Town to promote public safety on the Town’s roads and

highways, protect residential land owners from the intrusive effects of glare and light trespass, preserve the rural character of the Town, and maintain and restore the beauty of the night sky.” The general lighting standards in Chapter 255-1-83 of the Code do allow for “airport lighting that is specifically regulated by federal law.”

The current sources of light emissions on the Airport include the medium intensity runway lights along edges and ends of the runways. These do not emit light that will disturb the surrounding community. Most of the taxiways have edge lights; however, these generate very limited emissions and would not impact off-Airport areas. The occupied buildings and parking areas – main terminal, Myers Aero Service, businesses along Industrial Road – would emit minor light from typical fixtures that will occasionally be utilized during nighttime hours. Due to the buffer provided by the surrounding forest, it is unlikely that the emissions can be viewed off-property.

3.11 Solid Waste

Solid waste generated on the Airport property is removed by the Town of East Hampton. There are no known deficiencies or substandard practices.

3.12 Other Environmental Concerns

3.12.1 U.S. Department of Transportation Act, Section 4(f)

Per FAA Order 1050.1E, “Section 4(f) of the DOT Act, which is codified and renumbered as Section 303(c) of 49 U.S.C., provides that the Secretary of Transportation will not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, State or local significance or land from an historic site of national, State, or local significance, as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such program, and the project includes all possible planning to minimize harm resulting from the use.”

There is no Section 4(f) land on or near the airport.

3.12.2 Floodplains

The Flood Insurance Rate Map (FIRM) developed by the Federal Emergency Management Agency for Suffolk County identified the area of the Airport as in Zone X, areas determined to be outside 500-year floodplain (dated May 4, 1998).

3.12.3 Coastal Zone Management and Coastal Barriers

In 1972, Congress passed the Coastal Zone Management Act to conserve, develop and protect the nation's coastal resources. Program development funds were granted to coastal states for the preparation of state coastal management programs. The Coastal Barriers Resources Act of 1982 prohibits, with some exceptions, Federal financial assistance for development within Coastal Barrier Resources System, which consists of undeveloped coastal barriers along the Atlantic and Gulf coasts.

The Coastal Erosion Hazard Areas Act empowers the New York State Department of Environmental Conservation (NYSDEC) to identify and map coastal erosion hazard areas and to adopt regulations to control certain activities and development in those areas. The backbone of these regulations is a permitting system aimed specifically at all proposed construction in erosion hazard areas. The Airport is not situated within the Coastal Zone or Coastal Barrier Resources System.

In addition, the Town of East Hampton has four coastal erosion overlay zones to regulate projects which are designed to control or prevent flooding and erosion of the coastline and adjacent upland areas or which may impact coastal resources:

- Zone 1: Ocean littoral zone, including bluffs, dunes, beaches and nearshore areas. This zone is predominantly free of erosion control structures.
- Zone 2: Bay littoral zone, including bluffs, dunes, beaches, and nearshore areas, which is predominantly free of erosion control structures.
- Zone 3: Bay littoral zone, including bluffs, dunes, beaches, and nearshore areas, which contains erosion control structures which are isolated and discontinuous, or which have no substantial flooding or erosion protection function.
- Zone 4: Bay littoral zone, including bluffs, dunes, beaches, and nearshore areas, which contains numerous erosion control structures. Within this zone the loss of natural resources and features such as bluffs, dunes, and beaches mean that in many cases erosion control structures provide the only remaining protection against flooding and erosion.

The East Hampton Airport is not in the vicinity of any of these coastal erosion overlay zones.

3.12.4 Wild and Scenic Rivers

Per FAA Order 1050.1E, "The President's 1979 Environmental Message Directive on Wild and Scenic Rivers (August 2, 1979) directs Federal agencies to avoid or mitigate adverse effects on rivers identified in the Nationwide Rivers Inventory as having potential for designation under the Wild and Scenic Rivers Act." According to the New York State Wild, Scenic, and Recreational River System Map (NYSDEC), there are no designated wild or scenic rivers in the vicinity of the Airport.

3.12.5 Prime or Unique Farmland

The Farmland Protection Policy Act (FPPA) regulates Federal actions with the potential to convert farmland to non-agricultural uses. The purpose is to preserve land considered to be prime, unique, or statewide or locally important farmland.

The East Hampton Airport is not on or contiguous to agricultural land. The property has been operating as an airport since 1936 and the proposed projects would not involve the conversion of farmland to non-agricultural uses. The FPPA does not apply.

3.12.6 Hazardous Materials Disposal

Although the activities at the Airport require the use of some hazardous materials, the Town of East Hampton Code regulates the use of hazardous materials at the Airport (75-29).

“No person shall store, keep, handle, use, dispense or transport any hazardous materials at the airport unless said act is done in accordance with the laws, rules, and regulations of the federal government, the New York State Uniform Fire Prevention and Building Code, the New York State Department of Environmental Conservation, the New York State Department of Transportation and the Suffolk County Department of Health Services, in particular Article 12 of the Suffolk County Sanitary Code.... Notification of any hazardous spill or emergency shall be made immediately to the East Hampton Fire Department and the airport manager. Upon receiving notification, the airport manager shall immediately notify the Town Fire Marshal and the Town Natural Resources Department...[Any] corrective action shall be in accordance with the applicable federal, state, and local laws, rules and regulations.”

New York State's Hazardous Waste Management Regulations (the Part 370 series) can be found in 6 NYCRR Parts 370, 371, 372, 373, 374 and 376.

The East Hampton Airport incorporates these regulations in daily operations, ensuring hazardous waste is disposed of properly, spillage of petroleum products and other hazardous products is minimized, and, if spills do occur, that they are handled appropriately.

3.12.7 Environmental Justice

In 1997, Presidential Executive Order 12898 was issued which highlighted the need to consider the effects on minority and low income populations. These Environmental Justice issues are defined in FAA Order 5050.4B. The goal of an Environmental Justice analysis is to determine whether a potential disproportionately high and adverse affect to minority and low income populations will occur as a result of any anticipated action by a federally funded public benefit project.

There are no areas in proximity to the Airport which have significant populations of minority or low income individuals.

4.0 Alternatives Analysis

4.1 Plan Development

The East Hampton Airport Master Plan Report considered four broadly differing alternative future concepts. These included 1) the no action alternative, 2) a modest plan that concentrated on improved safety, efficiency and compliance with current design standards, 3) a reduction in capability and 4) a expansion program designed to fully accommodate the largest prospective aircraft forecast to use the facility. The Town considered all these alternatives and selected, after soliciting public comments, alternative 2 which was then subject to further refinement during a twelve month review period and then further consultation with the planning team. Consideration of a full range of future airport configurations was therefore integral to the process from the outset. Detailed consideration of the selected design and the alternatives considered are detailed below.

4.2 Runway Configuration Alternatives

East Hampton Airport originally had a three runway configuration with each runway 100 feet wide. A central question in the preceding study, the East Hampton Airport Master Plan Report, concerned the need to retain all three runways. The determination made in that investigation was that, in accordance with appropriate wind coverage criteria, either Runway 4/22 or Runway 16/34 in combination with the longer Runway 10/28 would provide adequate wind coverage.

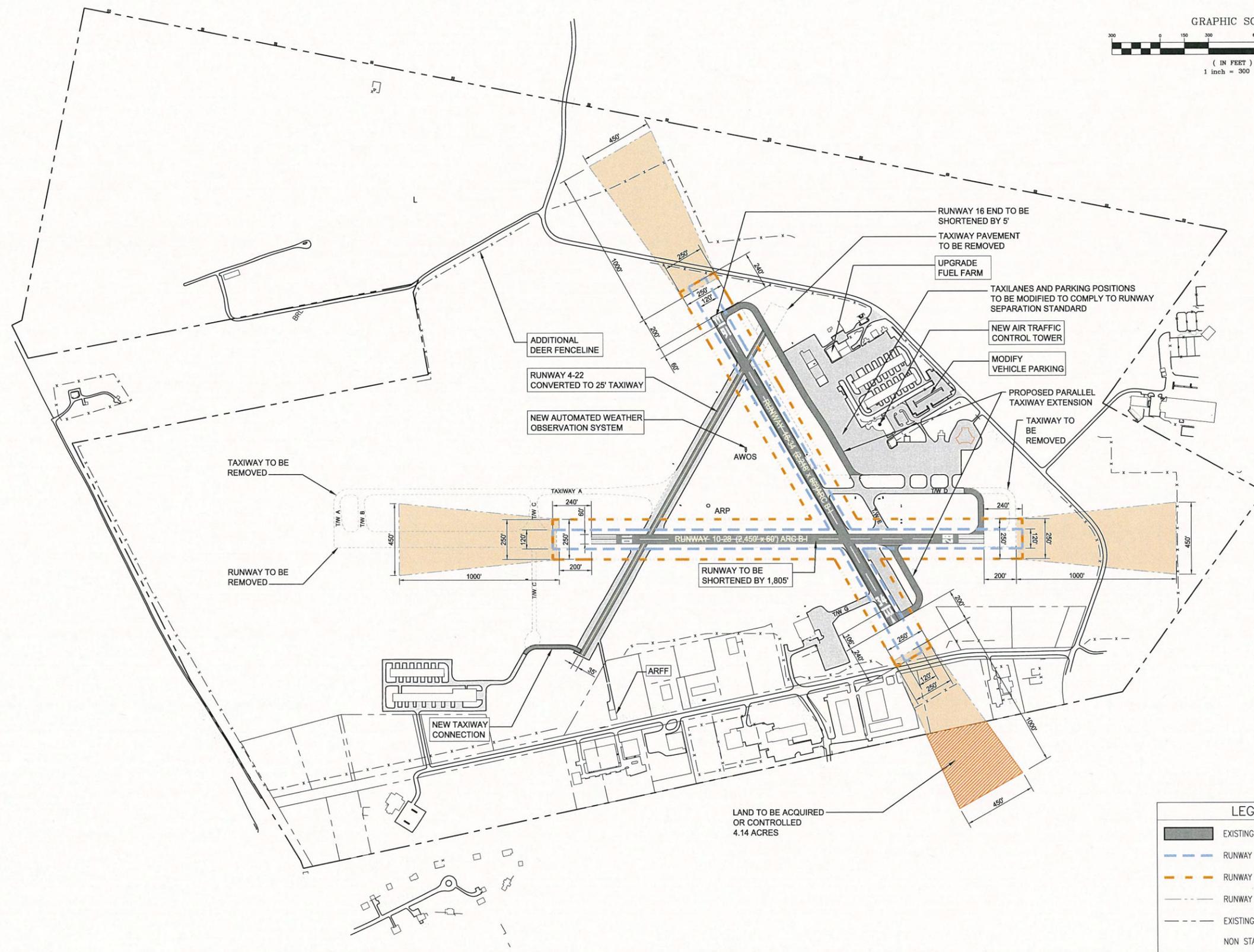
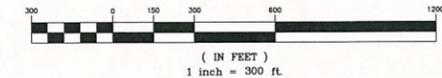
Currently, Runway 4/22 is closed due to poor pavement condition and Runway 16/34 remains in service. There are three potential alternatives for the future configuration, 1) retain Runway 16/34 (see Figure 4-1), 2) close Runway 16/34 and rehabilitate Runway 4/22 (Proposed Action; see Figure 1-1), or 3) retain both runways (see Figure 4-2). This choice was considered at length including public hearings, other public input especially from the airport user community and in depth consideration by the Town of East Hampton.

Runway 16/34 is better aligned with wind velocities in winter while Runway 4/22 provides better coverage during the spring, summer and fall. One other principal difference between the two runway orientations is the land use adjacent to the runway ends. The area along the extended runway centerline of Runway 4/22 is in forest land to the northeast, but is developed in commercial, industrial and residential uses to the southwest. The Runway 16/34 extended centerline is similarly in forest and open land to the northwest but disturbed land used in the past for industrial mining to the southeast. The preliminary decision, strongly influenced by the more compatible land use, was to retain Runway 16/34 and continue the closure of Runway 4/22.

As a consequence of this decision, Runway 16/34 was examined in detail to determine its adequacy with respect to current FAA design standards. Providing a parallel taxiway to Runway 16/34, a design necessity now lacking, was found to have a series of key disadvantages. A taxiway to the west of the runway would not allow convenient access to the current Terminal



GRAPHIC SCALE



NOTES:

- 1. GPS INSTRUMENT APPROACHES TO BE ENHANCE
- 2. ENVIROMENTAL CONSERVATION AND PRESERVATION PRACTICES WILL BE IMPLEMENTED

FIGURE 4-1 - RETAIN RUNWAY 16/34 (ALTERNATIVE 1)

Area. A taxiway to the east of Runway 16/34 would need to be routed through the existing terminal ramp and aircraft parking area. Alternative layouts to the existing ramp, or supplementing the current paved area by paving additional space would not yield sufficient space to offset the loss that would occur by adding the parallel taxiway. Further, although the existing design aircraft is a small business jet, the Airport frequently accommodates much larger business jet aircraft which, if two were parked in front of the existing terminal, would block the proposed taxiway.

One potential remedy is the relocation of Runway 16/34 sufficiently to avoid placing the necessary parallel taxiway within the Terminal Area. There is insufficient airport property to shift Runway 16/34 to the southeast due to an existing roadway and elevated train right of way. Similarly, there is insufficient airport land to accommodate relocating Runway 16/34 to the northwest. Thus, were the needed taxiway emplaced with Runway 16/34 remaining at its current location, the terminal building and some of the associated vehicular parking would need to be relocated further to the northeast in order to obtain sufficient ramp space in front of the terminal. This might also entail relocating portions of Daniel's Hole Road. Alternatively, the entire Terminal Area would need to be relocated elsewhere on the airport. The situation is further complicated by existing FBO and aircraft parking areas some of which might also require elimination or relocation should Runway 16/34 be retained.

As a consequence of these detailed considerations, it was determined that rehabilitating Runway 4/22 to a minimum width of 60 feet was less disruptive, more consistent with the layout and function of the airport and also inherently more cost effective. The existing Runway 16/34 is proposed to be used as a taxiway. These decisions formed the basis of the current preferred alternative shown as Figure 1-1.

4.2.1 Taxiway Pavement to Be Removed

Abandonment of Runway 16/34 and conversion into a taxiway leaves two areas of pavement on each runway end that are no longer functional. These areas are marked for removal on the proposed airport plan. The area to the northwest is composed of 23,000 square feet of concrete with approximately 1,000 square feet in a fillet connecting the existing runway surface to an adjacent deteriorated pavement area of 21,000 square feet. These areas total slightly more than one acre. If these areas are entirely removed, approximately 800 cubic yards of concrete and asphalt would require disposal and a similar volume of fill would be needed to re-contour the area.

On the southeastern end, a similar situation exists. This area consists of nearly 14,000 square feet of concrete pavement, another 1,000 square foot area in a filleted taxiway and nearly 41,000 square feet of deteriorated adjacent asphalt pavement. The resulting total is approximately 1.3 acres of total pavement area yielding at least 1,000 cubic yards of excavated pavement.

Pavement removal involves the labor required to breakup the pavement and load the remains into suitable trucks for relocation to a disposal site, which has yet to be determined. This could generate in excess of 100 truck loads and necessitate a similar volume of replacement fill. This could be avoided by simply leaving the pavement in place. This was the previous decision that

resulted in the existing deteriorated pavement adjacent to Runway 16/34. Leaving the unused pavement in place would appear advantageous since it avoids the costs and environmental impact of the removal process.

4.2.2 Runway 4/22 Design/Operational Alternatives

Reactivation of Runway 4/22 will increase noise impact in areas to the southwest of the Airport in Wainscott although only from small piston-engined aircraft. In comparison to the other areas around East Hampton Airport, this is the most significant residential concentration of homes. The closest residence is less than one quarter mile from the Runway 4/22 runway end on a straight out heading.

Currently, the threshold markings on Runway 22 are painted 380 feet from the physical end of the pavement. This displacement is the result of obstructions, primarily tall trees in the approach. By removing and topping some trees in the approach, the preferred alternative, as depicted on Figure 1-1 diminishes the displacement of Runway 22 from 380 feet to 126 feet from the current end of the pavement. The 126 feet of displacement is still required in order to prevent encroachment of the Runway Safety Area and the Runway Object Free Area onto Daniel's Hole Road. In order to provide sufficient clearance over Daniel's Hole Road for landings, an additional 60 foot landing threshold displacement (translating into a total displaced threshold of 186 feet) will be required. Some tree clearing will be required to eliminate tall trees in the approach. In sum, compared to existing markings and past usage, the available length of Runway 22 for takeoff and landings will be effectively increased, contributing to increased safety with little or no added impacts.

A detailed analysis of the potential benefits to noise abatement through extending Runway 22 threshold 500 feet the northeast was considered. This analysis is presented under the Mitigating Measures discussion. The analysis showed that the benefits in terms of noise reduction were insufficient to offset the costs and impact of encroaching on the forest preserve which is proposed for the area north and east of Daniel's Hole Road. Therefore, the most appropriate noise abatement management alternative is placing as much departure traffic as appropriate on Runway 28 and using Runway 22 only when winds require its use. The proposed noise abatement turn for Runway 22 takeoffs, which turns aircraft to the 280 degree heading before crossing the airport boundary, should be recommended as a voluntary procedure for the smaller and lighter aircraft using the Airport. Extending Runway 22 to the northeast beyond Daniel's Hole Road does not appear to be justified.

Runway 4/22 was originally 100 feet wide while the current proposal calls for a 60 width in conformance with FAA guidance. This pavement is currently used as a taxiway. It accommodates aircraft as large as a Gulfstream V. Although this use will be reduced or eliminated by completion of the full length taxiway to Runway 10/28, it may be advantageous to maintain the current historical width. In any case, pavement strength should be designed to withstand the weight of a 100,000 pound taxiing aircraft.

4.2.3 Runway 28 Modifications

Runway 10/28 serves as the primary and longest runway at East Hampton Airport. It is proposed to meet criteria associated with Airport Reference Code B-II with a length of 4,255 feet as currently exists and a width of 75 feet, a reduction of 25 feet. This reduction in width would require moving the runway edge lights, runway end lights and Runway End Indicator Lights is proposed for the long term. i.e., at such time as the runway pavement and lighting system require replacement. Other modifications proposed include eliminating the current displaced landing threshold on Runway 28 via relocation of a segment of Daniel's Hole Road to increase clearance for vehicles, particularly trucks, using that portion of the road; providing a full length parallel taxiway on the north via connecting a straight segment between the existing Taxiway A and Taxiway D; constructing a bypass taxiway on the Runway 28 end; and constructing a new taxiway connecting Taxiway G and the southern FBO area with the Runway 28 threshold. Each action and its alternatives are discussed in greater detail below.

4.2.4 Eliminate Displaced Landing Threshold on Runway 28

Although currently not shown via runway markings, there should be a 150 foot displaced landing threshold on Runway 28 due to insufficient clearance over Daniel's Hole Road in accordance with current FAA design standards. This displaced threshold would not be necessary if Daniel's Hole Road were relocated further eastward to increase clearance under the approach slope. The proposed new alignment of the road shown on Figure 1-1 is the minimum linear distance, but is longer than the existing right of way resulting in slightly increased travel distances, transit times and therefore greater fuel consumption and air pollutant emissions for ground vehicles. Alternative routings are possible, but would result in higher construction costs and increased travel distances. Making no change will result in non-conformance with FAA regulations, decrease margins of safety, or result in the marking of the displaced landing threshold on Runway 28. A displaced landing threshold would reduce available landing length for arriving aircraft on Runway 28 but there would be no change in the overall ability to accommodate the same type of aircraft.

4.3 Provide Full Length Taxiway for Runway 10/28

Providing a center link between the two existing taxiways for Runway 10/28 will result in a full length taxiway on the north side of Runway 10/28. This will shorten taxiing distances for arriving and departing aircraft using this runway reducing fuel consumption, air pollutant emissions and operating times for aircraft on the main runway. There is no reasonable alternative location since the extension must connect existing Taxiways A and D or taxiing on Runway 4/22 or Runway 10/28 will be required for aircraft to access the Terminal Area. Deleting this proposed improvement will require aircraft to backtaxi on the existing runway pavement which is not a recommended procedure or to use Runway 4/22 to access the Terminal Area and associated parking in FBO leaseholds. Use of Runway 4/22 by the largest aircraft contributes to excessive pavement deterioration.

4.4 Construct Bypass Taxiway on the Runway 28 End

The proposed bypass taxiway on the Runway 28 end of Runway 10/28 provides access to departing aircraft when the existing taxiway is blocked by a departing aircraft awaiting clearance for an instrument departure. It is similar in size and location to the existing bypass taxiway at the Runway 10 threshold. This will avoid delays to departing aircraft, reduce idling time on the ground and decrease associated fuel consumption and air pollution. There is no feasible alternative location and deleting this proposed improvement will preserve existing inefficiencies.

4.5 Construct Taxiway on South Side of Runway 10/28

A short taxiway connecting the existing FBO on the south side of the Airport will permit access to the main runway for departing aircraft using Runway 28 which now must taxi on the runway itself to access the Runway 28 threshold. This proposal reduces taxiing distance and decreases runway occupancy time, improving overall flow. In addition, it prevents unsafe conditions caused by crossing or taxiing on an active runway. There is no reasonable alternative configuration and the absence of this improvement will result in increased costs and decreased margins of safety.

4.6 Seasonal Aircraft Control Tower

A seasonal control tower is proposed for use during the May through October period. This will permit appropriate assignment of aircraft and helicopters to the most appropriate flight tracks improving adherence to noise abatement and other procedures.

Two sites are under consideration. The north site is shown on Figure 1-1 near the intersection of Runway 10/28 and Runway 4/22. The proposed site is linked to Daniel's Hole Road by a proposed driveway accessing the site. As shown on the diagram, the proposed driveway is routed to avoid areas currently forested. A second potential site lies southeast of the intersection of Runway 10/28 and Runway 4/22. This site is already linked by a gravel drive roughly parallel to the Runway 4/22 centerline on the southeast side thence exiting onto Industrial Road. The seasonal tower is actually a mobile unit and not a fixed structure.

Both proposals do not involve site clearing or significant grading or filling and no tree removal will be required in either location. The determination of the preferred site is dependent on the preferences of the company that will staff and operate the facility.

The alternative to establishing a seasonal control tower is a continuation of uncontrolled airport use with attendant difficulties in enforcing appropriate flight management including adherence to noise abatement management techniques.

4.7 Automated Weather Observation Station

The AWOS is a weather observation unit that transmits current weather data directly to aircraft. It is currently being established at the location shown of Figure 1-1. In order to provide representative information unaffected by structures or trees which could deflect the overall wind pattern, its preferred location is the center of the airport tract surrounded by an open area. This also eliminates the potential for interference with the broadcast signal. Since it must be powered through an underground cable, the most cost effective location is adjacent to the Terminal Area. While other sites may be feasible, the several criteria are most efficiently satisfied by the current site, centered in the triangle bounded by Runways 10/28, 4/22 and Terminal Area. Alternative sites are feasible should this location potentially interfere with future airport improvements.

Absence of the AWOS will increase the potential for aircraft approaching the Airport in low visibility conditions when landings are not feasible resulting in additional noise events and will not accommodate potential reclassification of the airspace environment.

4.8 FBO Improvements

The southern FBO area is proposed to be improved with a fuel storage facility to eliminate the need for trucking fuel from the existing facility located on the north side of the Terminal Area. This reduces fuel consumption by trucks, and speeds fueling operations. It may be advantageous to install a second fuel farm area for the northern FBO and eliminate the existing Town operated facility. This would eliminate the Town's role as the "middle man" in operating and financing the fuel farm and procuring adequate fuel stocks.

The northern FBO area includes two older large hangars that are proposed for replacement and enlargement, but plans are not shown on Figure 1-1 since the proposal is in the early phase of preparation. This proposal is stimulated by the fact that the existing structures are antiquated, and insufficient under roof space is available to handle some aircraft already on the Airport. Any such proposal will be evaluated under current Town government consensus on avoiding growth inducing expansion proposals (see Decision-Making Model in Appendix.E).

4.9 Terminal Area Improvements

Two projects are proposed for the terminal area and are already underway. A maintenance building will be constructed on a site fronting on the terminal ramp south and east of the terminal building. The site is cleared and the foundation already in place.

The parking area that serves the main terminal building is being expanded. The currently turfed area along the southern margin is being paved to provide dedicated spaces for rental cars. A second turfed area on the north side of the existing parking area is being paved for additional employee parking. Alternative locations would require construction of parking outside of the current Terminal Area which would be less convenient for airport users.

Although not currently planned, programmed or included on the list of proposals, security fencing may be required by federal regulators. Similarly, fencing to discourage wildlife, particularly deer, may be required to adhere to necessary standards of safe operation.

4.10 Industrial Development Request for Release

A series of tracts located along Industrial Road on the south side of the Airport are proposed to be released from aeronautically exclusive use, i.e., may be used for general industrial, commercial, or institutional uses. This would expand the potential market for the currently undeveloped sites.

Several of these sites are already developed under lease to a variety of uses including a broadcast studio, school and other non-aviation commercial or institutional purposes. The proposed plan seeks to obtain releases from the FAA for these parcels so that they may support additional lease development or sale and provide revenue to the Airport. No plans or specifications have been created. Portions of these sites which are currently forested would be cleared. Potential site development would be subject to the conditions of the Ground Water Overlay Protection Zone and other Town of East Hampton ordinances. The alternative is the continuation of the current status which makes marketing and financing of proposed additional uses more difficult and/or impractical.

A second potential industrial development site is proposed on the northern side of the airport tract adjacent to Daniel's Hole Road. It is reserved for aviation related use which, depending on the exact location and configuration, could include airside access such as for eventual hangar development. This area, as shown on Figure 1-1, is approximately 5.5 acres, is entirely wooded with a mix of evergreen and deciduous vegetation. The proposal is a long term future proposal which at an undetermined future point would be made available for additional aviation related development when the current areas on the south side are completely utilized or if a larger site than any currently available is required. Further detailed environmental approvals would precede development and the process would be governed by the Town Zoning ordinance. Alternative sites would have less convenient access to Daniel's Hole Road, require longer utility lines, greater linear driving distances or would utilize other areas reserved for environmental protection.

4.11 Runway Protection Zone Compliance

All areas included as part of the Runway Protection Zones which are located at the end of each active runway should be owned or the land uses controlled by the Airport. All four Runway Protection Zones have portions off airport. A total of 0.71 acres or 30,928 square feet are included in these four small parcels. These areas are recommended for acquisition or alternative form of land use control. The alternative to doing so would be non compliance with required safety criteria or shortening each runway to draw these areas back onto land currently owned.

4.12 Further Environmental Review

All projects discussed in the Purpose and Need section of this GEIS, when carried out in conformance with these plans, can proceed in compliance with SEQRA with no further environmental review required with the following exceptions and conditions.

Release of industrial sites is a change in the status of these lands. Any proposed development projects will proceed only after compliance with Town regulations including further environmental review, compliance with zoning code requirements, and site plan review as would occur if these sites were located elsewhere in East Hampton.

The designated future development area on the north side of the airport will similarly be subject to Town environmental and planning and zoning requirements and other local laws prior to any site alteration including land clearing.

Other provisions of Town, county and state regulations may apply to projects reviewed within this document. This includes, for example, fuel farm design, development and operation.

5.0 Expected Environmental Impacts

5.1 Noise

5.1.1 Introduction

Assessment of future noise impact is based on the five year forecast of operations. This projection shows little growth, consistent with the last several years of record. Single engined and twin engined aircraft volumes are expected to trend downward while jet aircraft and helicopters operations are expected to increase.

Noise contours for both the average day and the busy day are presented. Busy day volumes are expected to be the same as the busy day volumes calculated for 2008.

The major change depicted is the consequence of the closure of Runway 16/34 and the rehabilitation of Runway 4/22. This change shifts some noise exposure away from open areas and toward the adjacent sections of Wainscott southeast of the Airport. Consideration of noise abatement design and operational measures are discussed under the Alternatives Analysis (Section 4.0).

5.1.2 Future Noise Contours Average Day 2013

Figure 5-1 presents the 2013 projected noise contours from DNL 50 to DNL 80. The contours are similar in shape and size to the existing conditions determination with the exception of the elimination of the contour lobes associate with Runway 16/34 which is expected to be converted into a taxiway and the shift of that activity to Runway 4/22. As a consequence the outer contour projects southwestward into Wainscott.

Forecast average day traffic levels on an annual and a daily basis are shown in Tables 5-1 and 5-2.

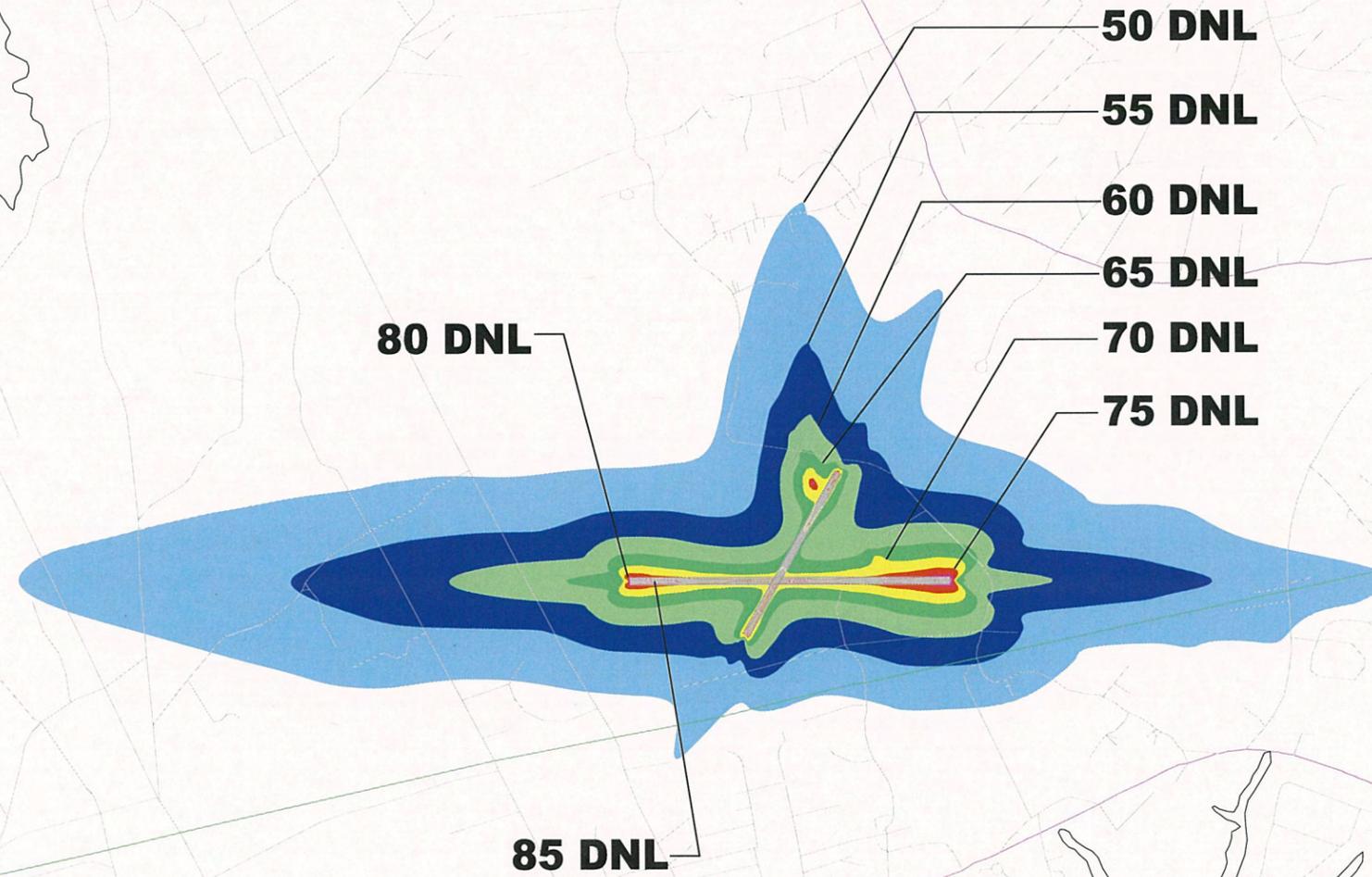
Total areas included within the contours include 1.776 square miles within DN 50, 0.715 sq. mi. in DNL 55, 0.323 sq. mi. within DNL 60, 0.149 sq. mi. within DNL 65, 0.065 within DNL 70 and 0.021 within DNL 75. All areas at the DNL 65 level and above are entirely within airport land holdings.



GRAPHIC SCALE



(IN FEET)
1 inch = 1000 ft.



| LEGEND | |
|-------------|--------|
| Light Blue | 50 DNL |
| Dark Blue | 55 DNL |
| Light Green | 60 DNL |
| Dark Green | 65 DNL |
| Yellow | 70 DNL |
| Orange | 75 DNL |
| Pink | 80 DNL |
| Purple | 85 DNL |

FIGURE 5-1 - AVERAGE DAY (2013) NOISE CONTOURS

Table 5-1: East Hampton Airport Future Case Forecast (2013) – Annual Volumes by Type

| INM Type | Aircraft | Annual Volumes |
|--------------------------------|--------------------------------------|-----------------------|
| <i>Jets</i> | | |
| GV | Gulfstream V | 106 |
| GIIB | Gulfstream IIB | 15 |
| CL600 | Canadair Bombardier Challenger CL600 | 268 |
| LEAR25 | Lear 25 | 4 |
| LEAR35 | Lear 35 | 348 |
| MU3001 | Beechjet 400 | 173 |
| CNA55B | Cessna Citation Bravo 550 | 1,039 |
| IAI1125 | Astra Jet 1125 | 141 |
| <i>Turbo</i> | | |
| CNA441 | Cessna Conquest 441 | 228 |
| DHC6 | Twin Otter DHC-6 | 146 |
| <i>Twin</i> | | |
| BE58P | Beech Baron BE58P | 479 |
| PA31 | Piper Navajo Chieftain PA-31 | 479 |
| <i>Single</i> | | |
| GASEPF | Single Engine, Fixed pitch | 4,625 |
| GASEPV | Single Engine, Variable pitch | 3,875 |
| <i>Helicopter</i> | | |
| S76 | Sikorsky S-76 Spirit | 1,766 |
| SA355 | Aerospatiale SA-355 Twin Star | 1,766 |
| Total Landings | | 15,458 |
| Total Annual Operations | | 30,916 |

Table 5-2: East Hampton Airport Future Case Forecast (2013) – Daily Volumes by Type

| INM Type | Aircraft | Daily Landings |
|-------------------------------|--------------------------------------|-----------------------|
| <i>Jets</i> | | |
| GV | Gulfstream V | 0.29 |
| GIIB | Gulfstream IIB | 0.04 |
| CL600 | Canadair Bombardier Challenger CL600 | 0.73 |
| LEAR25 | Lear 25 | 0.01 |
| LEAR35 | Lear 35 | 0.95 |
| MU3001 | Beechjet 400 | 0.47 |
| CNA55B | Cessna Citation Bravo 550 | 2.85 |
| IAI1125 | Astra Jet 1125 | 0.39 |
| <i>Turbo</i> | | |
| CNA441 | Cessna Conquest 441 | 0.62 |
| DHC6 | Twin Otter DHC-6 | 0.40 |
| <i>Twin</i> | | |
| BE58P | Beech Baron BE58P | 1.31 |
| PA31 | Piper Navajo Chieftain PA-31 | 1.31 |
| <i>Single</i> | | |
| GASEPF | Single Engine, Fixed pitch | 12.67 |
| GASEPV | Single Engine, Variable pitch | 10.62 |
| <i>Helicopter</i> | | |
| S76 | Sikorsky S-76 Spirit | 4.84 |
| SA355 | Aerospatiale SA-355 Twin Star | 4.84 |
| Total Daily Landings | | 42.35 |
| Total Daily Operations | | 83.88 |

Table 5-3 shows a comparison of the reported area values and population for 2008 and 2013. Slight growth in the contours was found to occur. However, these areas remain below the levels reported for 2006 and earlier years. The DNL 65 contour remains on the Airport in both the 2008 and 2013 annual average cases. Cumulative noise impacts of the current magnitude are now below those that prevailed in the 1990s.

Population figures are essentially the same. The number shown in the DNL 70 line is caused by an aspect of the INM calculation process. Specifically, the INM counts population through the enclosure of “centroids” or bundles of individuals. Centroids are placed arbitrarily at specific locations based on the accumulations of the population counted in the 2000 Census. In this case, one centroid is located directly in the middle of Runway 10/28 resulting in the 73 or 74 people shown exposed to DNL 60 and above noise contours. In actuality, no homes or residents are located on the airport.

Table 5-3: Comparison of 2008 and 2013 Annual Average Noise Contours

| Noise Contour Areas and Population | | | | |
|---|------------------|-----------------------------|------------------|-----------------------------|
| <i>(All Areas in Square Miles)</i> | | | | |
| | 2008 Area | Estimated Population | 2013 Area | Estimated Population |
| DNL 50 | 1.683 | 91 | 1.776 | 91 |
| DNL 55 | 0.669 | 74 | 0.715 | 74 |
| DNL 60 | 0.294 | 73* | 0.323 | 73* |
| DNL 65 | 0.137 | 73* | 0.149 | 73* |
| DNL 70 | 0.060 | 0 | 0.065 | 73* |
| DNL 75 | 0.017 | 0 | 0.021 | 0 |
| DNL 80 | 0.005 | 0 | 0.003 | 0 |

* These population values are a result of the use of “centroids” placed arbitrarily at locations. One centroid is located directly in the middle of Runway 10/28 when in actuality no homes or residents are located on the Airport.

5.1.3 Busy Day Noise Contours 2013

Figure 5-2 shows the Busy Day Contour for 2013. It is similar to the 2008 Busy Day Contour and uses the same volumes. The shift of activity from Runway 16/34 to Runway 4/22 can be readily discerned.

Table 5-4 shows a comparison of the area and population counts as determined by the INM. The counts are identical with the exception of a projected increase of 163 people at the DNL 50 level. This is a consequence of the greater population in the Wainscott area near the threshold of Runway 4.

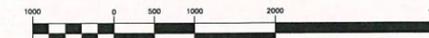
Table 5-4: Comparison of 2008 and 2013 Busy Day Noise Contours

| Noise Contour Areas and Population | | | | |
|---|------------------|-----------------------------|------------------|-----------------------------|
| <i>(All Areas in Square Miles)</i> | | | | |
| | 2008 Area | Estimated Population | 2013 Area | Estimated Population |
| DNL 50 | 7.656 | 798 | 7.841 | 961 |
| DNL 55 | 2.397 | 159 | 2.41 | 159 |
| DNL 60 | 0.940 | 74 | 0.947 | 74 |
| DNL 65 | 0.407 | 74* | 0.418 | 74* |
| DNL 70 | 0.184 | 73* | 0.189 | 73* |
| DNL 75 | 0.085 | 73* | 0.087 | 73* |
| DNL 80 | 0.032 | 0 | 0.031 | 0 |

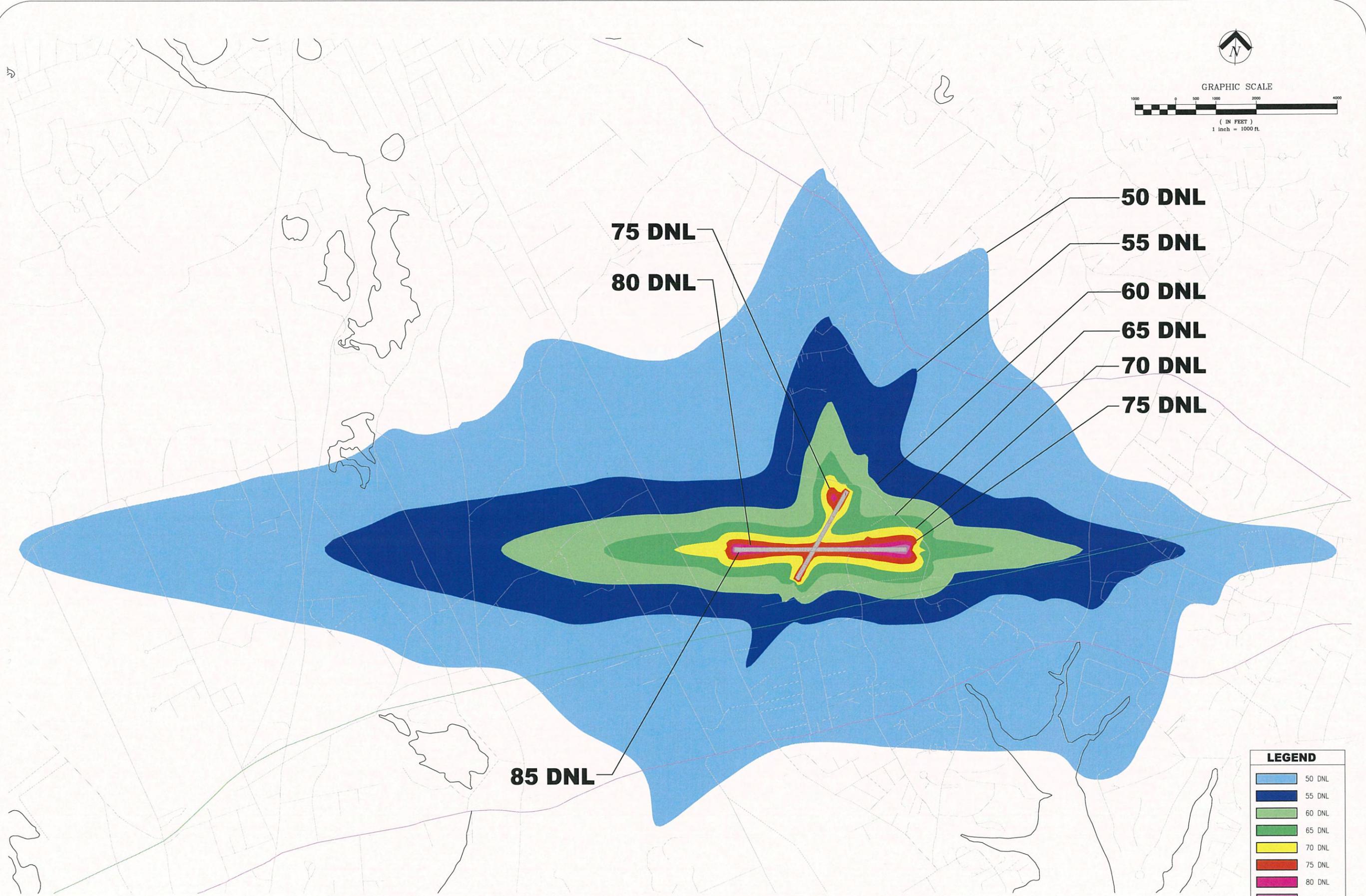
* These population values are a result of the use of “centroids” placed arbitrarily at locations. One centroid is located directly in the middle of Runway 10/28 when in actuality no homes or residents are located on the Airport.



GRAPHIC SCALE



(IN FEET)
1 inch = 1000 ft.



75 DNL

80 DNL

50 DNL

55 DNL

60 DNL

65 DNL

70 DNL

75 DNL

85 DNL

| LEGEND | |
|--------|--------|
| | 50 DNL |
| | 55 DNL |
| | 60 DNL |
| | 65 DNL |
| | 70 DNL |
| | 75 DNL |
| | 80 DNL |
| | 85 DNL |

FIGURE 5-2 - BUSY DAY (2013) NOISE CONTOURS

5.2 Air Quality

5.2.1 Air Pollutant Sources

Air pollutant sources associated with general aviation activity include aircraft engine emissions, ground vehicle emissions from employees as well as travelers, construction impacts, venting of fuel tanks, and space heating of hangars, terminal and office space, and ground service vehicle operation.

The primary pollutant of concern and the only one showing recent violations of the New York State and Federal Ambient Air Quality Standards is ozone. Ozone is produced by photochemical reactions in the atmosphere typically on sunny summer days. These reactions typically consume sufficient time that the manifestation of the pollutant may be many miles from the emission sources. Therefore, in East Hampton the precursor components of ozone that may be emitted will normally materialize as ozone in off shore areas driven by prevailing winds.

5.2.2 Aircraft Operations

Assessment of air quality impacts normally accomplished in accordance with FAA procedures. These are defined in "Air Quality Procedures for Civilian Airports and Air Force Bases, April 1997." East Hampton Airport hosted 29,220 total operations during 2008 or 14,610 Landing Takeoff Cycles (LTOs). The threshold of analysis identified on page 20 of that document indicates that no air quality analysis is needed for projects at airports showing less than 180,000 annual (LTOs). Conformity with air quality maintenance goals is assumed. Traffic levels at East Hampton are approximately 8 percent of the threshold triggering detailed analysis. This situation remains essentially unchanged for the five year future.

Although not regulated under ambient air quality standards, odors from fueling of aircraft have been reported at some airports. None have been reported in East Hampton since the operational areas are well separated from residential areas.

5.2.3 Ground Vehicle Operations

Modest increases in arriving and departing passenger vehicles may occur as a result of a changing future mix of aircraft. The increase is less than 10 percent of existing trip generation. Generally, intersections that allow for airport access are free flowing since the area has low population densities. Daily peak periods support significant vehicle flows, but these are not related to airport generated traffic. Further, area roadways tend to be narrow preventing the congregation of sufficient numbers of vehicles to create carbon monoxide hotspots.

5.2.4 Ground Service Vehicles

Ground services consist primarily of fueling trucks, management vehicles, and tugs. These are insufficiently used to create significant air quality impacts.

5.2.5 Construction Impacts

Reactivation of Runway 4/22 will require repaving (2,375' x minimum 60'). This will cause air pollutant emissions from the importation of asphalt and the equipment used to spread and compact the material. It is the approximate equivalent of repaving one mile of roadway.

Similarly, the **relocation of Daniel's Hole Road** and the construction of the various taxiways will cause air pollutant emissions from the grading and paving process. Approximately 2,000 linear feet of pavement, 25 feet wide will be required for the new section of Daniel's Hole Road (subject to full design and adherence to local and State transportation safety requirements). The completion of the **parallel taxiway to Runway 10/28** will require 850' x 40' of pavement. The **bypass taxiway** at the Runway 28 end will be approximately 240' long and 40' wide and the **extension of Taxiway G** will be approximately 1,100' long by 40' wide. These projects are assumed to occur at different points in time and emissions will cease after construction.

The remaining projects included in the proposed plan – **modification of vehicle parking, construction of maintenance building, installation of AWOS, and installation of seasonal control tower** – are not substantial with regard to construction efforts; therefore, air quality impacts can be assumed to be negligible. There are potential impacts from the development of the **northern industrial site**, depending on the extent of construction that will occur. These are expected to be minor and temporary.

5.2.6 Findings and Conclusions

The proposed plan is below the threshold for analysis with respect to all categories of air pollutants under state and federal criteria. There is no potential for substantial additional impact in comparison to other major projects either already in operation or under construction. Air quality in the project vicinity is in compliance with the exception of ozone. The area is unobstructed in terms of air flow and is adjacent to large water bodies with essentially no air pollutant sources.

5.3 Water Related Impacts

The proposed development plan at the Airport took into consideration the potential impacts to groundwater and will be consistent with the existing land use provisions enacted by the *Town of East Hampton Comprehensive Plan*. The areas north and east of Daniel's Hole Road (107 acres) will be retained for parks and conservation and clearing of the land will be limited to the extent necessary for continued safety at the Airport. **Reactivation of Runway 4/22** will require the removal and trimming of trees within this area, in order to adhere to FAA requirements (9.75 acres of trees to be removed and 4.7 acres to be trimmed). Removal of trees will be minimized to the extent possible. Even in areas where trees are to be removed, shrubs and understory vegetation will be maintained as long as they do not penetrate any obstruction surface, stumps will be cut to the ground, and root systems will be left in place. Alternatively, to the extent feasible, the area will be revegetated with native low-growing plants with mature heights below any obstruction surface. This will reduce erosion impacts and ensure the continued integrity of the Town's groundwater. In addition, the **relocation of Daniel's Hole Road** further east of its

existing layout will require minimal clearing of trees and will accommodate the increased stormwater within the design. The total amount of clearing will be within the limits of the Water Recharge Overlay District (not to exceed 10,000 square feet or 50% of the lot area, whichever is greater). No new commercial or industrial uses will be located within this conservation area so that it will remain part of the core groundwater protection areas for the Town.

No irrigation system exists or is proposed for the Airport; therefore, manual irrigation will continue at a minimal rate, limiting the impact to groundwater and drinking water resources. No fertilizers, pesticides, or herbicides will be used at the Airport. Increased impervious surfaces (from **relocation of Daniel's Hole Road, completion of parallel taxiway to Runway 10/28, bypass taxiway at Runway 28 end, extension of Taxiway G, modification of vehicle parking, and installation of seasonal control tower**) will not impact stormwater through the use of existing drywells. The sandy soil results in minimal stormwater impacts. As necessary, drainage systems will incorporate oil/water separators to prevent petroleum products from entering the groundwater.

Since operations are forecast to remain steady in the near future, water consumption is not expected to increase at the Airport. Facilities are currently served by individual septic systems. Only the **maintenance building** and **seasonal control tower** will result in an additional need for water, producing only minimal demand.

With the exception of Daniel's Hole Road/Wainscott-NW Road, there is no development within 150 feet of the on-site wetland and no development or activity is proposed; therefore, there would be no impact to wetlands from any of the proposed projects.

5.4 Historic, Architectural, Archaeological, and Cultural Resources

Since there are no Historic Properties on the Airport property and no indication that the Airport is within an area sensitive to historic or cultural resource, there would be no impact to historic, architectural, archaeological, and cultural resources from any of the proposed projects.

5.5 Energy Supply Impacts

The proposed projects will not result in an increase in operations or activity at the Airport. There would be only a negligible increase in consumption of electricity from the installation of new facilities, including the **maintenance building, AWOS, and seasonal control tower**. The current shortfall in fuel supply during the peak summer months will be addressed through the installation of a second **Jet A fuel tank**. The remaining projects would have no impact on energy supply.

5.6 Solid Waste Impacts

Per FAA Order 5050.4B, "airport actions which relate to airfield developments (runways, taxiways and related items) will not normally include any direct relationship to solid waste collection, control, or disposal other than that associated with the construction itself." As part of

the **reactivation of Runway 4/22**, trees north of the runway end must be removed or trimmed generating a limited amount of vegetative waste. A minor amount of clearing will be required for the **relocation of Daniel's Hole Road** and the original portion of the road must be removed (approximately 5,000 SY). This waste can be disposed of locally or recycled, if of appropriate quality. The remaining construction projects are not expected to generate a significant amount of debris which can be accommodated by the Town of East Hampton.

5.7 Biotic Impacts

None of the specified projects is sufficient in scale to fundamentally alter or degrade the existing land cover. Almost all construction projects will occur in areas already used for airport and aviation related purposes. Existing development regulations will allow eventual development while minimizing on-site disruption and preserving subsurface water resources. Any revegetation required for Airport projects will be planted with native grassland species which are adapted to the soil and droughty conditions of the site. To prevent alien seed species being imported to the site, topsoil for construction projects will be obtained from elsewhere on the Airport property. In addition, the current mowing schedule (once per year, typically in mid-summer) will be implemented to maintain the grassland areas of the Airport.

Removal or trimming of trees within the **approach to Runway 4/22** will be minimized to the extent possible (9.75 acres of trees will be removed and 4.7 acres of trees will be trimmed). Even in areas where trees are to be removed, shrubs and understory vegetation will be maintained as long as they do not penetrate any obstruction surface, and stumps will be cut to the ground and root systems will be left in place. Alternatively, to the extent feasible, the area will be revegetated with native low-growing plants with mature heights below any obstruction surface. This will preserve the land cover and reduce erosion impacts. The **relocation of Daniel's Hole Road** will result in only a small amount of clearing. The potential **future development of the industrial site** in the north of the Airport property may result in clearing of up to 5.7 acres of land; however, that amount of clearing would not significantly impact the biotic communities on or in the vicinity of the Airport. No other projects would result in an impact to biotic communities.

5.8 Impacts to Endangered Species

There are no federally designated rare or endangered species found on the Airport. Five species of concern have been identified; three plant species and two bird species.

Only two projects have the potential for impacting the plant species of concern, the **completion of the parallel taxiway to Runway 10/28 and the reactivation of Runway 4/22**.

There is a small population of the Pine Barren Sandwort found in the area where the proposed taxiway segment will be constructed. This plant species is relatively common in shoreline areas through the Mid Atlantic States, but suitable areas for it are relatively uncommon in New York. The loss of these plants is not significant, but could be entirely avoided if they were moved during the dormant season to other areas.

The Bird's Foot Violet occurs in the areas along Daniel's Hole Road in the vicinity of the Runway 4 and Runway 16 thresholds. Impacting these plants can be avoided by limiting disturbance of adjacent areas during construction and the rehabilitation of Runway 4/22.

Avoiding construction during the sensitive times of the year for bird and animal reproduction is recommended. Construction practices should minimize disruption to adjacent areas since revegetation of disturbed areas may be difficult given the constraints of the soils. Finally, any required fill should be obtained from designated borrow pits on the Airport to avoid introduction of unwanted plant species.

5.9 Construction Impacts

As described in the Air Quality section (5.2.5), several of the proposed projects will have some construction impacts, although most will be minor. It is anticipated that the projects will be constructed individually, with only limited overlap, thereby, minimizing any impacts. The projects with the most significant construction scope include the **rehabilitation of Runway 4-22, the relocation of Daniel's Hole Road, and the construction of the various taxiway sections.** To a lesser degree, **modification of the vehicle parking, construction of the maintenance building, installation of the AWOS, and installation of the seasonal control tower** will result in construction impacts as well.

Construction impacts are usually short-term and occur only during the construction period when the contractors, personnel and equipment are operating at the Airport. An increase in noise level and dust can be expected as a result of equipment in the area. However, these impacts can be minimized by using universally accepted construction methods for airports.

Contractors will be required to implement dust and erosion control procedures such as wetting the soil in active work areas and seeding with fast growing grass in work areas that are temporarily inactive. These procedures are standard bid items under the FAA standard specification Item P-156, *Temporary Air and Water Pollution, Soil Erosion, and Siltation Control*. This specification also contains several other control options such as prohibition of burning on the site and the requirement that trucks transporting loose material be covered. In addition, any controls set forth by the Suffolk County Soil & Water Conservation District will be initiated and maintained throughout all construction phases.

In addition, in an effort to promote construction procedures which will protect, enhance and preserve a favorable environment, pre-construction meetings will be mandatory with each selected contractor prior to breaking ground for each project. These meetings will serve to inform and instruct the contractor of the techniques and procedures discussed in FAA AC 150/5370-10, *Standards for Specifying Construction of Airports*. These specifications and control measures will be maintained by the contractor during the life of the contract. Because of the above efforts, construction impacts will be minimized and, because they are only temporary, they are not anticipated to cause long-term significant impacts.

5.10 Other Environmental Impacts

DOT Section (f) Land – Since there is no DOT Act Section 4(f) land on or near the airport and no proposed project at the Airport would require the use of any Section 4(f) land, there would be no impact to Section 4(f) lands from any of the proposed projects.

Floodplains – The Airport has been identified as an area outside the 500-year floodplain; therefore, no proposed project would impact floodplains.

Coastal Zone Management and Coastal Barriers – The East Hampton Airport is not situated within the Coastal Zone or Coastal Barrier Resources System, or in the vicinity of any local coastal erosion overlay zones. Therefore, there would be no impacts to coastal resources from the proposed projects.

Wild and Scenic Rivers – According to the New York State Wild, Scenic, and Recreational River System Map (NYSDEC), there are no designated wild or scenic rivers in the vicinity of the Airport; therefore, the proposed projects would not affect wild and scenic rivers.

Prime or Unique Farmland – Since the East Hampton Airport is not on or contiguous to agricultural land and the proposed projects would not involve the conversion of farmland to non-agricultural uses, the Farmland Protection Policy Act (FPPA) does not apply and the proposed projects would not affect farmland.

Hazardous Materials Disposal – There would be no change in the type and amounts of hazardous materials on Airport property from any of the proposed projects. The Airport has procedures in place to ensure that hazardous materials are disposed of properly and there is no significant impact.

Environmental Justice – There are no areas in proximity to the Airport which have significant populations of minority or low income individuals. In addition, the proposed projects would not create additional aircraft operations and no project would extend beyond the Airport property. Therefore, there would be no impact to environmental justice.

5.11 Cumulative Impacts

Cumulative impacts are the impacts on the environment that result from the incremental effects of the proposed projects when added to other past, present, and reasonably foreseeable future actions to be taken at the site. Cumulative impacts can result from individually minor, but collectively significant sets of actions taken over time.

For the past ten years there has been very little activity at the Airport, as far as new construction or improvements. The aircraft parking apron in the front of the terminal building was rehabilitated in 2001 and other facilities have been maintained, but no other projects have been undertaken. It has been over ten years since Runway 10-28 was rehabilitated (in the mid-1990's). The impacts from those projects were primarily limited to temporary construction impacts and

would not contribute to the significance of present or future actions. This GEIS encompasses all of the current and reasonably foreseeable future actions to be taken at the Airport; therefore, the impacts from the proposed projects reflects the cumulative impacts.

5.12 Summary

Table 5-5 provides a summary of the impacts from each of the proposed projects across all the impact categories. Overall, none of the proposed projects has the potential to cause significant impacts.

Table 5-5: Summary of Impacts

| Project | Noise | Land Use | Air Quality | Water Quality | Historic, Architectural, Archaeological, and Cultural Resources | Biotic Communities | Endangered Species | Wetlands | Energy Supply and Natural Resources | Light Emissions | Solid Waste | Other Env. Concerns¹ |
|---|---|--|---|--|--|---|---------------------------|-----------------|---|---|---|--|
| Rehabilitate RW 4/22; obstruction removal at 22 end | Change in noise contours; no significant impact to sensitive land uses. | Consistent with current Airport use; no significant impact to surrounding community. | No significant change in operations; temporary impacts from construction | No significant impact to groundwater or stormwater; clearing within limits of Water Recharge Overlay District requirements | No impact. | Minor impact from removal and trimming of trees in RW 22 approach; shrubs and understory vegetation to remain in place. | No impact. | No impact. | No significant change in demand. | No significant increase. | No significant change. | No impact. |
| Convert RW 16/34 to Taxiway | Reduced noise over RW 16/34 approaches | Consistent with current Airport use. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No significant change in demand. | Decrease in emissions from approach lights. | No significant change. | No impact. |
| Relocate Daniel's Hole Road | Temporary increase during construction. | Maintained within Airport property. | Temporary impacts from construction. | No significant impact to groundwater or stormwater; clearing within limits of Water Recharge Overlay District requirements | No impact. | Minor impact from clearing of small amount of trees. | No impact. | No impact. | No impact. | No impact. | Disposal of original road section is a minor increase, to be accommodated by existing facilities. | No impact. |
| Complete Parallel Taxiway to RW 10/28 | Temporary increase during construction. | Consistent with current Airport use. | Decreased emissions from improved circulation; temporary impacts from construction | No significant impact to groundwater or stormwater | No impact. | No significant impact; area currently cleared. | No significant impact. | No impact. | Reduced fuel consumption from improved circulation. | Minor increase from taxiway lights. | No significant change. | No impact. |
| Bypass Taxiway at RW 28 end | Temporary increase during construction. | Consistent with current Airport use. | Decreased emissions from reduced idling times; temporary impacts from construction. | No significant impact to groundwater or stormwater | No impact. | No impact; area currently cleared. | No impact. | No impact. | Reduced fuel consumption from reduced idling times. | Minor increase from taxiway lights. | No significant change. | No impact. |
| Extend TW G at RW 28 end | Temporary increase during construction. | Consistent with current Airport use. | Decreased emissions from improved circulation; temporary impacts from construction. | No significant impact to groundwater or stormwater | No impact. | No impact; area is currently cleared. | No impact. | No impact. | Reduced fuel consumption from improved circulation. | Minor increase from taxiway lights. | No significant change. | No impact. |
| Additional Fuel Farm | No impact. | Maintained within Airport property. | Decreased emissions from reduced number of fuel transfers. | No significant impact to groundwater; fuel tanks are above-ground and would adhere to spill prevention regulations | No impact. | No impact. | No impact. | No impact. | Improved fuel capacity to meet peak summer demand. | No impact. | | No impact. |
| Modify Vehicle Parking | Temporary increase during construction. | No change in current use. | Temporary impacts from construction. | No significant impact to groundwater or stormwater. | No impact. | No impact; area is currently cleared. | No impact. | No impact. | No significant change in demand. | No impact. | No impact. | No impact. |

¹ Includes U.S. DOT Act Section 4(f), Floodplains, Coastal Management and Coastal Barriers, Wild and Scenic Rivers, Prime or Unique Farmland, Hazardous Material Disposal, and Environmental Justice.

| Project | Noise | Land Use | Air Quality | Water Quality | Historic, Architectural, Archaeological, and Cultural Resources | Biotic Communities | Endangered Species | Wetlands | Energy Supply and Natural Resources | Light Emissions | Solid Waste | Other Env. Concerns¹ |
|------------------------------------|--|--|--------------------------------------|--|--|---|---------------------------|-----------------|--|--|------------------------|--|
| Construct Maintenance Building | Temporary increase during construction. | Maintained within Airport property. | Temporary impacts from construction. | No impact; no increased impervious surface. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. |
| Install AWOS | Reduced from fewer number of missed approaches; temporary increase during construction. | Consistent with current Airport use. | Temporary impacts from construction. | No significant impact to groundwater or stormwater. | No impact. | No impact; area is currently cleared. | No impact. | No impact. | No significant change in demand. | No significant increase. | No impact. | No impact. |
| Install Seasonal Control Tower | Reduced from improved flight management and enforcement of noise abatement procedures; temporary increase during construction. | Consistent with current Airport use. | Temporary impacts from construction. | No significant impact to groundwater or stormwater. | No impact. | No impact; area is currently cleared. | No impact. | No impact. | No significant change in demand. | No significant increase. | No significant change. | No impact. |
| Acquire or Control RPZs | No impact. | No change in land use. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. |
| Release sites along Industrial Rd. | No impact. | Compatible with Airport land use and adjacent industrial uses. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. | No impact. |
| Reserve Future Industrial Site | No impact. | Compatible with Airport land use. | Temporary impacts from construction. | No significant impact to groundwater or stormwater; clearing within limits of Water Recharge Overlay District requirements | Site well outside wetland buffer. | Potential minor impact from clearing of up to 5.7 acres of trees. | No impact. | No impact. | No significant change in demand. | No significant increase; maintained within Airport property. | No significant change. | No impact. |

6.0 Mitigating Measures

6.1 Introduction

The proposed development is the product of an extensive consideration of options that was undertaken during the development of the Master Plan Report. That document included consideration of four differing future concepts or alternatives including 1) no action, 2) a reduction in capability, 3) a preservation of existing capability with improvements to satisfy safety requirements, efficiency, and reducing community impacts and 4) an expansion program to accommodate the largest facilities triggered by existing and future need. After consideration of all alternatives, the Town determined that a limited program focusing on improving the airport in terms of safety, efficiency and reduction of impact from operations would best serve the community's needs. The plan is deliberately limited in scope, avoids growth inducing measures, avoids wetland areas and avoids the need for extensive mitigation actions.

This concept is consistent with a variety of Town practices, policies and procedures which form the administrative context for the Airport. These are detailed below accompanying specific mitigating measures considered for implementation resulting from the adoption of the plan itself.

6.2 Runway 22 Extension

Reactivation of Runway 4/22, as detailed in the Alternatives Analysis, is required to meet adequate wind coverage standards. Runway 16/34 cannot easily or economically be improved to accommodate a parallel taxiway which is a design requirement.

However, reactivation of Runway 4/22 will increase noise impact in areas to the southwest of the Airport in Wainscott although only from small piston engined aircraft. In comparison to the other areas around East Hampton Airport, this area has the greatest concentration of single family residences. The closest residence is less than one quarter mile from the Runway 4 end on a straight out heading.

This area is under the approach to Runway 4 and under the straight out takeoff track for Runway 22. There is no convenient remedy to reduce landing noise for aircraft using Runway 4. Potential mitigating measures for Runway 22 takeoff noise are discussed below.

To examine the differences in noise impact that might result from either physical changes to Runway 22 or to recommended noise abatement flight tracks or other measures, single event grid point noise analysis using the Integrated Noise Model were prepared for the following four distinct alternatives.

- A straight out departure on Runway 22 as proposed,
- A straight out departure with the Runway 22 takeoff threshold moved 500 feet to the northeast,
- A noise abatement flight track via a low altitude turn to the 28 heading before reaching the Airport boundary, and

- A straight out departure on Runway 28 as an alternative to using Runway 22.

Two receptor sites were chosen, the closest residence to the southwest in Wainscott on the extended centerline of Runway 22 and the closest house to the Airport property line south of the extended centerline of Runway 28 in Southampton. Two alternative aircraft were selected for analysis, the Beech Baron, a twin engined piston powered aircraft, and a Cessna 172, a common single engined aircraft.

Table 6-1 below provides the numerical comparisons of these alternatives.

Table 6-1: Comparison of Peak Noise Levels – Closest House in Wainscott and Southampton

| <i>(All Values in decibels)</i> | | | |
|--|--------------------------|--------------------------------|---------------------|
| <u>Proposed Runway Threshold on Runway 22</u> | | | |
| | 22 Straight Track | 22 Noise Abatement Turn | 28 Departure |
| BEC58P, Beech Baron (Twin Engine) | | | |
| Wainscott - House 1 | 92.6 | 89.4 | 69.6 |
| Southampton - House 2 | 69.1 | 79.8 | 79.7 |
| | 22 Straight Track | 22 Noise Abatement Turn | 28 Departure |
| CNA172, Cessna Skyhawk (Single Engine) | | | |
| Wainscott - House 1 | 77.4 | 81 | 55.3 |
| Southampton - House 2 | 67.3 | 55.7 | 67.1 |
| <u>Extend Runway 22 500 feet to the Northeast</u> | | | |
| | 22 Straight Track | 22 Noise Abatement Turn | 28 Departure |
| BEC58P, Beech Baron (Twin Engine) | | | |
| Wainscott - House 1 | 91.1 | 84.4 | 69.6 |
| Southampton - House 2 | 70.0 | 83.8 | 79.7 |
| | 22 Straight Track | 22 Noise Abatement Turn | 28 Departure |
| CNA172, Cessna Skyhawk (Single Engine) | | | |
| Wainscott - House 1 | 79.9 | 72.5 | 55.3 |
| Southampton - House 2 | 56.2 | 72.4 | 67.1 |

Straight Out Heading on Runway 22 versus Runway 22 with a 500 Foot Extension – This comparison showed a difference of 1.5 dB at the closest house to the southwest in Wainscott in the case of the Beech Baron and a 1.1 dB difference from a Cessna 172. In both cases, these differences are less than three decibels and therefore probably not distinguishable at the location selected for analysis. Further Runway 22 has historically been used for only about 5 percent of departures. The runway extension is logically unjustified.

Noise Abatement Flight Track - Turning the aircraft to a westbound heading before crossing the Airport property line on a Runway 22 takeoff would avoid overflying Wainscott. In this case, the peak noise level in the Wainscott house would be reduced by 3.2 dB in the case of the Beech

Baron and 3.6 dB in the case of the Cessna 172. This is an audible difference, but just barely noticeable. There are two disadvantages. This track would raise the noise level at the selected house in Southampton by 4.0 dB and 5.1 dB in the case of the Beech Baron and Cessna 172 respectively although peak levels at this location would remain about five decibels lower overall than in Wainscott. The second disadvantage is the noise abatement turn would take place at a relatively low altitude, less than 300 feet above runway elevation. Margins of safety are reduced in such circumstances and the proposed noise abatement turn would logically be a voluntary procedure.

Combining proposed runway threshold relocation and the noise abatement flight track reduces peak noise levels by about five decibels at the point selected in Wainscott, but raises them by nearly the same amount at the house selected near the western Airport boundary line. However, this improvement in Wainscott is dependent on the turn altitude, i.e., the degree of improvement is greater in the Wainscott area as the turn altitude is lowered. However, the turn point remains uncomfortably low from an operational view point.

Straight Out Departure on Runway 28 – Results from the proposed noise abatement turn show that peak noise levels compared with a straight out departure on the main runway, Runway 28, show improvement in the Wainscott area and similar improvement in the house to the west in Southampton versus any alternative use of Runway 22.

This proposed mitigating measure provides insufficient noise reduction to merit its inclusion in the plan. A voluntary noise abatement turn for light aircraft is recommended under conditions when this can be safely executed. Larger twin engined aircraft should utilize Runway 10/28 in preference to Runway 22 for departures when wind conditions permit.

6.3 Design Measures – Runway System

Two design measures, provisions for a full parallel taxiway for Runway 10/28 and a bypass taxiway for the Runway 28 threshold, mitigate air pollutant emissions by reducing taxiing distances and potential delays to arriving and departing aircraft.

6.4 Helicopter Routing

Impacts resulting from helicopter noise have been partially mitigated through two strategies. Overflight altitudes have been raised to 2,500 feet above ground level. Two additional helicopter routes have been provided, one to the north over Northwest Creek and one from the south over Georgica Pond. This divides traffic and both routes have shorter segments over populated areas.

6.5 Management Practices

East Hampton Airport and much of the area north and east of the airport is situated above the largest source of ground water in the Town. A variety of management practices have been instituted to prevent contamination of this irreplaceable resource. These considerations are detailed in the Town of East Hampton Comprehensive Plan issued in May, 2005. The Plan

includes designation of part of the northeastern airport tract as a forest preserve adjoining other critical areas. All areas north and east of Daniel's Hole Road will remain forested and undeveloped except as required to support the existing Airport use (i.e., removal and trimming of trees to maintain Runway approaches and relocation of road at Runway 28 end to comply with FAA standards). At the Runway 22 end, the removal of tree obstructions will be minimized to the extent possible. Impacts to the ground cover will be reduced by maintaining shrubs and understory vegetation that do not penetrate any obstruction surface. Stumps will be cut to the ground and root systems will be left in place to reduce erosion and protect the integrity of the Town's groundwater. Alternatively, to the extent feasible, the area will be revegetated with native low-growing plants with mature heights below any obstruction surface. Areas designated for future industrial or commercial development are subject to local development regulations that are designed to prevent ground water contamination.

A management plan for open areas of the airport tract should be considered including protecting and promoting stable, sustainable ground cover, proper mowing and maintenance practices allowing for bird and wildlife sustenance during breeding seasons. Applications of materials, particularly hazardous chemicals, determined to be detrimental to ground water quality will be avoided. Preservation of the Pine Barrens ecosystem of which the Airport is a part will be enforced and expanded where practical.

6.6 Construction Practices and Timing

All development of areas within the Airport is expected to incorporate measures to reduce or eliminate the potential for erosion and sedimentation. Construction should occur during the summer, fall and winter months so as to limit impact to wildlife during the breeding season. Any future provisions for storm drainage system for ramps and parking areas will incorporate oil/water separators. Adequate stocks of absorbent materials will be available in the event of spillage of petroleum products. Above ground storage of petroleum, fuel, and waste liquids are preferred.

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