

Environmental Assessment Proposed Rectrix Facilities

Worcester Regional Airport

Worcester,
Massachusetts

Prepared for **Rectrix Commercial Aviation Services, Inc**
200 Hanscom Drive
Bedford, Massachusetts 01730

Prepared by



Vanasse Hangen Brustlin, Inc.

Transportation, Land Development, Environmental Services
101 Walnut Street
P.O. Box 9151
Watertown, Massachusetts 02471
(617) 924-1770

July 2013

This Environmental Assessment (EA) becomes a Federal document when evaluated, signed, and dated by the Responsible FAA Official.

Responsible FAA Official

Date



July 12, 2013

Mr. Richard Doucette
Environmental Program Manager
FAA New England Region, Airports Division
12 New England Executive Park
Burlington, MA 01803

Re: Rectrix FBO Improvements, Worcester Regional Airport

Dear Mr. Doucette:

I am pleased to submit for your review this Environmental Assessment (EA) for the proposed Rectrix Fixed Base Operator (FBO) Improvements at Worcester Regional Airport.

Rectrix Commercial Aviation Services, Inc., through a lease agreement with the Massachusetts Port Authority (Massport), proposes to construct state-of-the-art replacement FBO facilities at the Worcester Regional Airport. This work would be advanced as a two-phased project. In Phase 1, Rectrix would replace an outdated FBO building with a new FBO hangar and facilities and replace the Airport's existing underground fuel tank facility with new above-ground fuel tanks. In a later Phase 2, the project expects to replace two hangars immediately adjacent to the FBO site.

Because the Federal Aviation Administration (FAA) must approve the change to the Airport Layout Plan, Rectrix, in conjunction with Massport, has prepared this EA in accordance with FAA's National Environmental Policy Act regulations that discloses the environmental consequences that may result from this project.

A 30-day public comment period for the EA will begin on July 15, 2013 and will end on August 12, 2013. A Notice of Availability will appear in the Worcester Telegram and Gazette on July 15, 2013.

The EA distribution list indicates all parties that will be sent a copy of the EA. In addition, this EA will be made available for public review at Worcester City Hall (Clerk's office), Worcester Regional Airport (Manager's office), the Worcester Public Library and on Massport's website at http://www.massport.com/environment/environmental_reporting/Pages/EnvironmentalFilings.aspx.

A public meeting will be held to inform the public of the proposed project and the EA and to give the public an opportunity to comment on the project. The public meeting will be held on July 29, 2013 at 7 PM at the Worcester Regional Airport terminal. Reviewers may also submit written comments on the project at any time during the comment period to Rectrix, c/o Lisa Standley, VHB Inc., PO Box 9151, Watertown MA 02471-9151 (lstandley@vhb.com). Comments must be received by 5 PM Eastern Daylight Time on August 12, 2013 in order to be considered.

On behalf of Rectrix, I hope that you and other reviewers of the EA find the document informative. We look forward to your review of this document and to close consultation with you and other reviewers in the coming weeks.

Please feel free to contact Lisa Standley of VHB at 617-924-1770 or contact her via e-mail at L.Standley@vhb.com should you have any questions.

Very truly yours,

Richard A. Cawley
President/CEO

Cc: A. Davis, S. Dalzell, Massport

BED • 200 Hanscom Drive • Bedford, MA 01730 • (p) 781.274.0400 • (f) 781.274.0414
HYA • 730 Barnstable Road • Hyannis, MA 02601 • (p) 508.771.7520 • (f) 508.771.7522
SRQ • 8250 15th Street East • Sarasota, FL 34243 • (p) 941.358.9600 • (f) 941.358.9611

www.flyrectrix.com

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Table of Contents

Chapter 1: Project Description	1-1
1.1 Introduction	1-1
1.2 Purpose and Need	1-4
1.3 Proposed Action.....	1-5
1.4 Required Approvals	1-5
Chapter 2: Alternatives	2-1
2.1 Proposed Action.....	2-1
2.2 No-Action Alternative	2-2
Chapter 3: Affected Environment	3-1
3.1 FBO Project Site	3-1
3.2 Fuel Farm Site	3-1
Chapter 4: Environmental Consequences	4-1
4.1 Introduction	4-1
4.2 Hazardous Materials, Pollution Prevention and Solid Waste	4-3
4.3 Historic and Cultural Resources	4-4
4.4 Water Quality	4-4
4.5 Wetlands	4-5
4.6 Construction.....	4-6
4.7 Cumulative Impacts	4-8
4.8 Summary.....	4-8
Chapter 5: Distribution List	5-1

List of Tables

Table 4-1	Resource Category Applicability	4-2
Table 4-2	Summary of Impact Significance	4-10

List of Figures

Figure 1-1	USGS Locus
Figure 1-2	Existing Conditions - Aerial View
Figure 2-1	Existing Conditions - Plan View
Figure 2-2	Proposed Conditions - Aerial View
Figure 2-3	Phase I Proposed Conditions FBO Facility - Plan View
Figure 2-4	Phase I Rendering
Figure 4-1	Environmental Resource Areas

1

Project Description

1.1 Introduction

Rectrix Commercial Aviation Services, Inc., through a lease agreement with the Massachusetts Port Authority (Massport), proposes to construct replacement Fixed-Base Operator (FBO) facilities at the Worcester Regional Airport (ORH). The proposed structures incorporate the latest in efficiency and sustainable design, and will achieve, at a minimum, LEED silver certification.

This work is expected to be advanced as a two-phased project. Phase 1 would immediately replace an outdated, inadequate FBO building with a new state-of-the-art FBO hangar and facilities, including reconfigured security fencing and gates, and replace ORH's existing underground fuel tank facility with new above-ground fuel tanks of similar capacity at the existing fuel farm. During a future Phase 2, Rectrix Aviation anticipates replacing two hangars immediately adjacent to the FBO site with more efficient structures constructed to modern building codes and standards. Phase 1 and Phase 2 together constitute the "Project". A locus map for the Project is provided as Figure 1-1. Figure 1-2 provides an aerial view of ORH with the major areas associated with the two phases delineated.

The proposed Project would require a modification of the ORH Airport Layout Plan (ALP). Approval of the modified ALP by the Federal Aviation Administration (FAA) is a federal action and requires review under the National Environmental Policy Act (NEPA). Pursuant to NEPA, this Environmental Assessment (EA) has been prepared to describe and assess the consequences to the human and natural environment that may result from the proposed improvements. This document discloses the direct, indirect, and cumulative impacts that may result from this proposed action. This analysis is conducted in compliance with NEPA requirements, the Council on Environmental Quality (CEQ) Regulations 40 Code of Federal Regulations (CFR) 1500 and 1508, and FAA Orders 5050.4B, *NEPA Implementing Instructions for Airport Actions* and 1050.1E, *Change 1, Environmental Impacts: Policies and Procedures*.



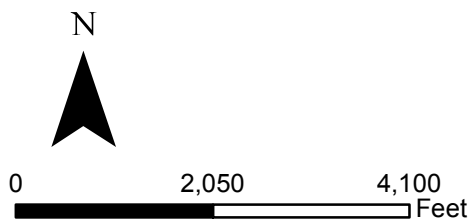
Source: USGS

Vanasse Hangen Brustlin, Inc.

 Project Areas

Figure 1-1
USGS Locus

Proposed Retrix FBO and Fuel Farm
Worcester Regional Airport





Source: USGS

Vanasse Hangen Brustlin, Inc.

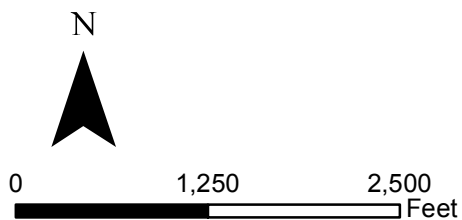


Figure 1-2
Existing Conditions - Aerial View

Proposed Rectrix FBO and Fuel Farm
Worcester Regional Airport

1.2 Purpose and Need

The purpose of this Project is to provide ORH with a modern FBO facility to better service, maintain, fuel, and shelter corporate/general aviation aircraft. Massport's goal is to develop first-class corporate/general aviation facilities that would support current aviation activity, attract new aviation business, and accommodate future demand. Specific goals of the Project include providing:

- Passenger amenities that include a passenger lounge and food service;
- Crew lounge;
- General administrative and management operations areas;
- Landside parking area for staff and passengers, and a drop off area that would provide a first class arrival experience;
- Aircraft parking (itinerant and based) to support a mix of aircraft up to Gulfstream G-V aircraft;
- Short-term and long-term storage and maintenance accommodating a mix of aircraft up to Gulfstream G-V aircraft;
- Ground service equipment (GSE) maintenance and storage; and
- Storage of 40,000 gallons of Jet-A fuel and 5,000 gallons of Av-gas at the current Fuel Farm area.

Worcester Regional Airport is one of the busier general aviation airports in New England, and is critical to serve the needs of the region. Based on Massport operations data, total airport operations (takeoffs and landings) for 2012 were 44,600. There are presently about 100 aircraft based at ORH, including a mix of single and multiengine piston aircraft, several cabin class turboprop aircraft and corporate jet aircraft. Major ORH users are corporate aviation, flight schools, large air charter services and private pilots flying for business and recreational purposes. Though not currently, ORH has supported significant levels of commercial operations in the past. In early 2013, JetBlue announced that it would initiate flights from ORH to Orlando Florida and Ft. Lauderdale, Florida starting in November of 2013.

ORH has the following infrastructure and facilities:

- Two runways (Runway 11-29 is 7,000 feet long and Runway 15-33 is 5,000 feet long);
- One 59,000-square foot terminal building with four gates;
- Apron areas that provide parking for general aviation and commercial aircraft;
- Fuel farm; and
- Hangars and airport-related facilities.

General aviation facilities include one full-service FBO facility. In addition, ORH has 30 T-hangars and 50 general aviation tie-downs. An aircraft maintenance provider, a flight school, and an avionics repair company are additional tenants. As described above, the FBO facilities are outdated, inefficient, and at the end of their useful life.

The FBO facilities are in need of modernization to meet the needs of the existing and potential aviation population served by ORH.

General aviation forecasts prepared for recent planning initiatives undertaken by the FAA, the Massachusetts Department of Transportation/ Aeronautics Division, and Massport all project a steady increase in general aviation and commercial activity at ORH over the near and long-term planning horizon. The terminal area forecast (TAF) projects future general aviation activity using the FAA's growth rates for ORH and projected annual operations of 70,325 in 2015, 75,103 in 2020, and 80,234 for 2025. Itinerant activity (meaning aircraft that are not based at ORH) accounted for 67 percent of the total operations in 2010.

1.3 Proposed Action

In Phase 1, Rectrix Aviation proposes to immediately demolish and replace the current FBO building with a modern facility of approximately 26,000 square feet (sf). The replacement FBO building would house facilities to service, maintain, fuel and shelter larger general aviation corporate aircraft, and would have facilities for general aviation passengers and crew. In Phase 2, two other outdated hangars are expected to be replaced. The current FBO facilities are outdated and have inadequate storage capacity for larger general aviation aircraft, and the fuel farm is also at the end of its useful life and in need of replacement. The proposed Project would provide additional specialized aircraft services for Worcester Regional Airport, thereby contributing to a more efficient airport for commercial and general aviation.

1.4 Required Approvals

At the Federal level, the proposed changes would require a modification of the Airport's official Airport Layout Plan (ALP) and approval of those changes by the Federal Aviation Administration (FAA). Construction of the Project requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for coverage under the Construction General Permit under the Clean Water Act as administered by the Environmental Protection Agency (EPA).

At the local level, the proposed fuel farm improvements require an Order of Conditions from the Worcester Conservation Commission, pursuant to the Massachusetts Wetlands Protection Act (WPA) (MGL Chapter 131, Section 40) and its implementing regulations (310 CMR 10.00).

The Project is not subject to the Massachusetts Environmental Policy Act (MEPA) (301 CMR 11.00) because the proposed Project does not exceed any MEPA review thresholds.

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2

Alternatives

2.1 Proposed Action

The Project would occur on the northeast portion of the airport within an approximately 8 acre area (see *Existing Conditions – Plan View*, Figure 2-1) that is fully developed for aviation uses. As noted above, the Project is proposed in two phases. Phase 1 involves the replacement of Building 12, a one-story brick office building, with a new 26,000-sf structure including FBO hangar and office space (see Figure 2-2, *Proposed Conditions - Aerial View*; Figure 2-3, *Phase I Proposed Conditions – Plan View*; and Figure 2-4, *Phase I Rendering*). The existing building is 3,750 square feet and is believed to have been constructed in the early 1960s. Until recently, the FBO facility was operated by Swissport, through a lease with Massport, owner and operator of the Worcester Regional Airport. The outdated building would be replaced by a modern FBO/hangar facility that would provide service, maintenance, fueling and shelter for general aviation aircraft, primarily corporate jets. Security fencing and gates located on the southern and western section of the site would be reconfigured.

Phase 1 of the Project also includes the replacement of ORH's existing underground fuel tank facility with four new above-ground fuel tanks at the existing fuel farm. The new fuel tanks would be constructed on an approximately 2,700-sf concrete pad and would include two 20,000-gallon jet fuel storage tanks, a 5,000-gallon aviation fuel tank, and a 500-gallon diesel fuel tank. The redevelopment of the fuel farm will feature a new, improved stormwater management system. The existing facility would remain in use until the new facility has been constructed and is ready for use. At that time, the underground storage tanks would be decommissioned and removed by Massport.

Phase 2 is expected to include the replacement of two existing hangars immediately adjacent to the FBO site with more efficient modern structures. Hangar 9 is 16,800 square feet, and Hangar 10 occupies 25,400 square feet. When Phase 2 proceeds, the two existing hangars would be replaced by two similarly sized hangars, including office area.

Rectrix is required to achieve a LEED Silver rating for the proposed project under the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System for the Project. The design team will conduct a preliminary evaluation to determine attainable LEED credits using the LEED 2009 (version 3) New Construction and Major Renovations (LEED-NC) rating system. As part of this evaluation, a preliminary LEED Scorecard for the current point standing for the Project will be developed and used as a tracking tool throughout design development and final design. The MA LEED Plus credits will also be evaluated to assess whether they are feasible for the project.

Rectrix will incorporate sustainable design principles as they relate to the project site design, materials, energy efficiency, water use and management, air emissions, and indoor air quality. During the design phases for the Project, the following sustainable design opportunities will be considered for their feasibility and applicability:

- Stormwater capture and re-use
- Incorporation of infrastructure for on-site collection, storage and handling of recyclables
- Design for deconstruction and flexible re-use of space as needs change over time
- Energy efficiency measures for building mechanical, electrical, and plumbing systems
- Measures to reduce water use by 50 percent
- Measures to reduce energy use by at least 20 percent
- Passive solar options for building envelope efficiency, such as broad roof overhangs or shading devices to reduce solar heat gain and glare
- Alternative and/or renewable energy systems

2.2 No-Action Alternative

The No-Action Alternative was retained for detailed evaluation in the EA for comparative purposes pursuant to 40 Code of Federal Regulations (CFR) 1502.14(d) and FAA Orders 1050.1E and 5050.4B. The No-Action Alternative would involve no new construction of FBO hangar/office facilities and would retain the existing underground fuel storage farm. The No-Action Alternative does not meet the Project need in terms of providing new, modern, efficient structures and service facilities. Because the proposed project is replacing existing facilities on a fully developed site and the potential for environmental impacts is so minimal, no location or layout changes are considered in this EA.

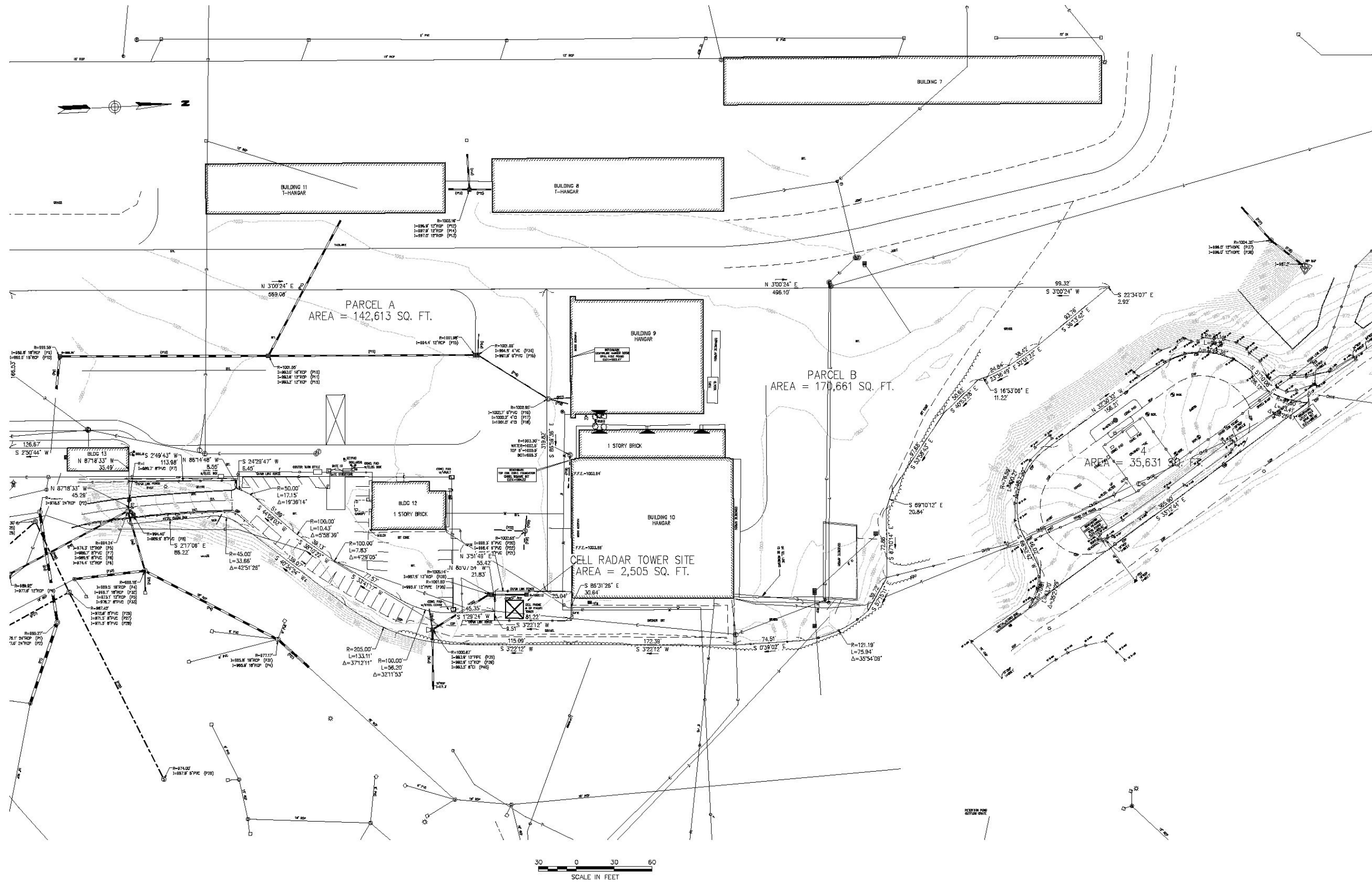


Figure 2-1
Existing Conditions - Plan View

Proposed Rectrix FBO and Fuel Farm
Worcester Regional Airport

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Source: USGS

Vanasse Hangen Brustlin, Inc.

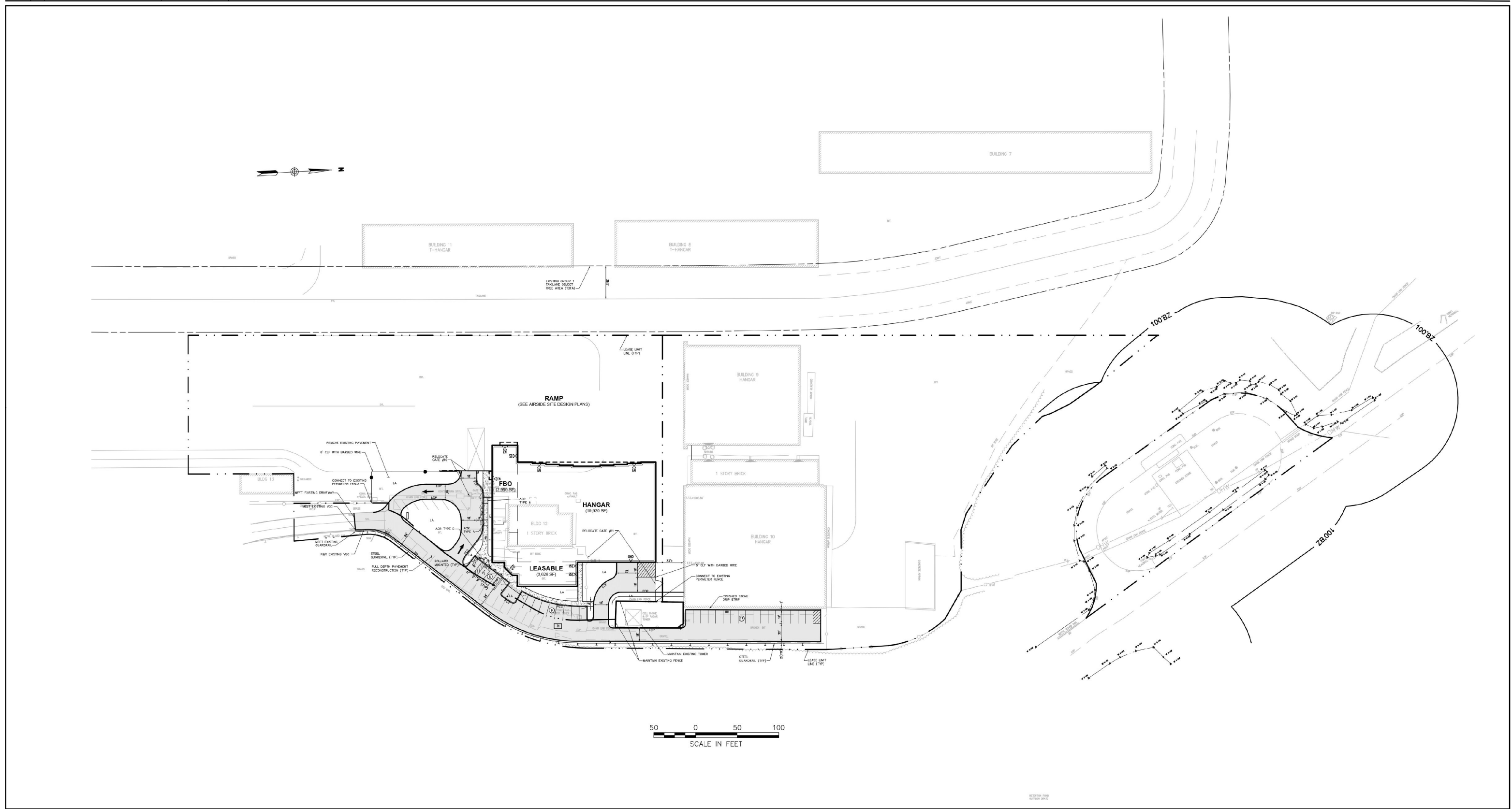


- Driveway
- Fence
- Guardrail
- Sidewalk
- Wall
- Concrete Pads
- Building

Figure 2-2
Proposed Conditions - Aerial View

Proposed Rectrix FBO and Fuel Farm
Worcester Regional Airport

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Figure 2-3
Phase I Proposed Conditions FBO Facility - Plan View

Proposed Rectrix FBO and Fuel Farm
Worcester Regional Airport

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Vanasse Hangen Brustlin, Inc.

Figure 2-4
Phase I Rendering

Proposed Rectrix FBO and Fuel Farm
Worcester Regional Airport



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3

Affected Environment

3.1 FBO Project Site

The FBO project is proposed on an approximately 8- acre portion of the ORH site located on the east side of the airport. This portion of the airport is almost entirely paved and currently consists of the FBO facilities slated for demolition, including a brick office building and two hangars, and associated parking. The site is located within the Blackstone River watershed. There are no wetland resource areas or protected species habitat areas located within 100 feet of the proposed work. Surrounding land uses include the airport (Runway 11-29, Runway 15-33) to the west and south, open space held by the Greater Worcester Land Trust (Tetasset Ridge) to the east and the fuel farm to the north. The residential neighborhoods of Prouty Lane, Glen Ellen Road and Brewster Road are located further to the north, with the closest homes approximately 1,100 feet away and separated from the airport by a forested area.

An aerial view of the airport showing existing conditions is provided as Figure 1-2. A plan view of existing conditions on the FBO and fuel farm sites is provided as Figure 2-1.

3.2 Fuel Farm Site

The fuel farm is located to the north of the FBO site on approximately 0.8 acres. The Site is ORH's only fuel farm. The existing fuel farm was constructed circa 1980 and consists of three underground storage tanks (UST's). All three tanks are of single wall construction. In addition to the existing tanks, a circular access road, fuel pumps, piping and other associated infrastructure are located on-site. The fuel farm is surrounded by man-made drainage ditches. These drainage ditches are jurisdictional under the Massachusetts Wetland Protection Act (see Section 2.5). There are no federal wetlands or any state or federal protected habitat areas on the fuel farm site.

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4

Environmental Consequences

4.1 Introduction

This chapter describes the potential impacts of the Project on the natural and human environment. Federal Aviation Administration (FAA) Order 1050.1E, Change 1 states that the environmental consequences analysis should include consideration of the “direct effects and their significance, the indirect effects and their significance, and cumulative effects and their significance.” Impacts are evaluated in comparison to the No-Action Alternative.

A summary of the resource assessment is provided in Table 4-1 below. Environmental resources in the vicinity of the site are shown on Figure 4-1. As discussed in the table, seven resource categories are not addressed in this chapter because either the resource is not present on the project site or because proposed activities would not impact the resource category. These are Coastal Resources; Department of Transportation Section 303/4(f) Lands/Land and Water Conservation Fund Section 6(f) Lands; Prime and Unique Farmlands; Floodplains; Socioeconomic Conditions, Environmental Justice Communities; and Wild and Scenic Rivers.

An assessment of three resource areas is presented: hazardous materials, pollution prevention and solid waste (Section 4.2), historic and cultural resources (Section 4.3), water quality (Section 4.4) and wetlands (Section 4.5). Temporary impacts of the construction period are discussed in Section 4.6. Finally, cumulative impacts are discussed in Section 4.7.

Table 4-1 Resource Category Applicability

Resource	Summary of Applicability
Air Quality	Not affected. The Project would have no impact on airport operations and air quality would not be impacted by the Project. Temporary impacts on air quality during construction are addressed in Section 4.6.
Coastal Resources	Not present. The Project is not in the coastal zone.
Compatible Land Use	Not affected. The Project would not change any land uses, would have no impact on airport operations and will not require any land acquisition. Accordingly, there is no impact on land use.
Farmlands	Not present. The Project site is fully developed and there are no farm lands on or adjacent to the Project site.
Fish, Wildlife, Plants	Not present. State-listed bird species inhabiting grassland habitat have been identified on the airport, but are not located within or contiguous to the project area (see Figure 4-1). The Project would occur entirely within existing paved or lawn areas, and no disturbance to the habitat area would occur as a result of the Project.
Floodplains	Not present. The Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA) indicates that the entire site is outside of any mapped floodplain areas
Hazardous Materials and Solid Waste	Hazardous materials and solid waste are discussed in Section 4.2.
Historical, Architectural, Archaeological, and Cultural Resources	Cultural resources are discussed in Section 4.3.
Light Emissions and Visual Impact	Not affected. The Project would not change the Airport's light emissions or the area's visual environment.
Natural Resources, Energy Supply, & Sustainability Design	Not affected. There would be no change with regard to the natural resources and energy supply required on the site. While the new buildings would be larger than the ones proposed to be demolished, they would be more efficient.
Noise	Not affected. The Project would have no impact on airport operations. Accordingly, noise would not be changed by the Project. Temporary noise impacts associated with construction of the Project are discussed in Section 4.6.
Section 4(f) and Section 6(f)	Not present. There are no Section 4(f) and Section 6(f) lands present on the site.
Socioeconomic Impacts, Environmental Justice	Not affected. The Project would have no impact on airport operations or off-airport properties. There would be no socioeconomic impacts.
Surface Transportation	Not affected. There would be no impact to surface transportation. Temporary traffic impacts associated with construction of the Project are discussed in Section 4.6.
Surface Water and Water Quality	Stormwater is addressed in Section 4.4.
Wetlands and Waterways	Wetlands and waterways are addressed in Section 4.5.
Wild and Scenic Rivers	Not present. There are no wild and scenic rivers located on the project site.

4.2 Hazardous Materials, Pollution Prevention and Solid Waste

This section discusses the handling and prevention of hazardous materials and solid waste. Measures to prevent spills from the proposed fuel tanks is discussed in Section 4.2.1, demolition of buildings and solid waste is discussed in Section 4.2.2, and the potential for encountering contaminated soils is discussed in Section 4.2.3.

Please note that the decommissioning of the existing underground fuel tanks will be undertaken by Massport as a separate action, and is not addressed in this filing.



4.2.1 Prevention of Spills from Proposed Above Ground Fuel Tanks

The Project includes the installation of two 20,000-gallon jet fuel storage tanks, a 5,000-gallon aviation fuel tank, and one 500-gallon diesel fuel tank. These tanks would be constructed on a concrete pad with secondary containment.



4.2.2 Demolition

Phase I includes the demolition of a one-story brick building, Building 12. Phase 2 of the Project, if implemented, would include the demolition of two hangars, Building 9 of approximately 16,800 sf and Building 10 of approximately 25,500 sf with a one-story brick off building added in the 1960s.

Solid waste generated from the Project will be recycled to the extent practicable. Where recycling is not practical, the waste will be disposed of in an approved landfill.

Prior to demolition, the buildings will be assessed and tested for asbestos and lead based paint. If extant, these materials will be handled by trained contractors and disposed of at a suitable disposal facility in compliance with 29 CFR Parts 1910 & 1926 and 310 CMR 4.00 (Air Quality notification approval timelines and fees), 7.00, 7.09(5), 7.15 (Air Quality asbestos regulation) and 310 CMR 19.061 (disposal requirements).



4.2.3 Potential for Encountering Contaminated Soils

There are twenty reportable release incidents listed at the airport in the online Massachusetts Department of Environmental Protection (MassDEP) MCP (Massachusetts Contingency Plan) database. One MCP site is associated with the existing fuel farm (RTN 2-12383), which was closed out with a Response Action

Outcome (RAO) in 2009. If hazardous materials encountered during excavations would be managed in accordance with federal law (the Resource Conservation and Recovery Act of 1980 (RCRA) (40 CFR Part 261 C) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1986 (CERCLA)); and Massachusetts state laws (M.G.L. c. 21E and 21A) and regulations (the Massachusetts Contingency Plan or MCP (310 CMR 40.0000)).

4.3 Historic and Cultural Resources

There are no National or State Register-listed properties located within the Project area, and none of the airport buildings have been inventoried. No known prehistoric or historic period sites have been recorded within the project area. A reconnaissance survey of the entire airport property was conducted in 2011 by Public Archaeology Laboratory (PAL) during the development of the airport's Vegetation Management Program. The report noted that the airport proper, which includes the project areas for both Phase 1 and Phase 2 of the proposed Project, is considered to have low archaeological sensitivity due to the construction of the airport and subsequent maintenance activities.

Confirmation that the buildings on the site slated for demolition, Buildings 9, 10 and 12, are not historically significant, is pending under a review by the State Historic Preservation Officer (SHPO) of a Project Notification Form submitted for the Project.

Under the No-Action Alternative, these buildings would be retained in their current condition.

4.4 Water Quality

The Project would have no adverse water quality impacts. Runoff generated from impervious surfaces would be collected and managed in accordance with the MassDEP Stormwater Management Standards. Buildings 9, 10, and 12 are located on a paved surface with a generally flat topography. Stormwater that falls onto the site is collected in a "catch basin to catch basin" system and is discharged untreated to the closed drainage network. The remainder of the site flows untreated overland to the north and east, eventually reaching the closed drainage system. The existing fuel farm area comprises one drainage area, with stormwater runoff flowing to a single design point at an existing 18-inch concrete culvert running under an adjacent maintenance road. This culvert conveys runoff from the drainage swale along the south side of the maintenance road to an off-site area north of the road. The stormwater will be handled to a higher standard with the proposed Project relative to the existing condition. The proposed stormwater management system implements a treatment train of Best Management Practices (BMPs) that have been designed to provide 80-percent TSS removal of stormwater runoff from all new impervious surfaces, including an oil/water separator and a filtering bioretention area.

Under the proposed improvements associated with the FBO hangar and facilities replacement, stormwater runoff would continue to be collected in a closed drainage system; however, the drainage system would be reconstructed to integrate BMPs and low impact design (LID) techniques in order to comply with LEED Credits 6.1 and 6.2 for Stormwater Design. BMPs and LID techniques implemented into the design would include disconnected pavement, subsurface infiltration, structural water quality devices and oil and gas separators.

At the replacement fuel farm, stormwater collected within the concrete pad would flow north to a trench drain via a sump pump. Runoff would be stored within the pad until fuel farm personnel are able to pump this stormwater through an above grade oil/water separator also located within the pad. BMPs and LID techniques implemented into the design would include disconnected pavement, areas of non-structural stormwater collection, and treatment of runoff from new impervious areas which exceeds regulatory requirements.

Under the No-Action alternative, stormwater would continue to be handled within the existing system. Because there is only a very minor area (2,700 sf) of additional impervious surface proposed with the Project and because stormwater will be handled to a higher standard with the proposed Project, the Project is beneficial compared to the No-Action Alternative for this resource.

4.5 Wetlands

There are no federal or state wetland resource areas on or within 100 feet of the section of the airport where the FBO/hangars are proposed.

The tank farm site includes several areas that have been identified as state-regulated wetland resource areas. These resource areas are associated with man-made drainage ditches (see Figure 4-1). The proposed fuel farm would not result in any direct impacts to these resource areas although work associated with the construction of the new above ground fuel tanks would occur within the associated state-identified 100-foot buffer zone. Prior to discharge, runoff generated from the Project would be collected and treated in accordance with design guidelines¹ developed by the MassDEP and standards contained in the WPA Regulations. A Notice of Intent has been filed with the Worcester Conservation Commission seeking an Order of Conditions for work in state-regulated buffer zone required for construction of the proposed replacement fuel farm. The tank farm site would not impact any federally-jurisdictional wetlands.



¹MassDEP, 2008. *Massachusetts Stormwater Handbook*.

The construction-period erosion and sedimentation control program proposed for the site includes provisions to minimize areas of disturbance through phasing and sequencing, stabilization, and installation of structural controls. See Section 4.6.

With the installation and maintenance of proper stormwater treatment and erosion and sedimentation controls, there will be no impact on these wetland resource areas. Accordingly, there is no difference between the No-Action Alternative and the Project.

4.6 Construction

The Project would involve the removal of existing buildings, construction of new buildings, site work such as paving and new fencing, and installation of above ground storage tanks. Activities would include demolition, foundation excavation, site grading, installation of utilities, building construction, paving and landscaping, installation of concrete pad and construction of above ground storage tanks and would be associated with typical temporary construction-phase impacts.

4.6.1 Construction Phase Air Quality

The Project would have no significant air quality impact nor would it violate local, State, Tribal, or Federal air quality standards under the Clean Air Act Amendments of 1990. There would be temporary *de minimus* effects to air quality emissions during construction. Massport requires tenants to commit to the reduction of construction-related diesel emissions through the Clean Air Construction Initiative and all tenant projects must meet this commitment. Under the agreement, contractors are required to retrofit their heavy equipment with advanced pollution control devices during construction of all projects on Massport property. Contractor-owned equipment such as front-end loaders, backhoes, cranes and excavators would be retrofitted with oxidation catalysts and low particulate filters. These devices filter out and break down diesel emissions of hydrocarbons, particulate matters and carbon monoxide. Rectrix will take part in the Clean Air Construction Initiative.

The erosion and sediment control program includes provisions to minimize the generation of dust during dry and windy conditions. When necessary, larger areas of exposed soil would be wetted to prevent wind-borne transport of fine grained sediment. Enough water shall be applied to wet the upper 0.5 inches of soil. The water would be applied as a fine spray in order to prevent erosion. A water truck would be kept on the property (or at a nearby location) to facilitate this practice.

4.6.2 Noise

There will be a temporary increase in noise levels from the site from the operation of heavy construction equipment. There are no noise-sensitive areas immediately

adjacent to the project site. The closest residential area is located 1,100 feet to the northwest of the project site and is separated from the project site by a forested area. Construction will be limited to typical daytime hours (Monday through Friday, 7am to 7pm), unless exigent schedule demands requires work on weekends. Nighttime work is not anticipated.

4.6.3 Traffic

There may be temporary impacts on traffic as workers and heavy machinery access the project site. Although not anticipated, police details would be used if needed to control the flow of traffic.

4.6.4 Construction Phase Stormwater

The Project would disturb over one acre of land and is therefore required to obtain coverage under the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Rectrix would work with Massport to amend the existing Stormwater Pollution Prevention Plan for Worcester Regional Airport to include the proposed work and the Project would comply with the requirements of the CGP throughout construction.

A suite of mitigation measures is proposed to prevent short- and long-term impacts to wetland resource areas. An erosion and sedimentation control program would be implemented to minimize temporary impacts to wetland resource areas during the construction phase of the Project. The program incorporates Best Management Practices (BMPs) specified in guidelines developed by MassDEP² and the U.S. Environmental Protection Agency (EPA)³.

Proper implementation and maintenance of the erosion and sedimentation control program would:

- minimize exposed soil areas through sequencing and temporary stabilization;
- place structures to manage stormwater runoff and erosion; and
- establish a permanent vegetative cover or other forms of stabilization as soon as practicable.

Controls would comply with criteria contained in the NPDES General Permit for Discharges from Large and Small Construction Activities issued by the EPA. Non-structural practices which may be used during construction include temporary stabilization, temporary seeding, permanent seeding, pavement sweeping and dust

² MassDEP, 1997. *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers, and Municipal Officials*.

³ EPA, 2007. *Interim Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites*. Office of Water Report EPA 833-R-060-04.

control. These practices would be initiated as soon as practicable in appropriate portions of the work zone.

Any areas of exposed soil or stockpiles that would remain inactive for more than 14 days would be covered with a layer of straw mulch applied at a rate of 90 pounds per 1,000 square feet. The mulch would be anchored with a tacking coat (non tar) applied by a hydroseeder. Steeper slopes (greater than 10 percent) would be covered with a bonded fiber matrix (EcoAegis[®] or similar) according to the recommendations provided by the manufacturer.

Prior to any ground disturbance, an approved erosion control barrier would be installed at the downgradient limit of work. As construction progresses, additional barriers would be installed around the base of stockpiles and other erosion prone areas. As appropriate, the barriers would be entrenched into the substrate to prevent underflow.

If sediment has accumulated to a depth which impairs proper functioning of the barrier, it would be removed by hand or by machinery operating upslope of the barriers. This material would be either reused at the Site or disposed of at a suitable offsite location. Any damaged sections of the barrier would be repaired or replaced immediately upon discovery.

4.7 Cumulative Impacts

No adverse cumulative impacts are anticipated due to the implementation of the Project due to the limited nature of potential impact to environmental resources. No major projects have been conducted at the Airport within the past five years. Presently, the only project planned for the Airport or the areas adjacent to the Airport, other than routine maintenance of roads and utility infrastructure, is the CAT III-ILS and Taxiway Improvements Project. This project is planned, although has not yet been reviewed under NEPA or MEPA. The CAT III-ILS and Taxiway Improvements Project would likely impact wetlands, require measures to avoid water quality impacts and affect wildlife habitat. It would have temporary increases on construction-related traffic, though not likely during any of the FBO project construction. The FBO project would not have additional impacts to these resources and therefore would not contribute to cumulative impacts.

4.8 Summary

Because the new FBO/hangar facilities are being proposed on an existing paved portion of the airport and the fuel tank improvements are being proposed at the site of the existing tank farm, the proposed Project has little potential for adverse environmental impact. Potential impacts related to erosion and sedimentation during construction and work within buffer zone to state regulated wetland areas

would be fully mitigated. Construction of a new state of the art fuel farm and LEED certified buildings would have a positive environmental impact.

Table 4-2 Summary of Impact Significance

Resource	Significant Threshold (from Table 7-1, FAA Order 5050 4B)	Impact
Hazardous Materials	When an action involves a property on or eligible for the National Priority List (NPL). Uncontaminated properties within a NPL site's boundary do not always trigger this significant threshold.	The project site is not on the NPL.
Historic and Cultural Resources	When an action adversely affects a protected property and the responsible FAA official determines that alternatives that may avoid adverse effects warrant further study.	Extant structures are currently under review by the SHPO. It is not anticipated that they will be judged to be historically significant.
Water Quality	When an action would not meet water quality standards. Potential difficulty in obtaining a permit or authorization may indicate a significant impact	The Project will meet water quality standards.
Wetlands	<p>When an action would:</p> <ul style="list-style-type: none"> • Adversely affect a wetland's function to protect the quality or quantity of a municipal water supply, including sole source aquifers and a potable water aquifer. • Substantially alter the hydrology needed to sustain the affected wetland's values and functions or those of a wetland to which it is connected. • Substantially reduce the affected wetlands's ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare. The last term includes cultural, recreational, and scientific public resources or property. • Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically-important timber, food, or fiber resources of the affected or surrounding wetlands. • Promote development that causes any of the above impacts. • Be inconsistent with applicable State wetland strategies. 	The Project will not impact wetlands.
Construction Period Impacts	<p>Air Quality: When a project or action exceeds one or more of the National Ambient Air Quality Standards (NAAQS).</p> <p>Noise: For most areas: When an action, compared to the no action alternative for the same timeframe, would cause noise sensitive areas located at or above DNL 65 dB to experience a noise increase of at least DNL 1.5 dB. An increase from DNL 63.5 dB to DNL 65 dB is a significant impact. For national parks, national wildlife refuges and historic sites, including traditional cultural properties: FAA must give special consideration to these areas. The DNL 65 dB threshold may not adequately address noise effects on visitors to these areas. Consult the jurisdictional agency for more information to determine a significant noise impact.</p> <p>Solid waste: None established.</p>	<p>The Project does not exceed the NAAQS.</p> <p>Noise increases will be temporary. The airport is not located in a noise sensitive area or within a national park, national wildlife refuge or historic site.</p> <p>Solid waste will be recycled or reused where practical or will be disposed of in accordance with applicable regulations.</p>

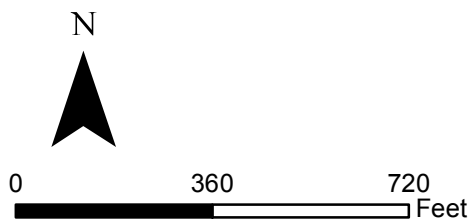


Source: USGS

Vanasse Hangen Brustlin, Inc.

-  DEP Wetlands
-  VHB Wetlands
-  NHESP Priority Habitats of Rare Species
-  Project Areas

Figure 4-1
Environmental Resource Areas
Proposed Rectrix FBO and Fuel Farm
Worcester Regional Airport



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5

Distribution List

City Clerk
City of Worcester
City Hall Room 206
455 Main Street
Worcester, MA 01608

Worcester Conservation Commission
455 Main Street
Worcester, MA 01608

Worcester Fire Department
141 Grove Street
Worcester, MA 01605

Massachusetts Department of
Environmental Protection
Central Regional Office
627 Main Street
Worcester, MA 01608

Mr. Jack J. Reiff
403 Browning Lane
Worcester, MA 01609

Mr. Michael Amir
48 Hickory Drive
Worcester, MA 01609

Mr. George Clark
53 Brattle Street
Worcester, MA 01606

Philip Guerin
Director of Environmental Systems
Worcester Division of Public Works & Parks
20 East Worcester Street
Worcester, MA 01604

Worcester Historical Commission
455 Main Street
Worcester, MA 01608

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

Mr. Bernard Iandoli
83 Flagg Street
Worcester, MA 01602

Mr. Robert Nemeth
60 Oak Hill Road
Worcester, MA 01609

Mr. George Allen
69 Elmwood Street
Millbury, MA 01527

Mr. Raul Porras
334 Massasoit Road
Worcester, MA 01604

Mr. Doug Belanger
13 Harberton Drive
Leicester, MA 01524

Ms. Dianna Provencher
P.O. Box 255
Leicester, MA 01524

Worcester Public Library
3 Salem Street
Worcester, MA 01608

