

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

February 8, 2012

E-Mail and Regular Mail

Secretary Richard K. Sullivan, Jr.
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

*RE: Provincetown Airport Final EIR
MEPA Project Number – EOEEA 13789
Attn: Analyst William Gage*

Dear Secretary Sullivan:

On February 7, 2012, a joint Cape Cod Commission (Commission)/MEPA public hearing was held and a Commission Subcommittee received comments on the Final Environmental Impact Report (FEIR) for the Provincetown Municipal Airport Capital Improvements Plan.

Prior to this hearing, the Commission Subcommittee received a copy of the FEIR. During the hearing, the Airport Commission and their consultant, Jacobs Engineering Group Inc. made a presentation on the FEIR, and Commission staff provided an analysis of the FEIR in a staff report. After consideration of this information, the Subcommittee voted to adopt the Commission staff report as their comments to MEPA.

The attached staff report provides comments on the Final Environmental Impact Report. Thank you for considering our comments. Please contact Commission staff if you have any questions or concerns about the attached report.

Sincerely,

Austin Knight
Subcommittee Chair

Enclosure

CC: Michael Garrity, Jacobs, 343 Congress Street, Boston, MA 02210
Sharon Lynn, Provincetown Town Manager
David Gardner, Provincetown Assistant Town Manager/DRI Liaison

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

STAFF REPORT

PROVINCETOWN MUNICIPAL AIRPORT CAPITAL IMPROVEMENTS PLAN FEIR/EA (EOEA # 13789)

COMMISSION SUBCOMMITTEE

Austin Knight (Provincetown) (*Chair*)
Joy Brookshire (Eastham)
Peter Graham (Truro)
Roger Putnam (Wellfleet)
John D. Harris (Minority Representative)
Robert Bradley (Harwich) (*Alternate*)

COMMISSION STAFF

Andrea Adams (Senior Regulatory Planner/Project Manager)
Glenn Cannon (Director of Technical Services/Traffic Engineer, PE)
Ryan Christenberry (Planner II/Energy Specialist)
Sarah Korjeff (Planner II/Historic Preservation Specialist)
Heather McElroy (Natural Resources Specialist)
Leslie Richardson (Chief Economic Development Officer)
Paul Ruchinskas (Affordable Housing Specialist)
Andy Walsh (Coastal Resources Specialist)

DATE

February 1, 2012

INTRODUCTION

A public hearing will be held on February 7, 2012 at the Provincetown Town Hall, 260 Commercial Street, Provincetown, beginning at 5:00 PM. The Cape Cod Commission (Commission) has received a copy of the Capital Improvements Plan (CIP) for Provincetown Municipal Airport/Final Environmental Impact Report (FEIR). The FEIR was published in the *Environmental Monitor* on January 11, 2012. Comments on the FEIR are due to MEPA by February 10, 2012.

PROJECT DESCRIPTION

Provincetown Municipal Airport is located within the Cape Cod National Seashore on approximately 322 acres of federally owned land administered by the National Park Service. The Airport is a public use, commercial service airport with scheduled Cape Air airline

passenger service to and from Logan Airport in Boston, serving about 10,000 passengers annually. The Airport site consists of developed airside and landside areas used for Airport operations and facilities, as well as undeveloped areas that consist of grasslands, coastal dunes, and wetlands. The Provincetown Airport Commission (Applicant) proposes a Capital Improvement Plan (CIP) that includes the following twelve (12) safety and facility improvement projects. These are also shown on the project plan attached to this staff report as Exhibit A:

CIP Project Elements

1. Westerly taxiway system improvements,
2. Relocation of the east end taxiway;
3. Reconstruct terminal apron with same footprint
4. Reconstruction of the easterly end of the partial parallel taxiway with same footprint;
5. Installation of taxiway edge lights, taxiway signs, and construction of an electric vault;
6. Rehabilitation or replacement of sightseeing shack;
7. Improvements MALSF (Medium Intensity Approach Lights System with Flashers) approach lights access road;
8. Construction of service access roads;
9. Installation of perimeter fence;
10. Expansion of auto parking;
11. Expansion of terminal building; and
12. Construct turf apron

JURISDICTION

The proposed project requires the preparation of an Environmental Impact Report (EIR) pursuant to 301 CMR Section 11.03(3)(a)(1)(a) and Section 11.03(3)(a)(2) of the MEPA regulations because it alters one or more acres of bordering vegetated wetlands, and the alteration requires a variance in accordance with the Massachusetts Wetlands Protection Act. As a development requiring an EIR, the project is categorically deemed to be a Development of Regional Impact (DRI) under the Cape Cod Commission Act (Act), Section 12(i), and Section 2(d)(i) of the Commission's *Enabling Regulations* (revised March 2011), and is subject to DRI review by the Commission.

PROCEDURAL HISTORY

The Commission and MEPA held a joint hearing on the draft Environmental Impact Report (DEIR) on June 27, 2007, where a Commission Subcommittee formulated comments for inclusion into the MEPA scope for the FEIR. On July 18, 2007, the Secretary of the Executive Office of Energy and Environmental Affairs (Secretary) issued a Certificate that set out the FEIR scope and also allowed the Applicant to proceed to a Final EIR.

FINDINGS FOR DRI APPROVAL

Section 7(c)(viii) of the Commission's *Enabling Regulations* (revised March 2011) states that the Commission shall review proposed DRIs for their consistency with the Act, the Regional Policy Plan (RPP), Districts of Critical Planning Concern (DCPCs), municipal development bylaws, and Local Comprehensive Plans. The Commission shall approve, or approve with conditions, a DRI if the Commission finds after a public hearing that:

[1] The probable benefit from the proposed development is greater than the probable detriment;

[2] The proposed development is consistent with the RPP and the Local Comprehensive Plan of the Municipality in which the proposed development is located;

[3] The proposed development is consistent with municipal development bylaws, or, if it inconsistent, the inconsistency is necessary to enable a substantial segment of the population to secure adequate funding opportunities of housing, conservation, environmental protection, education, recreation or balanced growth;

[4] If the proposed development is located in whole or in part within a designated DCPC, it is consistent with the regulations approved or adopted by the Commission pursuant to Section 11 of the Act.

STAFF COMMENTS

Commission staff reviewed the FEIR for the project's compliance with the Regional Policy Plan.

Natural Resources

The FEIR/EA for the Provincetown Municipal Airport Capital Improvements Plan (CIP) provides adequate information on impacts to wetlands and rare species for review and permitting. The Applicant has provided detailed descriptions of existing resources within the Airport lease area and proposed work sites, as well as detailed analysis of alternatives considered for each CIP project such that comparisons may be made and appropriate alternatives selected.

The environmental setting for the CIP projects is characterized by freshwater and tidally influenced wetlands located amongst the Airport infrastructure, and areas of the Airport where vegetation is actively managed. In addition, the site supports habitat for four state listed rare species. Cultural grasslands, maintained as part of regular Airport maintenance, may provide habitat for state listed species including the Vesper Sparrow and Broom Crowberry, and both wetlands and uplands within the lease area may provide habitat for the state listed Spadefoot toad and Eastern Box Turtle. The FEIR/EA reflects consideration for avoiding these sensitive resources, minimizing impacts, and providing mitigation where necessary. The following comments address the adequacy of the FEIR/EA in addressing the wetland and habitat resource interests protected under the Regional Policy Plan.

Wildlife and Plant Habitat

Wildlife and Plant Habitat Minimum Performance Standards (MPS) aim to prevent or minimize loss or degradation of wildlife and plant habitats. MPS WPH1.2 requires minimizing clearing and grading, and MPS WPH1.3 requires protecting large unfragmented areas and minimizing habitat fragmentation. In general, the CIP projects comply with these standards as the projects occur within or immediately adjacent to existing impervious or disturbed areas. The fence, by design, intends to discourage larger mammals and unauthorized humans from entering the active Airport use areas, and may not be consistent with MPS WPH1.3.

MPS WPH1.4 requires protection of the habitat of state listed rare species, while allowing for disturbance that will not adversely affect such habitat. As a general comment, Commission staff is aware that the Applicant has worked closely with the Natural Heritage and Endangered Species Program (NHESP) to avoid impacts to rare species and/or designed the project to minimize and mitigate unavoidable impacts. The Applicant has taken actions to minimize or mitigate, including replacement of cultural grasslands to ensure no net loss, and locating and designing the fence to avoid prime Spadefoot breeding habitats and allow for movement of Box

Turtles. Commission staff strongly encourages the Applicant's continued coordination with NHESP to ensure no adverse impacts to rare species or their habitat consistent with the Massachusetts Endangered Species Act (MESA) and MPS WPH1.4. Commission staff notes that the FEIR/EA identifies the environmentally preferred alternatives for CIP projects #7 – 12 as the *No-action Alternative*, which by definition would avoid any impacts to rare species. Of these, projects #8, 9, 10 and 12 have the potential to impact rare species.

With regard to mitigation for impacts to rare species habitat (wetlands mitigation discussed separately, below), the Applicant proposes to create cultural grasslands in an amount equivalent to those lost to new construction. The new cultural grassland created for the new turf apron (project #12) may not adequately mitigate for loss of Vesper Sparrow nesting habitat, as plane parking and bird nests may be exclusive.

Wetlands

Wetland Resources MPS aim to preserve and restore the quality and quantity of wetlands and their buffers. As a general comment, the Regional Policy Plan prohibits the alteration of wetlands and their buffers. During the course of the last few years as the Applicant has consulted with Commission staff and others about how to address relevant performance standards, Commission staff has advised that wetlands alterations should be avoided. Where alterations are absolutely unavoidable, the Airport should clearly demonstrate the need for the alteration, and then provide appropriate mitigation. There are very few instances where the Cape Cod Commission has allowed for wetland alteration. Where the Cape Cod Commission has, the project proponent demonstrated a public benefit and provided significant mitigation (one such project was the Commission's approval of the Provincetown Airport Short Term Improvements in a Development of Regional Impact (DRI) decision dated 4/13/00 (DRI number TR93007), and where the Airport's contribution toward the Hatches Harbor restoration was accepted as mitigation for wetland impacts). The Applicant has provided the relevant Federal Aviation Administration (FAA) standards or guidance upon which the various CIP projects are based.

MPS WET1.1 prohibits wetland alteration and WET1.2 prohibits the alteration of the 100 foot buffer to wetlands. Nearly all of the CIP projects fall within wetlands or their buffers, or rare species habitat; consequently Commission staff acknowledges that mitigation actions will overlap and/or potentially serve multiple resource protection interests. Projects # 1 – 6 either involve maintenance of existing Airport infrastructure, or are directly and clearly related to FAA standards for maintaining safety at airports (with the possible exception of the proposed run-up pad/holding bay at the West end taxiway which appears to be necessary only when more than 30 planes utilize the runway per hour). Projects #7 and #8 also appear to address FAA requirements for Airport safety, but do not directly relate to aircraft safety. Project #9, the fence, is proposed to address safety and security, but the guidance for this project comes from Transportation Security Administration (TSA) Guidelines and does not appear to be a requirement. Projects #10, 11, and 12 address capacity improvements, and similarly are not FAA requirements. Again, Commission staff notes that the FEIR/EA identifies the "*environmentally preferred alternatives*" for CIP projects #7 – 12 as the *No-action Alternative*, which by definition would avoid any impacts to wetlands. Of these, projects #7, 8, 9, 10 and 12 have the potential to impact wetlands or their buffers.

The cumulative impacts to freshwater wetlands from all of the projects is 82,893 square feet¹ alteration of isolated vegetated wetlands (IVW), and 2,458 square feet alteration of bordering vegetated wetland (BVW). Mitigation proposed includes the restoration of 64,000 square feet of IVW, and 5,000 square feet of BVW, as well as invasive species management within an additional 14 acres of IVW at the Airport. RPP Wetland Best Development Practice (BDP) WET1.5 encourages wetland restoration, but notes that such restoration efforts should not be used as mitigation for wetland alteration. Should the Commission determine that the proposed wetland alteration is necessary, the means for mitigating that alteration will have to be considered.

Commission staff notes that during meetings with project proponents over the last several years, Commission staff has questioned the need for the fence, and whether the fence will address the stated goals of maintaining security at the Airport. Commission staff highlights the importance of establishing the purpose and need for the fence. While the Airport has considered many alternatives for the fence configuration and fence design, and the preferred alternative appears to minimize impacts to the extent feasible (while still providing a fence), the preferred alternative does not completely secure the airstrip and terminal facilities. The fence may provide a deterrent for hikers/hunters and larger mammals from entering the active runway area, but it does not completely close off access. It also results in notable alterations to wetlands, buffers, and rare species habitat, results in fragmentation of areas previously utilized by wildlife, and generally contributes to the gradual change in character of this Airport located within a national park. The FEIR/EA identifies the no-action alternative as the “*environmentally preferred alternative*” for the fence, and, as noted above, directive to include a fence in the CIP appears to come from TSA Guidelines, and not FAA standards for Airport safety. The direct impacts to wetlands could be reduced by 25,648 square feet if the fence is removed from the CIP.

Commission staff also notes that the FAA granted Provincetown Airport relief from strict compliance with runway clear areas in FAA Waiver No. 55 issued in 1970. Among the reasons cited for granting relief from this particular FAA clear area standard were the scenic and natural qualities of the Cape Cod National Seashore. Similar relief may be warranted with regard to the proposed fence, as it appears to only partially address its intended goals, and results in significant impacts to resources protected by the Cape Cod Commission Act, as well as state resources of significance.

Open Space

Regional Policy Plan MPS OS1.3 (Open Space Requirements) states in part that “*all development, excepting municipal projects serving municipal purposes, that qualifies as a DRI shall provide permanently restricted upland open space in accordance with the proportional calculation described below...*” Based on this, Commission staff suggests the Airport is not required to provide open space for the proposed CIP projects.

Coastal Resources

Protected Coastal Resources

Coastal resources located at the Airport include Coastal Dune, Land Subject to Coastal Storm Flowage (LSCSF), and Barrier Beach. Coastal Dunes occur within and adjacent to the Airport facilities, and include both vegetated and unvegetated dunes with intervening wetlands. Dunes

¹ There is a discrepancy between Section 3 and Table 5-3, summary of Impacts and Mitigation, regarding the amount of IVW alteration resulting from fence installation.

within and immediately adjacent to the Airport facilities are generally low relief (1-3 foot height), with higher relief dunes located over 100-200 feet north and south of the Airport facilities. The FEIR/EA does not make clear whether the dunes within and adjacent to the Airport infrastructure actively migrate. The FEIR/EA indicates that the extensive dunes north of the Airport are within the Race Point Barrier Beach System (#Pt-2). Based on review of MassGIS's Massachusetts Ocean Resource Information System (MORIS) mapping, none of the Airport's facilities or infrastructure appears to be located within the Barrier Beach resource area. The total area of proposed alteration to Coastal Dunes is 50,172 square feet (including both Parking Phases 1 and 2).

Most of the project site is located within LSCSF (A zone, el. 10 ft.), with the west end of the runway and taxiway located in A zone, el. 11 ft. Approximately 2.34 acres of coastal floodplain will be altered due to implementation of the Preferred Alternatives.

Compliance with Applicable Coastal Resources Minimum Performance Standards

Based on the location of the site in the above-mentioned Coastal Resources, several RPP MPS under Coastal Resource Goal CR2 (Coastal Hazard Mitigation) apply to the site. These include: CR2.2 (Accommodating Relative Sea-level Rise); CR2.3 (Migration of Coastal Resources); CR2.4 (Damage Prevention and Flood Minimization); CR2.5 (Barrier Beaches, Coastal Dunes and Their Buffers); CR2.8 (Public Infrastructure in Land Subject to Coastal Storm Flowage), and CR2.10 (General Exceptions).

MPS CR2.2 (Accommodating Relative Sea-level Rise) requires all new buildings, including replacements or substantial improvements to existing structures to be designed to accommodate documented relative sea-level rise. For projects located in FEMA "A zones," including most of the CIP projects, the standard requires that the lowest horizontal structural member be a minimum of 1-foot above Base Flood Elevation (BFE). The FEIR/EA does not clearly indicate whether the Terminal Building and/or the Sightseeing Shack are currently elevated above BFE or whether construction associated with expansion or repair of these structures will include elevation of the structures at or above BFE as part of the design. The National Park Service's Statement of Findings pursuant to Floodplain Management (E.O. 11988, D.O. 77-2) states that "Any new construction will adhere to local building codes for work within the 100-year floodplain. The existing structures and facilities are designed to be consistent with the standards and criteria of the National Flood Insurance Program (44 CFR Part 60), as well as any state and local building codes." The Applicant should confirm whether the terminal building expansion project and the sightseeing shack (if repairs are deemed a "substantial improvement" as defined in the RPP) will meet MPS CR2.2.

MPS CR2.3 (Migration of Coastal Resources) requires that new development and redevelopment within the 10-year floodplain avoid impeding the landward migration of coastal resources, such as Coastal Dunes and coastal floodplain. The proposed projects will upgrade existing and fixed Airport infrastructure for safety purposes as well as in anticipation of future demand. In general, there are few or no feasible alternative locations for implementing the proposed improvements at the Airport. As such, it is not possible to relocate the proposed projects around any potential migrating coastal landforms, such as dunes (as mentioned above, it is not clear whether the dunes at the Airport actively migrate). The location of the 10-yr. floodplain, if present on the site, is not identified in the FEIR/EA.

MPS CR 2.4 (Damage Prevention and Flood Minimization) requires that activities within FEMA "A zones" shall not increase the velocity of flood waters or increase flows due to changes

in drainage or flowage characteristics at the site, adjacent properties, or any public or private way. This standard also prohibits the placement of fill in hydraulically constricted areas. The proposed CIP projects will not significantly alter the overall drainage or flowage characteristics of the site. Cumulatively, the project will result in a net reduction of impervious area by 0.65 acres (28,086 square feet), allowing for increased recharge of floodwaters and storm runoff. Lost flood storage capacity due to projects that will introduce fill (i.e., taxiway improvements and installation of the access roadways) will be compensated by the proposed wetland restoration.

MPS CR2.10 (General Exceptions) permits activities related to the maintenance of public infrastructure notwithstanding certain MPS including *MPS CR2.3* and *MPS CR2.4*. Compliance with these standards is exempted provided that Best Management Practices are utilized to minimize adverse impacts on all critical characteristics of LSCSF (to the satisfaction of the Commission) and provided that all other RPP MPS for underlying resource areas are met. As such, safety and facility improvements at the Airport are exempted from *MPS CR2.3* and *CR2.4*.

MPS CR2.5 (Barrier Beaches, Coastal Dunes and Their Buffers) regulates both new development and redevelopment/reconstruction on Coastal Dunes and Barrier Beaches (outside of the project area). Coastal dunes have been delineated within and immediately adjacent to the Airport. While the dunes along the northern lease line of the Airport are within the mapped Race Point Barrier Beach, none of the delineated dune areas within or immediately adjacent to the Airport are located within the Barrier Beach resource area. *MPS CR2.5* allows redevelopment/reconstruction provided there is no increase in the development footprint, impervious area, or intensity of use, and the project will not adversely affect the natural beneficial functions of the coastal resources or increase the flood hazard. As mentioned above, the project will directly impact 50,712 square feet (1.1 acres) of Coastal Dune through the addition of fill. Approximately 0.69 acres of dune habitat will be created on-site to mitigate for the impact of 1.1 acres of dunes (replacement ratio of approximately 0.6:1). Additional mitigation will be in the form of invasive plant species management on dunes at the Airport. As a general comment, Commission staff notes that the FEIR/EA identifies the environmentally preferred alternatives for CIP projects #7 – 12 as the No Action alternative, which by definition would avoid any impacts to Coastal Dunes. Of these, projects #8, 9, and 10 alter Coastal Dunes.

MPS CR2.8 (Public Infrastructure in Land Subject to Coastal Storm Flowage) prohibits the development of new or the expansion of non-water dependent public infrastructure in LSCSF unless there is no feasible alternative location and there is an overriding public benefit. In addition, such infrastructure shall not promote new growth and development within the coastal floodplain. Facility and safety improvements at the municipally owned Airport, by their nature, generally cannot be relocated to avoid resource impacts, and are being adequately mitigated by the Applicant. The project will provide an overriding public benefit by providing facility and safety upgrades to provide safe, secure and reliable flight service for the public.

Based on the information provided in the FEIR/EA, Coastal Resources staff recommends that the Applicant provide the following additional information to better evaluate the project:

- Clarify whether the terminal building and/or the sightseeing shack are currently elevated above BFE or whether construction associated with expansion or repair of these structures will include elevation of the structures at or above BFE as part of the design.

- Indicate whether the dunes within and adjacent to the Airport infrastructure actively migrate (MPS CR2.3).

Water Resources

Protected Water Resource Areas

The Airport is located within a Marine Water Recharge Area to Hatches Harbor. However, a nitrogen threshold concentration (Total Maximum Daily Load - TMDL) is not currently available for this watershed. No other water resource areas, as delineated by the RPP (e.g., Wellhead Protection Area, Potential Water Supply Area, Water Quality Improvement Area), are located at the project site or within the Hatches Harbor watershed. Aside from Race Point Road and Province Lands Road, the watershed consists of largely undeveloped land within the Cape Cod National Seashore. Several RPP Minimum Performance Standards under Water Resource Goals WR1 (General Aquifer Protection), WR3 (Marine Water Embayment and Estuaries) and WR7 (Stormwater Quality) apply to the site and its proposed improvements. These include: WR1.1 (Five-ppm Nitrogen Loading Standard); WR3.2 (Maintenance or Improvement of Nitrogen Loading); WR7.1 (No New Direct Discharges of Untreated Stormwater); WR7.2 (On-Site Infiltration); WR7.4 (Bio-infiltration Practices); WR7.6 (Impervious Surfaces); WR7.9 (Best Management Practices), and WR7.10 (Stormwater Maintenance and Operation Plan).

Compliance with Applicable Water Resources Minimum Performance Standards

MPS WR1.1 (Five-ppm Nitrogen Loading Standard) requires that development/ redevelopment not exceed a 5-ppm nitrogen loading standard for impact on groundwater unless a stricter standard applies. Although the Airport is located in a Marine Water Recharge Area, the receiving waters (Hatches Harbor) are not likely to be impaired given the tidal restoration efforts in recent years. In addition, the paucity of development in the vicinity of the Airport suggests that nitrogen loading within the Hatches Harbor watershed should not pose a threat to water quality. The Massachusetts Estuaries Project (MEP) has identified Hatches Harbor as a water quality and nutrient loading study site, but it is not on MEP's priority list. The FEIR/EA provides no data relative to current nitrogen loading at the Airport or how the proposed CIP projects will change the overall nitrogen load. The Applicant should determine the existing and proposed nitrogen loading concentrations for the Airport to determine compliance with MPS WR1.1.

Cumulatively, the CIP projects will result in a net reduction of impervious area by 0.65 acres (28,086 square feet), allowing greater infiltration of stormwater on-site. The reduction in impervious surfaces at the site helps meet the intent of MPS *WR7.2 (On-Site Infiltration)* and *WR7.6 (Impervious Surfaces)*. Currently, stormwater is managed at many of the project sites by infiltrating runoff into grass safety areas. Several of the CIP projects will not affect existing paved surfaces and therefore will not impact existing drainage or stormwater management. These projects include the repair of the Sightseeing Shack, installation of edge lights and taxiway signs, Turf Apron expansion, and installation of a Perimeter Fence.

Reconstruction of the Terminal Apron, completed in 2008, was limited to the previous footprint and resulted in no changes to impervious area or to the existing stormwater drainage system. The existing closed drainage system which collects drainage from the terminal was maintained. The system was also fitted with a filtration system to intercept petroleum-based pollutants from runoff and an existing outlet was retrofitted with an outlet sediment trap.

The taxiway improvement projects, including the Westerly and East End Taxiway modifications and the reconstruction of the Easterly End of the Parallel Taxiway, will continue to manage stormwater by infiltration into the adjacent grass safety areas. The East End Taxiway relocation will add 2,814 square feet of impervious area, while the Westerly Taxiway system improvements will remove 1,294 square feet of pavement. Reconstruction of the Easterly End of the Parallel Taxiway will remove 44,226 square feet of pavement. According to the FEIR/EA, runoff from the Airport's runways and taxiways contain negligible amounts of contaminants since salt is not applied and engine repair does not take place in these areas. Moreover, stormwater flows contain minimal suspended solids since the Airport does not apply sand or de-icing chemicals to the taxiways. Stormwater volumes generated by projects proposing additional impervious area (ranging from +381 square feet to +5,500 square feet) will be infiltrated into adjacent grass safety areas, and will be offset by the overall reduction of impervious surfaces at the site (-27,925 square feet). As such, these projects comply with *WR7.1 (No New Direct Discharges of Untreated Stormwater)*.

The expansion of automobile parking at the Airport from the existing 62 parking spaces to 119 in two phases will result in a net increase of 5,638 square feet in impervious surface. Storm runoff currently flows from the paved aisles to the unpaved median and gravel parking spaces where it infiltrates into the soil. The new parking areas will be similarly constructed with paved aisles and gravel parking and unpaved medians. Stormwater generated by new impervious surfaces in Phase 1 (+2,835 square feet) will be managed by additional infiltration swales. Stormwater runoff from the Phase 2 parking construction (+2,803 square feet) will be managed using grass filter strips and three bio-retention basins to provide treatment and to partially infiltrate the 1-inch storm event. Vegetative plantings in the proposed bio-retention basins will help improve water quality prior to infiltration. An overflow inlet with a perforated underdrain pipe embedded in gravel will limit ponding within the basins. *MPS WR7.4 (Bio-infiltration Practices)* require stormwater management designs to manage the first inch of stormwater (25-yr., 24 hr. storm) and to be constructed in accordance with the Massachusetts Storm Water Management Handbook (V. 1): Stormwater Policy Handbook (March 1997). In addition, *MPS WR7.2 (On-site Infiltration)* requires that stormwater treatment be consistent with 310 CMR and the Massachusetts Stormwater Management Handbook. As such, staff recommends the Application confirm that the design of the stormwater management system is consistent with *MPS WR7.2* and *MPS WR7.4*.

The vertical expansion of the Terminal Building will not involve any change in the building footprint (~4,800 square feet) or to the existing stormwater drainage system. The FEIR/EA does not indicate whether the building expansion will increase wastewater flows (i.e., nitrogen loading). The Terminal Building expansion may utilize water conservation technologies including low-flow fixtures and faucets, drought-tolerant native landscape plantings, and possibly roof runoff capture and re-use. Best Development Practice *WR1.7 (Use of Water-conservation Technologies)* encourages these technologies and practices. The Applicant should confirm whether the design is consistent with these MPS.

MPS WR7.9 (Best Management Practices during Construction) requires the use of best management practices to prevent erosion and sedimentation and to stabilize disturbed soils. The FEIR/EA's Preliminary Construction Management Plan requires that an Erosion and Sedimentation Control Plan prepared for each project element to include storm drain inlet protection measures, spill prevention and control, housekeeping practices, and wetland protection measures. *MPS WR7.9* requires that BMP's for erosion and sedimentation control be specified on project plans.

A stormwater maintenance and operation plan should be developed for the bio-retention basins and other stormwater management measures at the Airport in accordance with *MPS WR7.10 (Stormwater Maintenance and Operation Plan)*. Under this RPP standard, the Professional Engineer-certified plan should include an inspection, monitoring and maintenance schedule, identification of the responsible party(s), and verification that inspection records will be documented and available to the Commission or local health board upon request. The standard also requires that an inspection be performed one year following completion of the stormwater management system(s) with written confirmation that the system(s) were installed and function as intended. The Airport has a Stormwater Pollution Prevention Plan (SPPP) (rev. July 2002) and a draft Spill Prevention Control and Countermeasure Plan (March 2007). The SPPP addresses several of the requirements per *MPS WR7.10* but should be updated to include the proposed improvements and mitigation (e.g., bio-retention basins).

Transportation

Airport improvement projects detailed in the Provincetown Municipal Airport's CIP will address current and future needs of the Airport to meet passenger demand and FAA standards. Improvement #10, as detailed in the preferred auto parking concept of the plan, calls for an expansion of automobile parking in two phases. Phase 1 would involve the addition of 28 new spaces, increasing the total number of spaces from 62 to 90. Phase 2 expansion, the construction of an additional 29 spaces for a total of 119, would be based on an additional parking study to be approved by the National Park Service (NPS) and the Commission.

In addressing transportation implications of this project, Minimum Performance Standards, as set forth in the Regional Policy Plan, must be met. Relating to this set of projects, MPS TR1.1 (Safety), TR1.7 (Bicyclists and Pedestrians), TR2.9 (Parking Spaces), and TR3.1 (Operational Requirements) should be considered.

To conform to Massachusetts Environmental Protection Agency (MEPA) and Commission guidance documents, a *Traffic Operation Report and Parking Analysis* was prepared by Jacobs Edwards and Kelcey in November 2006 and later revised in 2008.

Site Access

The Provincetown Municipal Airport is located on Race Point Road approximately two miles north of the signalized intersection of Route 6 and Conwell Street. The passenger entrance on Race Point Road, referred to as Airport Driveway, is unsignalized as is the entrance to the small employee lot.

Trip Generation

The 2008 revision of the *Traffic Operation Report and Parking Analysis* presents trip generation estimates following procedures outlined in the Institute of Transportation Engineers' (ITE) *Trip Generation*, Eighth Edition, 2008 and following an empirical method suggested by Commission staff. The empirical method is a more accurate reflection of the unique operating characteristics of the Airport. This empirical method was based on trip generation rate calculated from actual airplane enplanement and traffic data. When applied to projected future Airport operating characteristics, the empirical method, as confirmed by Commission staff, yielded the more conservative of the two estimate methods (i.e., a larger passenger trip increase). The projected trip increase during weekday morning, weekday midday, weekday evening, and Saturday midday peak periods are presented in Table 1 on the next page.

Trip Generation Increase Using Empirical Method (Table 1)

	Existing Airport Generated Trips	Projected Airport Generated Trips	Trip Increase
Weekday Morning Peak Hour	13	15	2
<i>Entering</i>	10	12	2
<i>Exiting</i>	3	3	0
Weekday Midday Peak Hour	52	60	8
<i>Entering</i>	24	28	4
<i>Exiting</i>	28	32	4
Weekday Evening Peak Hour	39	45	6
<i>Entering</i>	21	24	3
<i>Exiting</i>	18	21	3
Saturday Midday Peak Hour	41	47	6
<i>Entering</i>	21	24	3
<i>Exiting</i>	20	23	3

The “*Limited Development of Regional Impact Scoping Checklist for Development*” contains the following question to determine if a significant amount of new traffic will be generated by either new or redevelopment: “[w]ill the project generate more than 250 new daily trips?”

Based on estimates by Commission staff, the project site will not generate more than 250 daily trips and therefore the proposed change is not anticipated to have a significant congestion impact on the roadway.

Safety Implications

The unsignalized intersection of Race Point Road at the Airport Driveway and the signalized intersection of Race Point Road and Conwell Street at Route 6 are within the scope of analysis for this project. A review of Massachusetts Department of Transportation (MassDOT) crash data revealed that there have been no reported crashes at the intersection of Race Point Road at Airport Driveway in the most recent three years of record (2007-2009). There have been five reported crashes at the intersection of Route 6 at Race Point Road and Conwell Street (zero, two, and three in 2007, 2008, and 2009 respectively). As a minimal increase in traffic is projected, no safety implications are anticipated.

Bicyclists and Pedestrians

While bicycling and walking are not typically considered major modes of travel to an Airport, it is conceivable certain users, particularly employees and sightseeing passengers, could benefit from such connections. The Provincetown Lands Bicycle Path runs adjacent to the Airport and crosses the Airport Driveway where bicyclists or pedestrians could access the Airport. This

connection, along with links to public transportation, makes the Airport accessible to all users as required by MPS TR1.7.

Parking

MPS TR1.2 states that parking shall be “no more than the minimum number of spaces required by the town” unless “justified by a parking analysis accepted by the Commission.”

The 2008 revision of the *Traffic Operation Report and Parking Analysis* presents justification for the additional spaces proposed in the CIP based on passenger projections in the Provincetown Municipal Airport 2005 Master Plan and methodology detailed in the ITE Parking Generation Handbook, 2nd Edition, 1987. The proposed increase in parking capacity is within accepted guidelines for the existing and proposed conditions.

Operational Requirements

The anticipated effects of the projected traffic volumes within the study area are documented in 2008 revision of the *Traffic Operation Report and Parking Analysis*.

Comparing Build and No-Build future projections, there is no measureable effect on the network operation within the study area as a result of the project. Additionally, the minimal projected increase in traffic caused by the project will have no measureable effect on the traffic network beyond the study area.

The future level of service of the unsignalized of Race Point Road at Airport Driveway and at the signalized intersection of Route 6 at Race Point Road and Conwell Street also are acceptable and comply with applicable Transportation MPS.

Solid and Hazardous Waste Management

Solid Waste

MPS WM2.1 requires that “[d]evelopment and redevelopment projects shall address the disposal of construction waste...” and that “a plan shall be provided to demonstrate how the applicant proposes to handle solid wastes, construction and demolition waste and recyclable materials currently categorized by the [DEP] as a waste ban material.” MPS WM2.2 describes the requirements of a construction and demolition (C&D) waste management plan. MPS WM2.3 requires a post-construction waste and recyclables management plan, and MPS WM2.4 addresses the management of “significant amounts” of food wastes.

Several of the proposed CIP projects will generate solid wastes, including C&D, particularly the anticipated runway and taxiway work and proposed terminal expansion. However, the FEIR does not address the types or amounts of C&D waste, general solid waste, recyclables or food waste that will be generated by the proposed projects. Commission staff suggests the Applicant should quantify the Airport’s total generation of solid waste, C&D, recyclables and food wastes, including Airport and tenant operations, so that conformance with the Solid Waste Management MPS can be determined.

Hazardous Waste

MPS WM1.1 strictly limits the amount of *Hazardous Waste* that can be used, generated, handled, stored, treated or disposed of in Wellhead Protection Areas (WHPA) to a *Household Quantity of Hazardous Waste*. Based on maps included in the 2009 RPP (as amended) the Airport site is not mapped as a WHPA.

MPS WM1.5 requires that “[a]ny development or redevelopment that uses, handles, generates, treats, or stores Hazardous Waste...” be in compliance with the state’s Hazardous Waste regulations and specifies the following three items be provided by Applicants to demonstrate compliance with this requirement for purposes of Commission review: Notification or registration with the Massachusetts Department of Environmental Protection as a generator of Hazardous Waste, a written plan to manage the Hazardous Waste prior to disposal, and a signed contract with a registered, licensed company to dispose of Hazardous Waste.

According to pg. 1-8 of the FEIR, Provincetown Airport hosts a single Fixed Base Operator, Cape Air, which operates out of one on-site hangar. The FEIR also states, however, that “with the exception of light servicing of maintenance equipment, Airport operations do not include aircraft maintenance or vehicle servicing. The Airport does not use pesticides, insecticides or herbicides in grounds keeping operations.” The FEIR also states “the planned improvements will not change the existing management of...Hazardous materials at the Airport.” The FEIR describes the storage of hazardous materials at and by the Airport, primarily bulk fuel storage. Commission staff suggests the Applicant should quantify the Airport’s total generation, use, handling, storage and disposal of Hazardous Wastes, including Airport and tenant operations, so that conformance with MPS WM1.5 can be determined.

Community Character

Heritage Preservation

The FEIR provides sufficient information to determine that the proposed project will not impact historic or archaeological resources protected by the Regional Policy Plan. Given comments from the Massachusetts Historical Commission in 2007 stating the project is unlikely to affect historic or archaeological resources, and concurrence from archaeological staff at Cape Cod National Seashore that there is no need for archaeological testing, Commission staff suggests the CIP projects are consistent with both MPS HPCC1.1 (Historic Structures) and MPS HPCC1.3 (Archaeological Sites). The landscape surrounding the project may be considered a cultural landscape; based on this, the Commission may consider the visual impact of the project per MPS HPCC1.2 (Cultural Landscapes) as described below.

Building Design/Site Design/Landscaping

The proposed expansion of the terminal building and parking area will be considered in the Commission’s DRI review of the project, acknowledging that the project is located in a distinctive scenic and cultural landscape. The preferred alternative in the FEIR states that the increase in floor area of approximately 1,000 to 2,000 square feet can be accomplished with a 6 to 12 foot increase in the height of the building. The FEIR illustrates this concept generally and shows how the increase in height would be visible from key points in the landscape. Based on these illustrations, it appears that variation in the building mass and roof form, traditional materials to blend the structure with the environment, and strategic landscaping can result in the proposed project having limited visual impact on the surrounding area. During Commission DRI review of the project, full design plans will be required to determine compliance with RPP performance standards relating to building, landscaping and parking design.

Exterior Lighting

The Airport’s CIP lists several project elements that may involve exterior lighting, in particular the proposed terminal expansion and an addition to parking areas for automobiles. However, the FEIR does not contain sufficient detail for Commission staff to determine what types and

how many exterior light fixtures may be used. During Commission DRI review of the project, the Applicant will be required to submit detailed information on exterior fixtures, including the locations, number, type, height and lamping so that compliance with RPP MPS HPCC2.11 can be determined.

Energy Resources

The proposed expansion of the terminal building will be considered in the Commission's DRI review of the overall CIP projects for consistency with MPS for Energy; specifically, MPS E1.1 (Redevelopment Energy Audit), MPS E1.2 (Energy Star) and MPS E1.3 (Building Envelope). Discussions with the Applicant's consultants as part of the FEIR process and the document itself have provided sufficient information on Airport's energy efficiency goals for the terminal expansion for Commission staff to determine that the approximately 1,000 to 2,000 square foot terminal building addition should be able to meet the applicable Energy Minimum Performance Standards.

Economic Development

For the purposes of the RPP Economic Development section, Commission staff suggests the Airport CIP projects can be considered to be "redevelopment." Staff notes the Airport is located in an area designated as *Resource Protection Area* on Provincetown's Land Use Vision Map.

MPS ED1.1 (Location in Economic Centers) states that "*development shall be located in Economic Centers or Industrial and Service Trade Areas, or where appropriate, Villages as designated on the Regional Land Use Vision Map unless waived in accordance with MPS ED1.3.*" MPS ED1.3 states in part "*the Commission may waive ED1.1...if the applicant demonstrates that...redevelopment meets two of the following criteria...*" As a redevelopment project, the Applicant must show that the project meets at least two criteria in MPS ED1.3 to meet the waiver. Commission staff notes that the CIP is a series of 12 distinct Airport-related projects, and therefore suggests the Applicant may be able to show that one or more of the improvements will meet the following two criteria:

- *Green Design:* The project is, at a minimum, LEED/New Construction-certified at the base level.

Commission Economic Development staff notes that the proposed expansion of the terminal building will be considered during the Commission's DRI review for consistency with Energy MPS. Staff suggests that compliance with these MPS could provide the Applicant with a terminal design that will also meet MPS ED1.3 Green Design waiver criterion.

- *Municipal Endorsement:* The location of the project outside of a designated Economic Center, Industrial and Service Trade Area, or Village as identified on the Regional Land Use Vision Map is endorsed through a resolution from the selectmen or town council of the town(s) in which the project is located. The resolution should state that the proposed location is consistent with both the goals of the town's Local Comprehensive Plan as well as the town's capital facilities and infrastructure planning or plan.

Commission Economic Development staff suggest that the Applicant could seek endorsement of the CIP from the Provincetown Selectmen.

MPS ED4.1 (Demonstrated Need and Public Benefit) states that "*development of infrastructure and/or capital facilities shall be in response to existing regional demand and shall improve the*

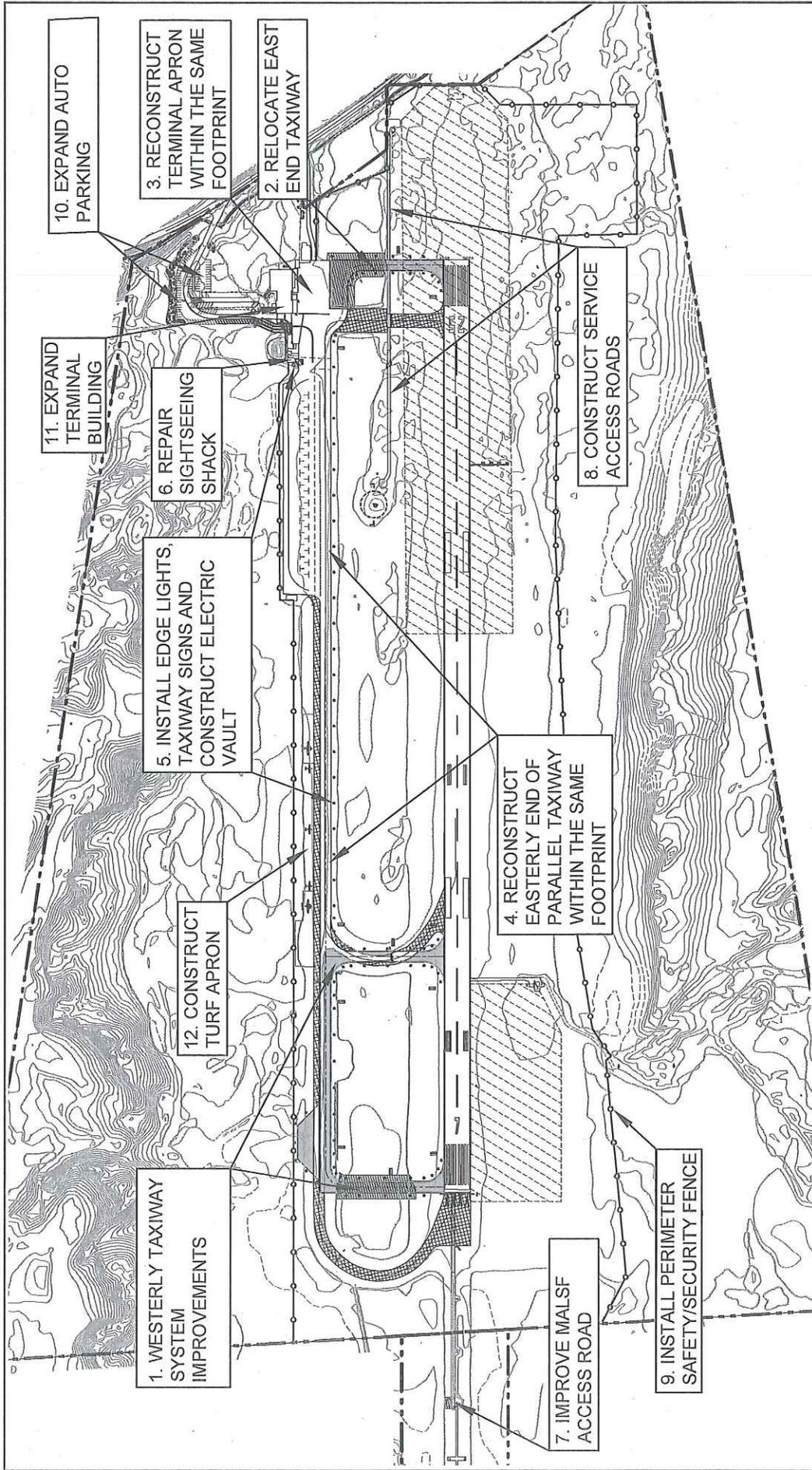
availability, reliability, quality, and cost of services.” Section 2.3 of the FEIR describes three (3) improvements out of the 12 total CIP elements which appear to be most directly connected to the Airport’s capacity and MPS ED4.1: Expand Auto Parking, Expand Terminal and Expand Turf Apron. Commission staff will review these project elements in more detail during the upcoming DRI review, but suggests information in the FEIR on these project elements may be sufficient to address MPS ED4.1.

Affordable Housing

The Provincetown Airport is owned by the Town, with management of facilities overseen by the Airport Commission, whose members are appointed by the Provincetown Board of Selectmen. As this is a municipal and a non-residential project, Commission staff suggests the Affordable Housing section of the RPP does not apply to this project.

CONCLUSION

In conclusion, Commission staff believes the Final EIR for the Provincetown Airport CIP Projects is sufficiently detailed to allow the Secretary to issue a Final Certificate on the document and complete the MEPA review. Staff also recommends that the Provincetown Airport be permitted to proceed to the Development of Regional Impact review, with the issues as outlined above included in the Secretary’s FEIR Certificate and the DRI review.



Provincetown Municipal Airport
Capital Improvements Plan



PROJECT OVERVIEW

Figure 1.2



Prepared By:
JACOBS

