

DECEMBER 2017

FINAL

Environmental Assessment (EA) & Environmental Impact Evaluation (EIE) for Obstruction Removal

Waterbury-Oxford Airport (OXC)

Prepared for:



Prepared by:



FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT (EA)
FOR OBSTRUCTION REMOVAL

WATERBURY-OXFORD AIRPORT (OXC)

FAA AIP NO. 3-09-0900-010-2014

CAA CONTRACT NO. 2014-02

CHA CONTRACT NO. 29067

May 2017

Prepared for:
Connecticut Airport Authority (CAA)



Prepared BY:
CHA Consulting, Inc.



Waterbury- Oxford Airport (OXC)

Obstruction Analysis -Tree Removal

FEDERAL FINDING

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed federal action is consistent with existing national policies and objectives as set forth in Section 101 of the National Environmental Policy Act (NEPA) and other applicable environmental requirements and will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 101 (2) (c) of the NEPA.

A handwritten signature in blue ink, appearing to read "R. Doucette", is written over a horizontal line.

Approved: _____
Richard Doucette
Manager, Environmental Programs

5/11/17
_____ Date

RECORD OF DECISION
ENVIRONMENTAL IMPACT EVALUATION (EIE) FOR
OBSTRUCTION REMOVAL

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Notice: On November 11, 2017, the State of Connecticut, Office of Policy and Management (OPM) determined that the Connecticut Airport Authority (CAA) “shall not be construed to be a department, institution or agency of the state”, and that the Connecticut Environmental Policy Act (CEPA) is not applicable to CAA actions. See CT OPM notice included in Appendix B. As such, environmental review for the project is not subject to CEPA, and this ROD (prepared prior to November 2017) is not applicable. Nevertheless, as this study followed the CEPA process, the ROD and references to CEPA and the EIE were retained for informational purposes.

1.0 DECISION

The Connecticut Airport Authority (CAA), owner and operator of the Waterbury-Oxford Airport (OXC) intends to implement the proposed action detailed in the Environmental Assessment and Environmental Impact Evaluation for Obstruction Removal issued in May 2017 and included with this document.

A single document serving as an EA/EIE was prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969 and the Connecticut Environmental Policy Act (CEPA) to address the potential impacts associated with the objects that penetrate the airspace which are classified as airspace obstructions, and should

be removed to safely accommodate approaching and departing aircraft. As the airspace surfaces extend well beyond the airport's property boundary, this EIE includes an off-airport obstruction removal and mitigation review.

This decision is based on careful consideration of the alternatives and potential environmental impacts documented in the Final EA/EIE.

2.0 PROJECT LOCATION AND SUMMARY OF ACTION

The Waterbury-Oxford Airport is a public-use, publically owned General Aviation (GA) airport on 424 acres located approximately seven miles southwest of Waterbury Connecticut in the Town of Oxford (New Haven County). A small northern portion of the Airport is located within the Town of Middlebury. The Airport is accessible via Airport Road just off of Route 188 (Strongtown Road), which has direct access to Interstate 84, a majority artery.

Based on the evaluation identified in the Environmental Assessment and Environmental Impact Evaluation for Obstruction Removal document, and the review by CAA and FAA, the Modified Obstruction Removal Alternative has been chosen as the "Proposed Action" and "Preferred Alternative" for Waterbury-Oxford Airport. This determination is primarily related to the Full Removal Alternative being considered not practical or feasible from an environmental and cost standpoint. The No Action Alternative is also not considered appropriate as it does not address the safety of airport users and does not satisfy FAA requirements or obligations.

3.0 STATEMENT OF ENVIRONMENTAL IMPACT

No significant impacts to the environment are anticipated as a result of the proposed action. All practicable means to avoid or minimize any associated environmental impacts as identified in the Final EA/EIE will be adopted. The mitigation measures identified in the Final EA/EIE will be adopted and implemented as part of the proposed action.

4.0 SUMMARY OF AGENCY CONSULTATION AND PUBLIC COMMENTS

A Scoping Notice was first published in the CEPA Environmental Monitor on June 16, 2015 to allow for 30 days of public comment, ending on July, 17, 2015. The Connecticut DEEP provided scoping comments dated July 17, 2015 which can be found in the attached Final EA/EIE document which follows the ROD.

A Draft EA/EIE was prepared for the project in September 2016 and submitted to the stakeholder agencies for review and comment. Contact was also initiated with federal and state resource agencies prior to the Draft EA/EIE during the development of alternatives, including:

- The Connecticut Department of Energy and Environmental Protection (CTDEEP), Office of Environmental Review
- The Connecticut Department of Energy and Environmental Protection (CTDEEP), Bureau of Outdoor Recreation
- Connecticut Department of Economic & Community Development, State Historic Preservation Office (SHPO)
- State of Connecticut Department of Public Health
- Tribal Historic Preservation Officers of the Mashantucket Pequot Tribal Nation and the Mohegan Tribe.

In September, 2016 the Draft EA/EIE was issued and made available for review and comment on the CAA project website (<http://waterburyairport.caa-analysis.com/>) and published in the Environmental Monitor (<http://www.ct.gov/ceq/cwp/view.asp?a=987&Q=578776>). A notice of the Draft EA/EIE publication, including information on how the document could be accessed, the location, date and time of the public informational meeting, and details on the comment process, was advertised in The Republican American and The Voices. The Republican American advertisement was posted on October 6th, 2016 and October 19th, 2016 and the Voices Advertisement was posted on October 5th, 2016. **Per CEPA requirements, this notice was also mailed to CTDEEP, the Town of Oxford, and the Connecticut Office of Policy and Management (OPM).** Comments were accepted through Friday December 2nd, 2016. A total of four comment letters or emails were received during this period from agencies and the public and can be found in Appendix B of the accompanying EA/EIE.

A public informational meeting was held on October 25, 2016 at the Oxford High School in the Library Media Center, 61 Quaker Farm Road, Oxford, CT 06478. This meeting was attended by representatives from CAA and CHA Consulting, Inc. who introduced the project and discussed the identified alternatives and proposed action. This meeting was attended by sixteen (16) members of the public.

Comments and issues identified from the public and agency stakeholders were reviewed, acknowledged and incorporated into the alternatives analysis, proposed action, project design and analysis of environmental consequences where feasible and practicable. **The Final EA/EIE including such revisions was publicly displayed and available for comment on the CAA project website (<http://waterburyairport.caa-analysis.com/>) in order to fulfill the requirements of CEPA and is included as part of the ROD.** Agencies that commented on the Draft EA/EIE as well as municipalities affected by the action were notified of the availability of the Final EA/EIE.

FINAL ENVIRONMENTAL ASSESSMENT (EA) FINAL ENVIRONMENTAL IMPACT EVALUATION (EIE)

The complete report can be found on the CAA website at
<http://waterburyairport.caa-analysis.com/>

FINAL ENVIRONMENTAL ASSESSMENT (EA) &
ENVIRONMENTAL IMPACT (EIE) EVALUATION FOR
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In Association with:
DY Consultants, Inc.
Fitzgerald & Halliday, Inc.

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LIST OF ACRONYMS

ACRONYMS	
ABBREVIATION	MEANING
AAC	Aircraft Approach Category
AC	Advisory Circular
ADG	Airplane Design Group
ARC	Airport Reference Code
CAA	Connecticut Airport Authority
CEPA	Connecticut Environmental Policy Act
DEEP	Connecticut Department of Energy and Environmental Protection
DOT	US Department of Transportation
EA	Environmental Assessment (Federal)
EPA	US Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FEMA	Federal Emergency Management Agency
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NPIAS	National Plan of Integrated Airport Systems
O3	Ozone
RDC	Runway Design Code
OXC	Waterbury-Oxford Airport
RPZ	Runway Protection Zone
TERPS	Terminal Instrument Procedures

Note that substantive report edits between the Draft EA and this final document are indicated with underlined text.

1.0 INTRODUCTION

This Environmental Assessment (EA) documents the evaluation of potential impacts associated with tree removal at Waterbury-Oxford Airport which is operated by the Connecticut Airport Authority (CAA). The evaluation addresses obstruction removal associated with Federal Aviation Regulations (FAR) Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace and published Terminal Instrument Procedures (TERPS), which define the airspace surrounding runways. Objects that penetrate the airspace are classified as airspace obstructions, and should be removed to safely accommodate approaching and departing aircraft. As the airspace surfaces extend well beyond the airport's property boundary, this EA includes an off-airport obstruction removal and mitigation review. It is noted that tree removal activities may require environmental permits based on site conditions, which will be made in coordination with the Connecticut Department of Energy and Environmental Protection (CTDEEP). Tree removal activity may also require, the purchase of a permanent easements for removals located on private property.

This EA was prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969 and the Connecticut Environmental Policy Act (CEPA) to address potential impacts associated with the tree obstruction removal while providing the opportunity for public involvement and comments. The study was conducted in accordance with Federal Aviation Administration (FAA) guidelines including the "Environmental Desk Reference for Airport Actions", FAA Order 5050.4B "National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions" and FAA Order 1050.1E "Environmental Impacts: Policies and Procedures." Since the project would potentially be federally-funded, the EA must comply with federal requirements (i.e., NEPA, FAA).

As part of a previous study, the CAA and Federal Aviation Administration (FAA) have identified that trees penetrate the airspace of Waterbury-Oxford Airport, including locations beyond airport property.

This EA includes the following sections:

- Introduction
- Purpose and Need
- Alternatives Analysis and Proposed Action
- Affected Environment
- Environmental Consequences
- List of Preparers
- Correspondence and Public Comments

1.1 PROJECT LOCATION AND EXISTING FACILITIES

The Waterbury-Oxford Airport is a public-use, publically owned General Aviation (GA) airport on 424 acres located approximately seven miles southwest of Waterbury Connecticut in the Town of Oxford (New Haven County). A small northern portion of the Airport is located within the Town of Middlebury. The Airport is accessible via Airport Road just off of Route 188 (Strongtown Road), which has direct access to Interstate 84, a major artery. Appendix A provides a map which depicts the location of OXC relative to the surrounding area.

Runway 18-36

Waterbury-Oxford is served by a single paved runway and one full length parallel taxiway. Runway 18-36 is 5,800 feet long and 100 feet wide with displaced thresholds on both ends. The runway is served by a full parallel taxiway

(Taxiway Alpha) to the west and a partial parallel taxiway to the east (Taxiway Bravo). Both runway ends have FAR Part 77 obstructions to the approach surfaces. Runway 18 has a displacement of 300 feet due to tree obstructions and Runway 36 has a 500 foot displacement due to a power line obstruction. The runway displacements are also needed due to nonstandard safety area (i.e., overrun) length beyond the runway ends. Table 1 provides information regarding Runway 18-36.

TABLE 1- EXISTING AIRPORT FACILITIES	
RUNWAY 18-36	
Runway Length (Feet)	5,800'
Width (Feet)	100'
Surface Type	Asphalt
Parallel Taxiway	TWY A
Threshold Displacement (Feet)	RWY 18: 300'
	RWY 36: 500'

Source: Data Compiled by CHA Consulting, Inc. (2015)

1.2 BASED AIRCRAFT AND AVIATION ACTIVITY

Waterbury-Oxford Airport is a general aviation facility that serves private, corporate, and charter aircraft operating for recreational/personal, training, and business purposes. The Airport does not offer scheduled airline service. There are a total of 168 based aircraft at the Airport.

Table 2 lists the existing based aircraft and Table 3 depicts annual operations at Waterbury-Oxford. Note that an aircraft operation is defined as either one landing or one takeoff, therefore each flight includes at least two operations which consists of one takeoff and one landing.

TABLE 2- BASED AIRCRAFT							
	SINGLE ENGINE	MULTI ENGINE	JET	ROTOR	GLIDERS	MILITARY	TOTAL
Based Aircraft	128	8	31	1	0	0	168

Source: FAA 5010 Data Dated (2012)

TABLE 3- ANNUAL OPERATIONS						
	AIR CARRIER	AIR TAXI	GA LOCAL	GA ITINERANT	MILITARY	TOTAL
Operations	0	3,914	18,725	24,017	1,331	47,987

Source: FAA 5010 Database (2012)

Appendix A contains a map that represents the Project Study Area and depicts the location of the airport and the general approaches to each runway end. Chapter 3, identifies the specific recommended tree removal locations.

1.3 FAA DESIGN STANDARDS

The design, or critical, aircraft is defined as the most demanding aircraft operating or projected to operate on the airport's runway, taxiway, or apron. According to the FAA, the design aircraft can be either a specific aircraft model or a composite of several aircraft, and must account for a minimum of 500 annual itinerant operations.

The FAA uses the approach speed and wingspan of the design aircraft to classify the airport. The FAA term for this classification is the airport reference code (ARC). Table 4 provides the FAA specifications associated with the ARC classification system.

TABLE 4 - AIRPORT REFERENCE CODES				
AIRCRAFT APPROACH CATEGORY (AAC) ¹		AIRPLANE DESIGN GROUP (ADG) ²		
CATEGORY	APPROACH SPEED	GROUP	TAIL HEIGHT	WINGSPAN
A	Approach speed less than 91 knots	I	< 20'	<49'
B	Approach speed 91 knots or more but less than 121 knots	II	20' - < 30'	49' - < 79'
C	Approach speed 121 knots or more but less than 141 knots	III	30' - < 45'	79' - < 118'
D	Approach speed 141 knots or more but less than 166 knots	IV	45' - < 60'	118' - < 171'
E	Approach speed 166 knots or more	V	60' - < 66'	171' - < 214'
		VI	66' - < 80'	214' - < 262'

Source: FAA AC 150-5300-13A, Airport Design¹

As previously identified, Waterbury-Oxford Airport is served by one runway (Runway 18-36). The design aircraft for Runway 18-36 is the Gulfstream V (G550). Given this information, the current ARC for Waterbury-Oxford is ARC D-III. Table 5 provides a summary of the runway design codes (RDC) classification for the runway at the airport.

TABLE 5 - RUNWAY DESIGN CODE SUMMARY			
Runway	Design Aircraft	AAC	ADG
18-36	Gulfstream V (G550)	D	II

Source: Airport Master Plan Update 2007

After determining the airport runway design code, the airport itself is classified with the appropriate ARC. The ARC is used for airport planning and design purposes and is determined by the highest RDC at the airport. The ARC uses the same classification system as the RDC. The ARC for Waterbury-Oxford is D-III.

Airspace Obstructions

Overall airspace obstructions include penetrations to any number of defined airspace surfaces, but predominantly include FAR Part 77 imaginary surfaces and Terminal Instrument Procedures (TERPS) surfaces, which define the airspace surrounding runways. The most restrictive surfaces are usually the Part 77 surfaces, which are discussed below.

The FAA's Federal Aviation Regulation Part 77, titled *Obstructions Affecting Navigable Airspace* are used to determine obstructions to air navigation and communication facilities. These are commonly referred to as "imaginary surfaces" and are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach procedure existing or planned for that runway end. The definitions of the Part 77 imaginary surfaces are listed below.

Horizontal Surface

The horizontal surface is established 150 feet above the airport elevation. The perimeter of the horizontal surface created by swinging arcs of a specified radii from the center of each end of the primary surface and connecting the adjacent arcs by lines tangent to those arcs.

Conical Surface

A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

Primary Surface

A surface longitudinally centered on a runway that extends 200 feet beyond each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

Approach Surface

A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

Transitional Surface

The transitional surface extends outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces.

Table 6 summarizes the FAR Part 77 surface dimensions at Waterbury-Oxford.

TABLE 6- FAR PART 77 SURFACE DIMENSIONS (FEET)		
SURFACE	RUNWAY 18	RUNWAY 36
Primary Surface Width	1,000'	1,000'
Horizontal Surface Radius	10,000'	10,000'
Approach Surface Width at End	3,500'	16,000'
Approach Surface Length	10,000'	10,000/40,000
Approach Procedure	Non-Precision	Precision
Approach Slope	34:1	50:1/40:1

Source: CHA Consulting, Inc. (2015)

In addition to Part 77, the US Standards for Terminal Instrument Procedures (TERPS) are used by FAA to develop all instrument approaches and other procedures to airports. These procedures are used by aircraft when visibility and cloud ceilings are low. TERPS are defined in FAA Order 8260.3B, and include numerous approach and departure surfaces surrounding runways. As the TERPS surfaces can be complex and differ from Part 77 surfaces, the FAA has provided overall airport design standards for obstruction clearing beyond any runway.

These obstruction clearing standards are defined in FAA Advisory Circular 150/5300-13A, Airport Design, and determined the minimum obstruction removal required for any runway end. In locations off-airport property, where the CAA does not own rights to clear all airspace penetrations, clearing the minimum design standards defined in the Advisory Circular may be the most feasible alternative.

2.0 PURPOSE AND NEED

Purpose: The purpose of the proposed obstruction removal project evaluated in this Environmental Assessment (EA) is to promote safety by bringing the airport into compliance with Federal Aviation Administration (FAA) design standards and regulations regarding clear airspace.

Need: The FAA has established airspace and design criteria to provide for safe aircraft operations. In 2012, the State conducted an obstruction study to evaluate the airspace at the Airport. Based on the FAA design criteria, the results of this analysis identified existing safety deficiencies at OXC consisting of multiple obstructions to the Federal Aviation Regulation (FAR) Part 77 surfaces, Terminal Instrument Procedures (TERPS), and Airport Design Standards. The results of this study identified that the Airport does not provide adequate airspace surfaces to its runways.

3.0 ALTERNATIVES ANALYSIS AND PREFERRED ACTION

This chapter of the Environmental Assessment (EA) addresses the potential alternatives for airport obstruction removal at Waterbury-Oxford Airport. The recent airport obstruction study identified substantial areas of tree obstructions in all areas surrounding the airport. The ideal alternative from an aeronautical standpoint would be to remove all tree penetrations to the Federal Aviation Regulation (FAR) Part 77 "Objects Affecting Navigable Airspace" and Terminal Procedures (TERPS) surfaces. However, as part of the scoping process for this study, it was determined that this approach would be impractical, and other alternatives would need to be developed.

The National Environmental Policy Act (NEPA) and FAA Order 5050.4B require the consideration of alternatives commensurate with the purpose and need statement. The intent is to evaluate various options that address the recognized need so that potential environmental impacts can be compared and minimized. This chapter presents the various options considered, as well as those deemed infeasible. Where appropriate, removal methods, and site specific procedures are also discussed.

3.1 ALTERNATIVES UNDER CONSIDERATION

As part of the effort to identify project alternatives, the recommendations from the 2012 Obstruction Evaluation were considered, as well as agency comments and the concerns of affected parties and property owners. This coordination effort took into consideration both the environmental and socioeconomic impacts as well as costs which were evaluated as part of the process to refine and develop the alternatives. The results of this refinement resulted in two alternatives plus the No Action option. All three are presented herein for consideration.

3.1.1 No Action Alternative

The No Action Alternative retains all obstructions, with CAA taking no action to address airspace hazards. The existing trees and other obstructions would continue remain as penetrations to the local airspace. As this option results in potential dangers to users of the airport it is not desirable from the perspective of the flying public. Mitigating potential airspace hazards is an important mission of the CAA and FAA. In fact, addressing airspace hazards is required by the FAA. Although, this alternative fails to improve safety for passengers and crews operating at the airport, it serves as the baseline for comparison to the build alternatives.

The No Action Alternative has the least potential impact to the environment and effect on property owners. This option also has no implementation costs. The No Action alternative cannot be selected as the preferred action as it would violate the airports federal obligations for hazard removal and mitigation. Airports developed or improved with federal funds are obligated to prevent the growth or establishment of obstructions in the approaches to the airport and to take reasonable actions to remove existing obstructions. This requirement is discussed in the FAA Airport Compliance Manual (FAA Order 5190.6B), which sets forth policies and procedures to be followed by public airports. This requirement is also listed in federal grant assurance No. 20, Hazard Removal and Mitigation of the Airport Improvement Program (AIP), per Federal Statute 49 U.S.C., Section 47101.



It is also noted that the No Action Alternative does not eliminate potential environmental and social impacts as the increased risk of airport operations poses an impact to airport users. Potential aircraft incidents could create environmental damage to wetlands, habitat, and endanger emergency responders and even persons and property on the ground.

The following summary box highlights potential advantages and disadvantages of the No Action Alternative.

No Action Alternative	
<p>Goal(s): This option minimizes environmental impacts as it takes no action to remove, lower, mark, or mitigate existing or potential future airspace obstructions.</p>	
<p>Description: Tree obstructions have been identified beyond both runway ends, Transitional Surface areas, and the outer airspace of the Horizontal and Conical Surfaces. These presumed hazards would remain in place, and potentially increase in size and penetration with additional tree growth.</p>	
Advantages	Disadvantages
<ul style="list-style-type: none"> • No wetland impacts (temporary or permanent) • No impacts to biological resources, habitats, or species of concern • No impacts to parks or recreation • No impacts or disturbance to property owners • No project costs 	<ul style="list-style-type: none"> • Retains potential hazards to airport users • Retains a potential hazard to people and property on the ground surrounding the airport • Does not comply with FAA design standards or grant assurances • Risks future FAA funding for improvements to the airport

3.1.2 Full Obstruction Removal Alternative

The Full Obstruction Removal Alternative would clear all obstructions to the FAR Part 77 Approach and Transitional Surfaces. These surfaces are generally the most encompassing for approach protection, whereas if cleared, it would generally assure clearance of other airspace surfaces (e.g., TERPS, threshold surface, PAPI Obstacle Clearance Surface, etc.). Within the outer Part 77 surfaces (i.e., Horizontal and Conical), this alternative includes obstruction lighting for the high terrain and tree obstructions surrounding the airport.

The Part 77 Approach Surface is trapezoidal in shape, and extends away from the runway along the centerline at a specific slope, as discussed in Section 1. The specific size and slope depends upon the aircraft served and visibility minimums of the runway end. The figures included in Appendix A for each runway end illustrate the Approach Surfaces, with the blue dots depicting penetrations to the Approach Surface and orange dots for obstructions to the Transitional Surfaces. These dots represent the most critical obstructions only, there are likely many more trees penetrations than shown by the dots. As such, in order to removal all obstructions per this alternative, comprehensive tree clearing would be necessary in all locations where these dots are present. In other words, the colored dots (blue and orange) indicate locations of obstructions to the Part 77 surfaces, which would be removed under the Full Obstruction Removal Alternative.

The Part 77 approach surface to Runway 36 has a relatively flat 50:1 slope, which results in penetrations over a large area and includes a substantial number of off-airport private and public properties. The tree obstruction

areas include industrial and residential areas, and a large area of undeveloped lands. The Part 77 approach surface to Runway 18 has a 34:1 slope, and results in substantially fewer obstructions than the Runway 36 approach. With the exception of a few small grouping of trees on an undeveloped parcels, all other obstructions within the Runway 18 approach are located on airport property.

For the airport as a whole, this alternative would result in approximately 140 acres of tree removal. For tree removals on residential and other private parcels, permanent 'avigation' easements are typically required. Avigation easements refer a permanent conveyance of airspace, from a property owner to the airport, granting the airport the right to overfly the property and remove obstructions to a defined airspace surface. These easements involve appraisals, negotiation, and acquisition of the perpetual rights to remove existing tree obstructions and prevent future obstructions.

This comprehensive alternative would satisfy FAA requirements and improve safety of all operations at the airport, as well as on surrounding properties. However, as highlighted in the summary box, this alternative would include potentially significant impacts based on the large area involved, as well as the number of residents and properties affected. The cost and time involved to complete this alternative would be substantial, to the point that the successful completion is questionable due to the number of agreements needed with private parties.

To reduce potential environmental impacts of this Alternative, the tree clearing parameters would primarily include removal of all sizable trees, but retaining small trees and underbrush. Tree stumps would be left in place in undeveloped locations to minimize ground disturbance and potential erosion. This practice prevents or reduces impacts to wetlands, floodplains, and archeological resources. However, it is not a permanent solution as trees will eventually regrow. Nevertheless, this alternative may be considered to have a 20-year design life.

On residential properties, the removal parameters would be limited to selective removal of tall trees only, with stump grinding, top soil placement and seeding. Removal of branches, wood chips, and repair of damage to lawn areas would also be included. Small trees that are 20 feet or more below the surface would be left in place.

Overall, the tree removal approach and methods would vary based on site conditions, environmental sensitivity, and land use, with the detailed methodology determined during the design and permitting process. Removals are typically conducted during dryer periods of the years (i.e., autumn) or winter, when partly frozen ground reduces temporary construction impacts. Winter removals are also beneficial to reduce impacts to bat, bird, and plant species.

Sample: Selective tree removal underway in a residential area, with shorter trees left in place.



The following summary box highlights potential advantages and disadvantages of the Full Obstruction Removal Alternative.

Full Obstruction Removal Alternative	
Goal(s): This option removes all penetrations to the FAR Part 77 Approach and Transitional Surfaces, with obstruction lighting for the Horizontal and Conical Surfaces.	
Description: A comprehensive removal of obstructions to the inner airspace surfaces, including substantial areas off-airport property. This alternative provides maximum benefit to airport users and safety enhancement. Outer surfaces are protected with lighting during nighttime operations.	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Clears or lights virtually all defined aeronautical surfaces • Satisfies federal design standards and assurances • Comprehensive removal of potential hazards to airport users • Improves safety for people and property on the ground surrounding the airport 	<ul style="list-style-type: none"> • Potential for impacts to wetlands (temporary or permanent) • Potential impacts to biological resources, habitats, or species of concern • Substantial coordination and negotiation needed with property owners • The need for numerous avigation easements may prevent successful completion of project and significantly extend the required schedule • High project costs • Successful completion is questionable

3.1.3 Modified Obstruction Removal Alternative

The Modified Obstruction Removal Alternative is intended to eliminate the most critical obstructions while substantially reducing the number of affected properties, and therefore potential environmental impacts. To accomplish this, the planned tree removals would focus on the penetrations to a less extensive airspace surface on locations off-airport property; on-airport locations would continue to address the Part 77 Surfaces.

The FAA has recognized that full off-airport clearing of the Part 77 surfaces can be a considerable endeavor and is often impractical due to environmental impacts, costs, and property considerations. As such, the FAA Airport Design manual (Advisory Circular 150/5300-13A) has defined a different approach surface that may be used by airport sponsors to address the most critical obstructions and maintain an acceptable margin of safety.

For distinguishing purposes, the surface is often referred to as the Threshold Surface, as not to be confused with the Part 77 Approach Surface. The Threshold Surface is designed to protect use of the runway in both visual and instrument meteorological conditions. Like the Part 77 Approach Surface, it is trapezoidal in shape and extends outward and upward from the runway along the extended runway centerline at a specific slope. However, the Threshold Surface is generally smaller in size or steeper in slope than the Part 77 Approach Surface, which reduces the size of the clearing area. The specific size and slope depends upon the aircraft served and visibility minimums of the runway end. In addition, for runways with displaced landing thresholds, the Threshold Surface is located based on the displacement, as opposed to the runway end. Displaced landing thresholds are often used to alleviate penetrations to the Threshold Surfaces.

Waterbury-Oxford Airport, the Threshold Surfaces for each runway end is steeper than the associated Part 77 approach surface, which reduces the penetrations to a much smaller area compared to the Full Obstruction Removal Alternative. Penetrations to the Threshold Surface are illustrated with a magenta (or pink) dots on the Figures. As most Threshold Surface penetrations are also Approach Surface Penetrations, these obstructions include blue dots with a magenta outline. The Modified Removal Alternative would result in approximately 17 acres of tree removal on airport property and 41 acres of selective tree removal off airport property on 10 individual parcels.

The figures in Appendix A illustrate the Modified Removal Alternative using shading. Yellow shading includes general tree clearing areas; green shading illustrates reduced or selective tree removal of individual tree obstructions identified during the design process – selective thinning. In other words, the hatching areas (green and yellow) indicate locations of obstructions to the threshold surfaces, which would be removed under the Modified Obstruction Removal Alternative. In some locations for preventative purposes, this alternative also recommends removals to some Part 77 surface penetrations as well. This selective thinning is use in locations where fewer obstructions are present and/or sensitive environmental conditions are anticipated (e.g., wetlands, streams). Similar to the other alternatives, for tree removals on private parcels, permanent ‘avigation’ easements are typically required.

Note that both runway ends have ‘displaced thresholds’, meaning the landing point is displaced from the physical end of the runway. The figures depict the Approach Surface based on the runway end, and the separate Threshold Surface based on the displaced threshold location. The shaded clearing areas on each map is the proposed tree removal for this alternative.

It is noted that Runway 18 does not have Threshold Surface obstructions; however, as the tree obstructions are located on-airport property, clearing is still recommended. For Runway 36, only a few Threshold Surface obstructions exist (magenta dots); however, in this unique case a portion of the tree obstructions to the Approach Surface (blue dots) are being recommended for removal. The area shaded for clearing contains a major electrical transmission line and substation. These facilities have been associated with past aircraft incidents, the location has poor access, contains no other developments, and is located within the Runway Protection Zone (RPZ). As such, clearing and thinning trees near the transmission line will provide improved visibility of the line itself, improve access to the area in the event of future incidents, and is intended to proactively improve airport safety. Therefore, due to this unique circumstance the Modified Alternative for the Runway 36 end (south end) recommends the removal of trees in areas that don’t penetrate the Threshold Surface. Ideally the transmission lines would be relocated or buried to improve airport safety; however, if that is not practical in the foreseeable future, tree removal in the along the electric transmission lines will improve visibility.

Immediately south of the airport property line (i.e., beyond Runway 36) is the Larkin State Park Trail. On this property, selective removal of the tallest trees (i.e., greatest penetrations) will be the goal of the removal project. During the design/permitting process, individual trees can be identified for removal, to the extent practical, to minimize clearing activities. The Connecticut DEEPDEEP owns this trail; as such all activities will required coordination and approval by DEEP.

Sample: Selective removal of trees to reduce impacts to sensitive properties.



As with the Full Removal Alternative, the Modified Removal Alternative would employ the same removal methods and techniques to minimums impacts, including:

- Removal of all sizable trees, but retaining small trees and underbrush.
- Tree stumps would be left in place to minimize ground disturbance and potential erosion.
- On residential properties, removal of tall trees only, with stump grinding, top soil placement and seeding.
- Fall and/or winter removals may be employed to reduce impacts to bat and bird species, and reduce ground disturbance.
- Removals will be conducted in coordination with State and Federal regulatory agencies, and follow required techniques or procedures defined during the permitting process.

Potential tree removal area surrounding electrical substation.



Unlike the Full Removal Alternative, the Modified Removal does not include obstruction lighting for the outer Horizontal and Conical Surface penetrations. Obstruction lighting is an added safety benefit, but requires additional property rights and access to remote locations.

The following summary box highlights potential advantages and disadvantages of the Modified Obstruction Removal Alternative.

Modified Obstruction Removal Alternative	
<p>Goal(s): This option removes penetrations to the FAA Threshold Surface in off-airport locations (and to FAR Part 77 Approach and Transitional Surfaces on-airport)</p>	
<p>Description: A reduced removal alternative intended to clear the critical penetrations to the runway approaches to maintain operational safety, while minimizing the impact to off-airport properties and the natural environment.</p>	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Clears the critical obstructions • Satisfies federal design standards and assurances • Improves safety for people and property on the ground surrounding the airport • Reduces impacts to environmental resources • Reduces the number of affected property owners • Streamlines the project schedule and reduces costs 	<ul style="list-style-type: none"> • Potential impacts to wetland, biological, habitat, or species of concern remain present • Easement are required with property owners • Less critical obstructions will remain • Outer Part 77 surface are not protected with obstruction lighting

The CAA and FAA have identified this alternative as the most practical solution. This alternative balances the airport needs and safety while taking into account environmental considerations and minimizing both cost and private property disturbance. The review considered land use, access, ownership, wetlands, and general environmental conditions.

As discussed above, detailed illustrations of the removal areas for this alternative have been prepared and are provided in Appendix A. These figures are referenced as necessary throughout the remainder of this document.

3.2 ALTERNATIVES CONSIDERED AND DISMISSED

This section includes a brief description of alternatives considered but dismissed because they were deemed infeasible.

- Removal of All Obstructions – Ideally all Part 77 obstructions would be removed, including those to the Horizontal and Conical Surfaces for the maximum safety benefit. However, due to the terrain surrounding the airport, private property involved, and potential environmental impacts, this alternative is not a realistic goal.
- Clear Cutting and Providing a Maintainable Surface – The two ‘build’ alternatives above remove tree obstructions; however, trees will eventually grow back. As an alternative, once trees are cut, the root balls could be pulled and the area graded and seeded. Thereafter the CAA would maintain the area as an open field with regular mowing or annual brush cutting. This option was eliminated from consideration in off-airport locations as grading the tree clearing areas would have a permanent impact to any wetlands, sensitive biological habitat, and recreational areas, and archeological resources. This alternative is also extremely costly.
- Further Displacement of Thresholds – The displacement of a runway’s landing location (i.e., threshold) is often used to reduce the amount of tree penetrations to the Threshold Surface. Currently Runways 18 and 36 have displaced thresholds of 300 and 500 feet, respectively. However, displaced thresholds reduce the landing length available for airport users. As such, this alternative was considered but dismissed. Reducing the available landing length would diminish the existing capability of the airport.
- Relocation of Runway – In some cases, a runway could be relocated or shifted horizontally to reduce penetrations. In the case of Waterbury-Oxford Runway 18-36, there does not appear to be a shifted or reoriented runway alignment that is feasible at the airport site. In addition, the cost for a runway relocation would likely far exceeded the cost for tree clearing.

3.3 PROPOSED ACTION

Based on the evaluation identified in this section, and review by CAA and FAA, the Modified Obstruction Removal Alternative has been chosen as the “Preferred Alternative” for Waterbury-Oxford Airport. This determination is primarily related to the Full Removal Alternative being considered not practical nor feasible from an environmental and cost standpoint. The No Action Alternative is also not considered appropriate as it does not address the safety of airport users and does not satisfy FAA requirements or obligations.

The remainder of this Environmental Assessment document focuses on the evaluation of potential impacts of the Proposed Action, with tree removals illustrated by the yellow and green shading. The goal of the evaluation is to enable the FAA to determine if the impacts of the Proposed Action are substantial, or could be implemented without significant impact.

4.0 AFFECTED ENVIRONMENT

This chapter describes the environment that may be affected by the Obstruction Removal alternative under consideration. The information provided in this chapter serves as the basis for the assessment of potential environmental, social, and economic impacts in Chapter 5.

Throughout Chapters 4 and 5, the discussion of potential impacts is in reference to the Preferred Alternative (i.e., the Proposed Action). It is assumed that the No Action alternatives, while undesirable, does not result in significant environmental impacts. It is also assumed that the Full Obstruction Removal Alternative will have greater impacts than the Preferred Alternative due to the more extensive area of tree removal and number of affected properties. As such, the remainder of this EA is focused on the potential impacts of the Proposed Action.

The sections below include the following:

- Land Use and Zoning
- Section 4(f) Lands
- Threatened and Endangered Species
- Wetlands



4.1 LAND USE AND ZONING

The Waterbury Oxford Airport is located in the Towns of Oxford and Middlebury approximately 7 miles southwest of Waterbury and one mile southwest of Interstate I-84. Airport property is surrounded by a mix of open, wooded, residential, commercial, and industrial land uses. The land to the south of the Airport is predominately wooded and/or open, with light industrial establishments along Commerce Drive and several low density residential areas

south of an electrical transmission line. The Larkin State Park Trail is just south of Runway 36. A wide mixture of industrial, and residential land uses are located to the north and west of the Airport along Christian Road, Route 188, and other roadways. The land to the east is predominately wooded with scattered residential areas. According to the Town of Oxford Zoning Map and Regulations dated March 2014, the portion of the airport located in Oxford as well as lands in the immediate vicinity are zoned Industrial. Lands to the west are zoned Corporate Business Park, lands to the east are zoned Residential A district or Residential Golf Community.

Land uses that are permitted in the Industrial District include in part wholesale and distribution; manufacture and assembly; warehouse and storage; banks and financial institutions; business, professional and corporate offices; aviation facilities; and printing and publishing activities. Allowable land uses within the Corporate Business Park zone include business or corporate offices, research and development facilities, data processing facilities, and manufacturing facilities. Residential District A permits land uses consisting of single-family dwellings, offices or shops in single family dwellings, elder care facilities, farms, governmental buildings, and similar uses. The Residential Golf Community district allows attached and detached single family dwellings, golf courses and community buildings.

The following zoning districts are delineated on zoning map dated October 2013 for the Town of Middlebury in the vicinity of the Waterbury –Oxford Airport: Residential District 40, Residential District 40/Planned Residential Development District, and Special Development District.

Residential District 40 consists of residential lots with a minimum lot size of 40,000 square feet. The Residential District R-40/Planned Residential District is intended to enable higher development densities in clusters, in order to protect sensitive environmental areas and enable more efficient construction. Finally the Special Development District provides flexibility for commercial and industrial uses that are in harmony with the Town of Middlebury Comprehensive Plan.

4.2 SECTION 4(F) LANDS

Section 4(f) of the Department of Transportation (DOT) Act requires the approval of the Secretary of Transportation for any project that impacts publicly owned land such as a public park, recreation area, or wildlife refuge of national, state, or local significance or a historic site of national, state or local significance.

A portion of the Larkin State Park Trail skirts the southern boundary of the airport near the end of Runway 36 in an area that includes the potential for both the removal and selective removal of trees. This area will require review by the Connecticut Department of Energy and Environmental Protection's (CTDEEP).

4.3 THREATENED AND ENDANGERED SPECIES

The habitat assessment for the Waterbury-Oxford Airport involved agency coordination with the Connecticut Department of Energy and Environmental Protection's Natural Diversity Database (NDDDB), screening through the United States Fish and Wildlife Service's Information Planning and Conservation System (IPaC), GIS screenings, and field investigations. Agency letters are attached. Field investigations were carried out during the summer of 2015.

Fish: There are no major waterbodies within the project area, however, small intermittent and perennial streams, including Little River (on the southern end of the airport), are located in proximity to the airport. These waterbodies likely support both warmwater and coldwater fisheries, depending on the waterbody type. The small

watercourses near the airport likely support an assemblage of coldwater fisheries tolerant of dry periods. Warmwater fisheries likely inhabit the perennial ponds and beaver ponds near the airport, and include species tolerant of warmer water temperatures and lower oxygen concentrations. Specific fish species that inhabit watercourses and ponds in the vicinity of the project area are currently unknown, and may require further investigation during project permitting if project activities are expected to result in direct impacts to these water resources.

Wildlife: Wildlife within the project area is expected to be diverse, representative of multiple taxa, and include a number of species identified as species of “Greatest Conservation Need” by the CTDEEP in the Comprehensive Connecticut Wildlife Conservation Strategy (CTDEEP, 2005). Various herpetofauna (reptiles and amphibians) are known or expected to occur within the project area. One of these species, the Eastern Box Turtle (*Terrapene carolina*) is listed as state Special Concern by the CT Endangered Species Act (CTDEEP, 2010).

A total of 52 bird species are reported from the “Larkin Bridle Trail” (the hiking trail just south of the airport) by area birders. A copy of the list is available here: <http://ebird.org/ebird/hotspot/L1636982>. This list includes species distributed among many taxonomic orders and families and is indicative of the species that would be expected to be found in similar habitats within the project area. It includes a variety of species considered to be of Greatest Conservation Need by the CTDEEP (2005), and a variety of migratory species whose distributional ranges overlap the project area, the protection of which falls under the jurisdiction of the USFWS.

The most abundant mammals observed within the project area are Gray Squirrel, Red Squirrel, and Eastern Chipmunk. Signs of White-tailed Deer (scat, tracks, and bedding areas in tall grass) were also frequently noted. Burrows of Woodchuck and Red Fox were encountered on or adjacent to the airport and signs of Beaver are evident along the southern and eastern ends of the airport. Other abundant mammals in the project area include Raccoon, Opossum, Eastern Cottontail, a variety of rodents and arboreal-roosting bats. During field investigations a black bear was observed on the southern side of the airport adjacent to a beaver pond area. This area is also suitable for amphibians, song birds, and other mammals. The ponded areas adjacent to the airport are suitable for various amphibians, song birds, wading birds, and mammals. The small wooded areas on the airport may provide limited suitable habitat for some reptiles, amphibians, song birds, and small and medium sized mammals.

Plants: The project area is characterized by a temperate deciduous forest dominated by tall growing broadleaf trees that sometimes grow to form dense continuous-canopy stands or forests, but that are often fragmented by residential, commercial and industrial land uses adjacent to the airport. Lower layers of small trees and shrubs are weakly developed in some areas and dense in others. The most abundant forest type that occurs within the project area includes mixed deciduous hardwoods, Appalachian oak, and pine-oak associations. Non-forested habitats include marshland, grasslands, old field / early successional habitats, lawn areas, and various miscellaneous wasteland habitats. Listed species may potentially occur based on observed habitat; field surveys may be needed during future project stages to determine presence/absence.

Within the airport property there are several wooded areas that are subject to only periodic maintenance. There are two forested areas at the north end of Runway 18 which have mixed upland and wetland habitats. The dominant vegetation in these areas include red maple (*Acer rubrum*) in the wetland areas and red oak (*Quercus rubra*) and shagbark hickory (*Carya ovata*) in the upland areas.

On the west side of the airport is a small forested and scrub-shrub wetland at the base of a steep slope. The dominant vegetation includes red maple and autumn olive (*Elaeagnus umbellata*).

On the southwest side of the airport (adjacent to the south end of Runway 36) is a large forested wetland system. This forested area is dominated by red maple and contains a perennial stream (Little River) and several stone walls. This system continues to the south, beyond the airport property as well as to the east within the airport property. Beyond the airport perimeter fence, within the same system, are two large active beaver ponds. The edges of these ponds are vegetated by red maple, silky dogwood (*Cornus amomum*), and common reed (*Phragmites australis*).

Rare Species: A review of CTDEEP Natural Diversity Database Geographic Information System mapping revealed a number of mapped locations of rare breeding species sites. According to NDDDB correspondence, there are seven (7) vertebrate and one (1) invertebrate species listed as endangered, threatened, and special concern species as now or formerly occurring on or adjacent to the Waterbury-Oxford Airport property. These species are identified in the CTDEEP response letter which is provided in Appendix C.

Additionally, the USFWS Online Screening Tool (IPAC) was referenced to obtain information on species listed by the federal Endangered Species Act. According to IPaC screening, there are nineteen (19) listed birds and one (1) listed mammal that are potentially found within the project area. Many of the listed species are habitat dependent and may not be located within the limits of the project. Further investigations at a later stage in the project may be required in order to make this determination. A copy of this report is provided in Appendix C.

Several private parcels have been identified off airport property as having potential impacts as a result of this project. These parcels have been individually numbered as Parcels 8-16 and were investigated for habitat resources. Adjacent parcel habitats, their characteristic vegetation, location in the project area, and characteristic wildlife species of conservation concern are provided in Table 7 below.

TABLE 7: Existing Habitats, Associated Species of Conservation Concern and their Respective State and Federal Status

Habitat	Characteristic Vegetation	Location/ Parcel No.	Species of Conservation Concern	CT Status	Federal Status
Abandoned residential/Lawn /Rock walls	Lawn, shagbark hickory, black birch, sugar maple	North of Runway 18/8	Fox Sparrow (dense thickets and woodlands)		Conservation Concern
			Blue-winged Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
Upland hardwood forest/Forested wetland/Emergent wetland/Open Water	Red oak, red maple, silky dogwood, northern spicebush, cattails	East of airport/9	American Bittern (marshy areas)	Endangered GCN – Very Important	Conservation Concern
			Blue-winged Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
			Canada Warbler (woodlands)	GCN – Very Important	Conservation Concern
			Least Bittern (emergent marshes)	Threatened GCN – Very Important	Conservation Concern
			Rusty Blackbird (wet forests)		Conservation Concern
			Wood Thrush (mature forests)	GCN – Most Important	Conservation Concern

Residential/Lawn/ Upland hardwood forest/Forested wetland/Open Water	Lawn, red maple, red oak	Southwest of airport/ 10 & 11	Fox Sparrow (dense thickets and woodlands)		Conservation Concern
			Blue-winged Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
Upland shrub & emergent / Upland hardwood forest	Goldenrod, red oak, red maple	South of Runway 36/12	Blue-winged Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
			Prairie Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
			Wood Thrush (mature forests)	GCN – Most Important	Conservation Concern
Upland hardwood forest	Red oak, red maple	South of Runway 36/13 & 14	Canada Warbler (woodlands)	GCN – Very Important	Conservation Concern
			Wood Thrush (mature forests)	GCN – Most Important	Conservation Concern
Mowed cemetery / Rock walls	Lawn, eastern hemlock, red maple	South of Runway 36/15	Fox Sparrow (dense thickets and woodlands)		Conservation Concern
			Prairie Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
Upland shrub & emergent field / Upland hardwood forest / Forested wetland / Intermittent Watercourse	Red oak red maple, northern spicebush	South of Runway 36/16	Blue-winged Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
			Prairie Warbler (edge, open woodlands)	GCN – Most Important	Conservation Concern
			Wood Thrush (mature forests)	GCN – Most Important	Conservation Concern
			Canada Warbler (woodlands)	GCN – Very Important	Conservation Concern

GCN = Greatest Conservation Need (CTDEEP, 2015)

Agency coordination and screening for listed species results in the identification of potential species in the general vicinity of the project area. This screening was not at the level of detail of a biological survey. It is possible that, within the specific project footprint, there may be less or no listed species identified.

4.4 WETLANDS

To understand the extent of wetland resources within potential obstruction removal areas, a review of National Wetland Inventory (NWI) mapping and a field investigation of the entire project area was conducted. The objective of the field investigation was to determine the approximate locations, extent, and connectivity of the wetlands and associated watercourses within land areas both on and surrounding the Waterbury-Oxford Airport. Knowledge of the wetlands and their position within the landscape helps for a better understanding of potential habitat impacts that may occur as a result of the obstruction removal project.

While the wetlands within the project area were not formally delineated, observations made in the field by a team of wetland scientists essentially encompassed the same criteria that are required for a formal wetland delineation. These criteria for state and federal wetlands include hydric soil conditions, hydrophytic vegetation, and evidence of hydrology. Connecticut inland wetland boundaries are determined by the limit of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture.

The Waterbury-Oxford Airport is situated on a terraced piece of land surrounded by forested land interspersed with low to medium-density residential communities to the north and south and light industrial development to the west and southwest. In general, the dominant wetland community type in the project study area consists of forested wetlands dominated by red maples (*Acer rubrum*) and northern spice bush (*Lindera benzoin*). Additionally, there is a strong presence of beaver activity in the area, as evidenced by the dammed streams and ponds at the southern end of the airport. The largest contiguous wetlands are located on the eastern and southern sides of the airport property and are often associated with intermittent and small perennial streams. Within the property boundaries of the airport there are two small wetland pockets at the northwest and northeast corners of the northern end of Runway 18 (see figures in Appendix A). These are both forested wetlands with intermittent watercourses flowing through them. There is also a small forested wetland within the airport perimeter fence on the western side of the airport, just north of Airport Access Road. Just outside of the airport perimeter fence on the northeast side of the airport are two man-made stormwater detention basins. At the southern end of the airport, a large forested wetland extends from the eastern side of Runway 36 to the south and wraps around the southern end of the runway. It then extends in a northerly direction along the western side of Runway 36 (see figure in Appendix A). The Larkin Trail State Park forms the southernmost boundary of this large wetland system. This wetland contains several large beaver ponds and a perennial stream (Little River). During the field investigation a large black bear was observed within this wetland system.

FORESTED WETLANDS – NE CORNER OF AIRPORT



Beyond the immediate airport property, several private parcels have been identified for tree removal as part of this obstruction removal and lighting project. These parcels have been individually numbered as shown in Appendix A and were investigated for wetland and watercourse resources.

Parcel 8 is located to the north of Runway 18 in a largely abandoned neighborhood. No wetland resources, waterbodies, or watercourses were observed during field investigation of this parcel.

Parcel 9, located to the east of the airport is dominated by a large wetland system that extends beyond the parcel to the north and east. Within the parcel there is a small body of open water surrounded by cattail (*Typha latifolia*) dominated emergent wetlands. The wetland transitions to a scrub-shrub wetland type which is dominated by northern spicebush and silky dogwood (*Cornus amomum*) and then into a larger red maple dominated forested system.

Parcels 10 and 11, located to the southwest of the airport, contain a small pond which is surrounded by a narrow band of red maples to the north and a larger block of red maples to the south. This wetland system covers approximately half of the land area comprising these two parcels.

Parcels 12, 13, 14, and 15 are located just to the east of Parcels 10 and 11, south of the airport. No wetland resources, waterbodies, or watercourses were observed during field investigation of these parcels.

Parcel 16, located south of airport Runway 36 and just south of the Larkin State Park Trail, contains a red maple and northern spicebush dominated forested wetland on the western third of the parcel. There is an intermittent watercourse contributing to this wetland system.

Each parcel within the project study area on which a wetland resource was observed in the field during site reconnaissance is listed in Table 8 below. Figures identifying potential wetlands are included in Appendix A.

Parcel No.	Wetlands Cover Types and NWI Classification	Location	Major Wetland Plant Associations / types
9	Forested (PFO), Emergent (PEM), Open Water (PUB)	East of the airport	Red maple, silky dogwood, northern spicebush, cattails
10 & 11	Forested (PFO), Open Water (PUB)	Southwest of the airport	Red maple
16	Forested (PFO), Watercourse	South of runway 36	Red maple, northern spicebush

5.0 ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential environmental, social, and economic impacts associated with the Preferred Alternative (i.e. Proposed Action). The analysis in this chapter was conducted in accordance with FAA Order 5050.4B “*National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*,” FAA Order 1050.1E “*Environmental Impacts: Policies and Procedures*,” and applicable federal and state environmental regulations. Based on the information in this chapter, coordination with federal and state agencies, and review of public comments, the FAA will determine if the Preferred Alternative would involve significant impacts. The FAA will also ensure that the document presents a full, accurate, and fair assessment of the environmental consequences of the proposed action.

Consistent with the FAA Orders 5050.4B and 1050.1E the following impact categories are addressed:

- Air Quality
- Coastal Resources
- Compatible Land Use
- Construction Impacts
- Department of Transportation Act: Section 4(f)
- Farmland
- Fish, Wildlife, and Plants
- Floodplains
- Hazardous Materials, Pollution Prevention, and Solid Waste
- Historical, Architectural, Archeological, and Cultural Resources
- Light Emissions and Visual
- Natural Resources and Energy Supply
- Noise
- Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks
- Water Quality
- Wetlands
- Wild and Scenic Rivers

Anticipated permit requirements and a potential impact summary are provided at the end of the chapter.

5.1 AIR QUALITY

The Clean Air Act Amendments of 1990 authorized the U.S. Environmental Protection Agency (EPA) to establish standards, known as the National Ambient Air Quality Standards (NAAQS), which are considered harmful to the public and the environment.

The Clean Air Act established two national air quality standards, including Primary and Secondary Standards. Primary Standards were established to set limits on harmful pollutants to protect the public and sensitive receptors (asthmatics, children and the elderly). Secondary Standards were set to protect the public welfare by accounting for the effects of air pollution on the public welfare, which includes protection against impaired visibility, damage to animals, soil, vegetation, crops, buildings, and other aspects of the general welfare.

The EPA has established NAAQS for the following six “criteria air pollutants” in order to protect the health and welfare of the general public. These pollutants are listed below.

- Ozone (O₃)
- Carbon monoxide (CO)
- Particulates (PM-10 and PM 2.5)
- Sulfur dioxide (SO₂)
- Nitrogen dioxide (NO₂)
- Lead (Pb)

According to the Connecticut Department of Energy & Environmental Protection (CTDEEP), New Haven County is currently in attainment for all criteria air pollutants with the exception of 8-hour Ozone. New Haven County is part of the NY-NJ-CT Non-attainment Area which is classified as a marginal Nonattainment Area and subject to planning and emission reduction requirements as specified in the Clean Air Act.

Section 176(c) of the Clean Air Act as amended in 1990, requires that Federal actions conform to the appropriate Federal or State air quality plans in order to attain the Act's air quality goals.

Conformity is defined as conformity to the implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards, and that such Federal activities will not:

- (1) Cause or contribute to any new violation of any standard in any area
- (2) Increase the frequency or severity of any existing violation of any standard in any area
- (3) Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.¹

The obstruction removal project will improve safety, but will not change the operating characteristics of the airport. There will be no changes in activity levels, aircraft types or other facilities and as such there will be no changes in air quality as a result of this work. Thus, the three criteria above are satisfied. No impacts are anticipated and therefore no further evaluation is needed.

5.2 COASTAL RESOURCES

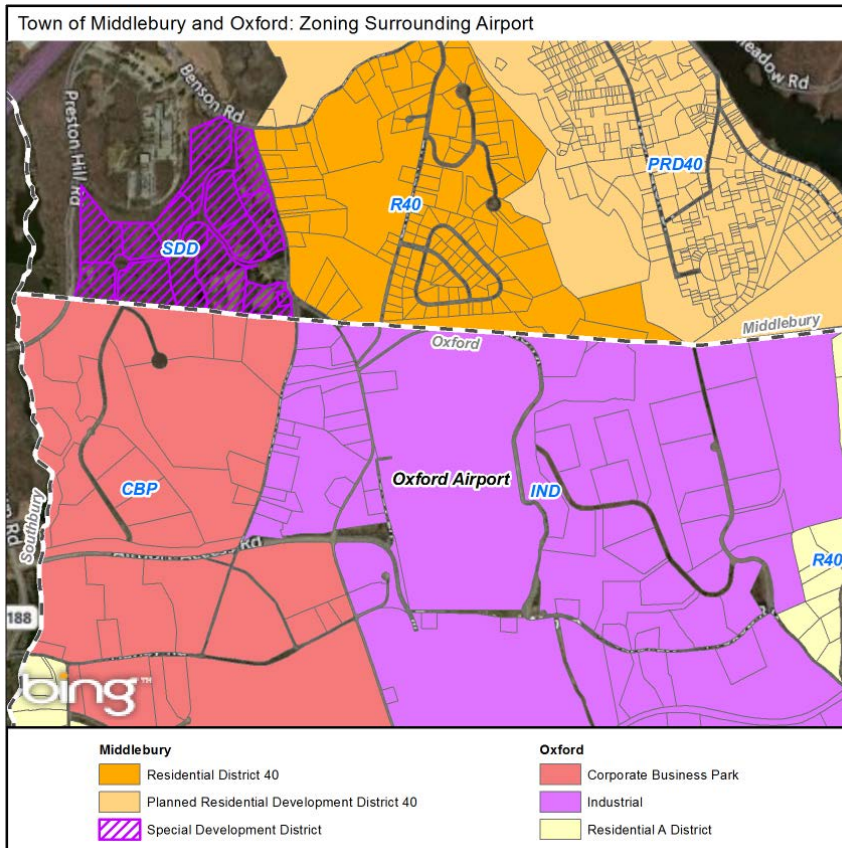
The CTDEEP administers the Connecticut Coastal Management Program, enacted in 1980 to protect coastal resources, including restoration of coastal habitat, improve public access, promote harbor management, and regulate work within tidal, coastal and navigable waters.

Waterbury-Oxford Airport is not located within a designated Coastal Zone, and therefore there will be no impact to designated coastal areas as a result of the Preferred Alternative. As a result, no additional evaluation is necessary.

5.3 COMPATIBLE LAND USE

Land use and zoning in the immediate vicinity of the Airport within the Town of Oxford is industrial. Surrounding Zoning designations in the Town of Oxford are Corporate Business Park to the west, and Residential A and Residential Golf Community to the east and Residential A to the south. North of Runway 18, in the Town of Middlebury zoning consists of Residential District 40, Residential District 40/Planned Residential Development and Special Development District.

¹ U.S. Department of Transportation, FAA Order 1050.1E, Appendix A, Section 2.1f



Runway 18 Approach

Lands within the Runway 18 approach is a combination of vacant lands owned by the State of Connecticut, vacant and occupied residential parcels and forested areas. A small portion of Parcel 8 has been identified for the selective removal of trees; based on its location adjacent to properties currently owned by the Airport and primarily vacant parcels nearby there will be no impacts to compatible land use or zoning as a result of the removal of obstructions on the Waterbury-Oxford Airport property or on the property identified as Affected Parcel 8 (Appendix A).

Runway 36 Approach

Land use within the Runway 36 approach is a combination of residential, undeveloped- both forested and fields, commercial and residential. There are no residential

uses on the parcels have been identified for the selective removal of trees (Appendix A, Parcels 10 through 16). A transmission line traverses the affected parcels and a transmission station is sited on Parcel 12. Larkin State Trail runs adjacent to the Airport Boundary in this location however the selective removal near the trail will retain a vegetative buffer to avoid changing the overall character of this section. The potential removal of trees will not impact existing zoning or use of this or adjacent parcels.

Overall the project does not alter airport operations or flight patterns and therefore will not have any impacts on adjacent land use or zoning. The removal of trees will not impact the existing use of these parcels.

5.4 CONSTRUCTION IMPACTS

Potential construction impacts from the removal of trees are not expected to be significant. Tree removal or installation activities may produce temporary environmental disturbances, such as noise from equipment, air quality impacts from dust, minor soil erosion and sedimentation, and minor disruption of local traffic patterns. These impacts can be mitigated through careful planning and consideration, as well as quality construction supervision.

5.4.1 Construction Noise

As with any construction project, the use of construction equipment and construction traffic will temporarily generates noise. All construction equipment and vehicles will be properly maintained, tuned to minimize the potential for noise. Upon project completion, ambient noise levels will return to pre-existing conditions.

5.4.2 Air Quality

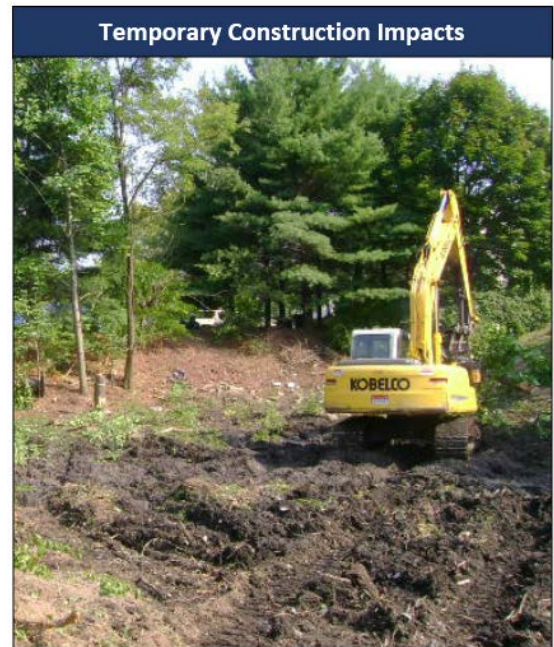
Air quality impacts during construction would be limited to short-term increases in fugitive dust, particulates, and localized pollutant emissions from construction vehicles and equipment during tree removal. As stated above, all construction equipment should be properly maintained and outfitted with emission reducing exhaust equipment. The work involves the selective removing of trees that have been identified as obstructions; other vegetation and ground covers will not be removed, protecting the soil from erosion and thereby limiting the potential for increases in fugitive dust. Adherence to the soil and erosion control plan as required in the Stormwater Pollution Protection Plan (SWPPP) will further mitigate any potential impacts.

5.4.3 Sedimentation & Erosion

The potential for erosion during the selective removal of obstructions is minimal as small trees and ground covers will remain and no new impervious surfaces will be created as part of construction operations. Adherence to the soil and erosion control plan as required in the SWPPP will further mitigate any potential impacts.

5.4.4 Traffic

Construction vehicles will enter and exit local roads throughout the duration of construction. Impacts to traffic patterns will be limited as all construction activities will be performed beyond the limits of the public roadways. In order to limit impacts related to construction impacts the community will be notified of the start date of this project and alert them to potential construction traffic.



5.5 DEPARTMENT OF TRANSPORTATION ACT: SECTION 4(f) LANDS CONSTRUCTION IMPACTS

Section 4(f) of the Department of Transportation (DOT) Act of 1966 states that the Federal Highway Administration and other DOT agencies cannot approve any program or project that requires the use of land from publicly owned recreation areas, parks, wildlife and waterfowl refuges, or public and private historical sites unless there is a determination that there is no feasible and prudent alternative, or the action includes all possible planning to minimize harm to the property resulting from use.

The proposed Project includes the removal of obstructions (trees) associated with Federal Aviation Regulations (FAR) Part 77 approach surface (on airport property), in order to maintain safe, navigable airspace beyond the ends of runways and will not require removal of any trees in a designated recreation, park, or wildlife area, with the exception of Larkin State Park Trail.



The project will require the removal of trees on airport adjacent to the Larkin State Park Trail at the end Runway 36. Selective thinning has been identified on Parcels 12 and 16 adjacent to the Trail and minimally extending into the trail Right of Way. Upon completion of the tree thinning operation, the use and access to the trail will remain unchanged. Therefore this project will have no significant effect on adjacent or nearby 4(f) lands as a result of the obstruction removal project.

5.6 FARMLAND

The Farmland Protection Act (FPA) of 1981 authorizes the U.S. Department of Agriculture to develop criteria for identifying the effects of federal programs on the conversion of farmland to non-agricultural uses. The prime and unique farmland regulations require that the U.S. Department of Agriculture determine whether land affected by any proposed action is prime and unique farmland.

If the proposed project involves the acquisition of farmland that would be converted to non-agricultural use, it must be determined whether any of that land is protected by the FPA.

The Natural Resource Conservation Service (NRCS), within the United States Department of Agriculture (USDA) has established guidelines under the Farmland Protection Policy Act (FPPA) for federal activities that involve directly undertaking, financing, or approving a project that would impact farmland soils. The guidelines recognize that the quality of farmland varies based on soil conditions, and places higher value on soils with high productivity potential. To preserve these highly productive soils, the NRCS classifies soil types as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. The NRCS requires that soils in these categories be given proper consideration before they are converted to non-farming uses by federal programs. The NRCS policy and procedures on prime and unique farmland are published in the Federal Register (Volume 43, No. 21, January 31, 1978).

According to Web Soil Survey from the NRCS, the following soil types identified as prime farmland are mapped in the vicinity of the potential affected parcels.

Prime Farmland

- Woodbridge fine sandy loam, 0-8% slopes (45B)
- Paxton and Montauk fine sandy loam, 3-8% slopes (84B)

These soils are generally located in areas that are forested or developed for non-agricultural uses.

The implementation of the appropriate soil erosion controls mitigates the potential for impacts to farmland soils from tree removal activities. The tree removal locations do not contain any active farmland areas and therefore no adverse effects or significant impacts are expected to occur. Furthermore, the project does not include any development activities, new impervious areas, or acquisition of property.

5.7 FISH, WILDLIFE, and PLANTS

Rocky Fill Slope on Western Edge of Parcel 9



The area surrounding the Waterbury-Oxford Airport is generally a woodland habitat dominated by oak-hickory hardwood forests in the uplands and red maple swamps in the wetland areas. Interspersed throughout the area are networks of streams and ponds which are strongly influenced by beaver activity. There are many areas along the upland/wetland interface where bedrock outcrops are visible.

The airport and surrounding facilities are located on a combination of natural and fill material that situates them above the lower elevations to the south. The areas to the north and west of the airport tend to be drier upland habitats while the areas to the south and east of the airport tend to be wetter habitats. The Larkin State Park Trail, a linear park following an

abandoned rail line, runs along the southern border of the airport in an east/west orientation, and is a narrow corridor which cuts through wooded upland and wetland habitat.

The infield of the airport consists of a frequently-mowed grassland environment managed to discourage use by wildlife. As a result of the regular mowing this area is not ideal for nesting birds or larger mammals, but may be suitable for small rodents, insects, and birds actively feeding or resting.

Various forest or woodland areas located within the project area ranging in size from a few acres to a few dozen acres could be impacted by individual tree cutting, stand cutting, or clear cutting. Un-fragmented forest cover typically provides habitat for successful breeding populations of “area-sensitive” species. Clear-cutting and other timber treatments that would result in the disruption of contiguous canopy coverage in these habitats may render such habitat unsuitable for those species, many of which are species of state and federal conservation concern. Birds are the most prevalent group of vertebrate wildlife occurring in the obstruction removal areas, with some species requiring large tracks of undisturbed forest for successful breeding.

Wetland transition at southern end of Parcel 9



When compared to the smaller forested blocks, un-fragmented forest blocks larger than 500 acres tend to have higher successful breeding rates of forest interior bird populations and are also important for other larger vertebrate organisms as well. Habitat blocks between 125 and 500 acres in size are considered to have less but still fair to important value for forest interior avifauna, especially if the surrounding landscape is not intensely developed. Forest blocks smaller than 125 acres can be considered to have poor to fair value for supporting

populations of forest interior species. The forest blocks at the Waterbury-Oxford Airport that lie within the obstruction removal area are smaller than 125 acres, and range in size from 10 to 100 acres.

Mature forest edge at eastern side of Parcel 16



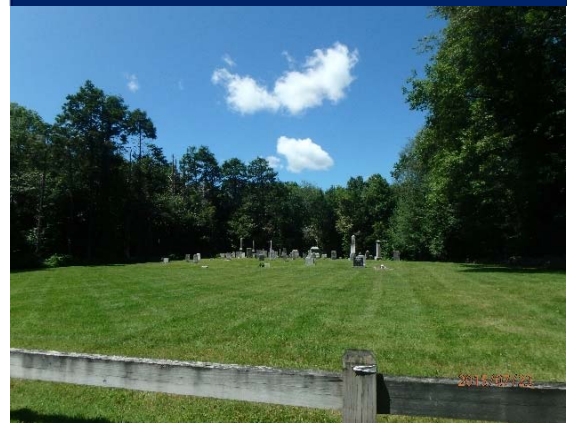
The loss of mature forest cover from the obstruction removal areas is not expected to have a significant negative impact to local populations of forest interior species. Among the USFWS list of species of conservation concern identified in the IPAC report, the Northern Long-eared Bat (NLEB), Wood Thrush (*Hylocichla mustelina*) and Worm-eating Warbler (*Helmitheros vermivorum*) are considered forest species that could be negatively impacted by the loss of forest cover should these species occur in the forest within the obstruction removal areas. If necessary to ascertain the presence of these species, surveys during the breeding season could be conducted by qualified personnel using the appropriate methodology.

There are stands of climax coniferous forest that provide suitable summer roosting habitat for male bats and large diameter shade trees for female bats, so the site appears to offer microhabitat features required by the NLEB and other bat species of conservation concern. Additionally, the site meets suitability on a landscape level (e.g. large contiguous forest blocks with occasional natural gaps and water features) for bat species. The IPAC report is limited to listing the site as occurring within the known distributional range of the Northern Long-eared Bat. Because no information is available for the site, we have no data on whether or not the NLEB actually exists on or adjacent to the site and whether or not there are known maternity roost trees or hibernacula in the area.

Regardless of the limited value of the forests to interior birds, the forested habitat blocks at the Waterbury-Oxford Airport that lie within the obstruction removal areas do provide wildlife habitat to edge species and species that do not require large contiguous tracts of forest interior (habitat “generalists”). These forest blocks also serve other ecological functions and values as well which may include but may not necessarily be limited to the following:

- Soil generation
- Soil and bank stabilization
- Temperature moderation
- Wind reduction
- Water retention
- Nutrient and production export
- Noise mitigation
- Pollution retention
- Aesthetic value

Cemetery bordered by mature forest at Parcel 15



Power line right-of-way at Parcel 12



The loss of a majority of these forest ecological functions and values would be avoided or minimized by employing best management practices (BMPs) for timber treatment implementation, erosion and sedimentation control, seasonal restrictions, and by felling timber in place with no or minimal harvest. No large-scale clearing or grubbing



across the entire obstruction removal area is included as part of the Proposed Action. Therefore, soil stabilization is not expected to be a major issue as large areas of bare soil will not be generated and exposed to the erosive forces of wind and water. Implementation of erosion and sedimentation control BMPs would further reduce the risk of soil loss from the occasional areas where limited amounts of soil disturbance might occur from equipment access.

Removal of the mature tree cover from within the obstruction removal areas at the Waterbury-Oxford Airport in the manner discussed above would actually serve to improve the habitat for the majority of the species of conservation concern identified by the CTDEEP and USFWS as having potential to occur within the project area. Many of the species listed by these agencies are shrub-land or barren species and, therefore forest interiors do not meet their habitat requirements. Upland species that would benefit from mature tree canopy removal and the subsequent and expected development of a robust shrub layer include the Black-billed Cuckoo (*Coccyzus erythrophthalmus*), Prairie Warbler (*Setophaga discolor*), Blue-winged Warbler (*Vermivora cyanoptera*), and Fox Sparrow (*Passarella iliaca*). Tree clearing in the manner described above would act as the disturbance mechanism needed to offset succession.

Conclusion: For the forest/woodland dependent species that may occur within the forest blocks subject to tree cutting (i.e., Northern Long-eared Bat, Wood Thrush, and Worm-eating Warbler), a biological survey would likely be needed in order to remove trees during the breeding season. The goal of a biological survey would be to assess the potential presence of the forest conservation concern and listed species during the breeding season. If those species were found, then follow-up agency consultation may be required to address impact to the habitats of these species, and mitigation may be needed.

As this process can be time consuming, CAA's preferred approach will include tree removal during winter conditions, avoiding the growing and breeding season. As discussed, under the wetland evaluation, winter cutting is the preferred approach to minimize potential impacts, and will be employed by CAA. Based on other airport obstruction removal projects, direct impacts to these species may be avoided via use of seasonal restrictions (e.g., no tree cutting from April 1 through September 30 when these species are known to breed in New England). As such, significant impacts to critical species is not anticipated. This conclusion will be reviewed by USFWS and CT DEEP to determine if biological surveys and potential mitigation are necessary.

5.8 FLOODPLAINS

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRMs) that depict 100-year and 500-year floodplains in many areas throughout the country. A 100-year floodplain is an area that has a 1% chance of being flooded in any given year (Zone A). A 500-year floodplain is an area that has a 0.2% chance of being flooded in a given year (Zone B).

According to the applicable FIRM, (Community Panel 09009C0232H, December 17, 2010), the majority of Waterbury-Oxford Airport is located in Zone X, which represents areas determined to be outside the 500 year

floodplain, with the exception of the end of Runway 36, where a small area mapped within the 500 year floodplain is identified for the removal of trees. A limited portion of Parcel 16, identified for the selective removal is mapped in the 500 year flood boundary and the southwest corner of Parcel 13 is adjacent to a mapped 500 year flood plain. As there are no tree removal areas identified within the 100 year floodplain and limited areas within the 500 year floodplain, no anticipated impacts to the floodplain as a result of this project.

5.9 HAZARDOUS MATERIALS

The scope of this task consisted of a database review of the relevant State and Federal environmental regulatory agency records and a visual field inspection for potential hazardous materials located within the tree clearing areas. Tree clearing activities do not create hazardous materials concerns in and of themselves; however it is important to identify any potential hazardous materials which may be encountered during the tree clearing activities that would require specialized management. A more detailed Environmental Site Assessment would be needed should hazardous materials be observed and/or encountered.

The results of the data reviews and site inspection are summarized in the following sections.

5.9.1 Database Review

The database review consisted of a search for records in the applicable State and Federal environmental regulatory agency records for each property located in the tree clearing areas. Special attention was given to those databases for hazardous materials spills and dumping, as these are the most likely to impact tree clearing activities.

None of the identified properties where tree removal activities are to take place were listed by any of the regulatory agency databases reviewed for this task.

5.9.2 Site Reconnaissance

The field inspection was conducted on August 5, 2015 and consisted of a detailed visual inspection of the areas of concern. During the field inspection, CHA personnel were accompanied by Mr. Michael Kelly of the CAA. Information pertaining to the history and past uses of the areas of concern is presented in this summary.

On-site Tree Clearing Areas

Areas slated for tree removal are located at each end of Runway 18/36 as well as along both the east and west sides of the runway. No hazardous materials were observed in these areas at the time of the site inspection. Mr. Kelly indicated that, with the exception of a few old tires, he had not observed any dumping or other hazardous materials disposal on airport property.

Off-site Tree Clearing Areas

A small area slated for selective tree removal is located north of the airport. This area is located in a former residential development in which the structures have since been largely demolished. A small amount of scattered household debris was observed in this area. Mr. Kelly indicated that there is occasional dumping in this area, largely household debris. No hazardous materials were observed in this area.

A large area designated for selective tree removal is located to the south of the airport. This area is a mixture of State Park land, forest, farmland, residences and some light commercial areas. No hazardous materials were observed in these areas during the visual inspection.

Summary

Conclusion: No potential hazardous materials or concerns were identified by the regulatory database review. No hazardous materials were observed during the visual site inspection. In summary, at this time, there are no known hazardous materials in the areas of concern at the Waterbury-Oxford Airport.

It should be noted that the database searches can only reveal reported hazardous materials concerns. Unreported spills or dumping of hazardous materials will not appear in these database searches. The visual field inspection was somewhat limited due to the large areas involved and the dense undergrowth encountered in some locations. Additionally, only hazardous materials present at the areas of concern at the time of the site inspection (August 5, 2015) are discussed in this report. Future dumping of hazardous materials at these sites may occur and care should be exercised if unidentified potential hazardous materials are encountered during tree clearing operations.

5.10 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act requires Federal agencies to review the potential effects of a proposed project on cultural resources. Through consultation, agencies identify historic properties within or adjacent to the project area and find ways to avoid, minimize or mitigate the potential effects on the identified resource while accommodating the proposed project.

Tree removal will generally include clearing without grubbing or grading. The Proposed Action does not include impacts or removal of any buildings or structures. Access would be provided by unimproved routes without grading or paving. It is anticipated that no significant soil disturbance will occur and as a result impacts to cultural resources will be avoided.

To confirm this, correspondence describing the project including mapping of potential affected parcels was submitted to the Connecticut State Historic Preservation Office (SHPO) for review. Their review indicated that although there are archeological sites or historic resources in close proximity of affected parcels, SHPO recognizes that tree removal can be accomplished with minimal ground disturbance without clearing and grubbing (Appendix B).

5.11 LIGHT EMISSIONS AND VISUAL

5.11.1 Light Emissions

The removal of tree obstructions will not result in light emissions. All tree removal operations will take place during daylight hours therefore no impacts related to light emissions are anticipated.

5.11.2 Visual Impacts

Runway 18 Approach

Tree obstructions to be removed or selectively thinned have been identified in several on-airport properties and one off-airport parcel (Parcel 8). On airport tree removal areas are located to the west and east side of the end of the Runway 18 approach. An area of selective thinning also on airport property has been identified at the end

of this approach that includes an area that formerly in residential use. This area has been purchased by the State of Connecticut under a different project and therefore there will be no visual impacts have been identified.

Runway 36 Approach

Land to the south of the Airport, which includes an electrical transmission line identified for the selective removal of trees is predominately wooded and/or open with no residential uses. Scattered residential uses are located along North Larkey Road, but clearing is not identified on these parcels. Selective removal is planned near residential lots, but project activities will not significantly change the visual character of the area.

5.12 NATURAL RESOURCES AND ENERGY SUPPLY

Energy demands associated with the proposed project is expected to be minimal as an increase in the demand for energy supplies will only occur during construction and will be limited to transportation and construction vehicles and equipment. This will not impact local or regional supplies.

5.13 NOISE

The preferred alternative includes the selective removal of obstructions (trees) within the project area. Selective removal of trees south of Runway 36 on parcels 12 through 16 is not located near residential uses, and will not result in noise impacts to residential areas during removal operations. Likewise, trees to be removed near the end of Runway 18 are not adjacent to residences. Parcels located north of Runway 18 include previously purchased by the Airport; as a result these properties are no longer in residential uses.

The selective removal of trees will not result in an increase in noise emissions after the clearing is completed. The preferred alternative will not affect airport activity levels; as such the project has no influence on overall aircraft generated noise.

5.14 SOCIOECONOMIC ISSUES

5.14.1 Social

Social impacts can consist of a wide range of considerations as discussed below. The social and economic concerns are always specific to the proposed action, and may include impacts such as include displacement of residents, neighborhood disruption, tax base reduction, changes in school population, public services and other community concerns.

Socioeconomic impacts are typically defined as disruptions to surrounding communities, such as shifts in patterns of population movement and growth, changes in public service demands, loss of tax revenue, and changes in employment and economic activity stemming from airport development. These impacts may result from the closure of roads, increased traffic congestion, acquisition of business districts or neighborhoods, and/or by disproportionately affecting low income or minority populations.

There will be no acquisition of land, displacement of any populations or neighborhood disruption as a result of this project. Property values will not be significantly impacted by selective removal of obstructions; therefore there will be no impact on the tax base or tax revenue of any sector. With no displacement/impact to populations there will be no impact to school populations.

Obstruction removal in no way effects the delivery of existing or future public service. The only effect of the obstruction removal is to increase the safety of airport operations; decreasing the risk of aircraft incidents thereby decreasing the possibility of loss of property or human capital. This also applies to children's environmental health and safety risks which may be associated with the pollution of air, food, water, recreational waters, soil, or products that a child is likely to be exposed to. The proposed project does not have the potential for significant impacts to this or for any population category.

5.14.2 Environmental Justice

In regards to civil rights and environmental justice, the EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Title VI was enacted as part of the Civil Rights Act of 1964 to protect against discrimination based on race, color, and national origin in programs and activities receiving federal financial assistance². To prevent further such occurrences, Executive Order 12898 "*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*" was authorized in 1994.

A review of the CT Department of Economic and Community Development list of distressed communities indicates that neither the Town of Oxford or Middlebury meet the criteria for a distressed community for the purposes of Environmental Justice. The purposed of the project is to remove or illuminate obstructions in order to improve safety for aircraft as well as the surrounding areas. Based on the type of project under consideration, this will not result in a disproportionate impact to this population; the only impact to the surrounding neighborhood will be reduced risk of aircraft incidents. As a result there are no impacts to low income or minority populations.

5.14.3 Children's Health and Safety Risks

The proposed project will not result in environmental health risks and safety risks. The proposed project will not create or make more readily available products or substances that contact or ingestions through air, food, drinking water, recreational waters, or soil could harm children and therefore will not result in any significant impacts to children's health or safety.

5.15 SOLID WASTE

Trees removal activities on affected parcels will be conducted by a licensed and insured tree removal contractor. With the exception of limited vegetative matter that may be spread on site for decomposition, all materials, such as salvageable timber (lumber), firewood, and woodchips for landscaping or pellets will be recycled. These materials will be removed from the site by the contractor. If prescribed by agreement with property owners, logs and other materials may be left on site for use by the owner, in an approved means described in writing. As such, no solid waste impacts are anticipated.

Any clearing on State property of commercially viable material will be cut and handled as per state Division of Forestry specifications. The Connecticut DEEP has requested that commercially viable cut materials from State property be transported to the Portland Depot, a State designated mill. The transportation of these cut materials to a State designated mill for harvesting is an acceptable practice under FAA funded projects, where a formal program has been established and transportation distances/costs are reasonable. The FAA does not have a

² Title VI, 42 U.S.C. § 2000d et seq, United States Department of Justice

defined maximum distance for transportation of cut logs or materials; however, at under 35 miles from the Airport, it is assumed that the distance to the state Portland Depot is reasonable.

5.16 WATER QUALITY

5.16.1 Ground Water

The CTDEEP classifies types of groundwater along with their respective designated uses. Groundwater in the vicinity of Waterbury-Oxford Airport is designated by the CTDEEP as Class GA and GAA. Class GAA is defined as: existing or potential public supply of water suitable for drinking without treatment. Class GA is defined as ground water within the area of existing private water supply wells or an area with the potential to provide water to public or private water supply wells with the presumption that ground water in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment.

According to the Connecticut Environmental Conditions Online Mapping (CTECO), the project area is not located within an aquifer protection area. Tree removal projects do not produce wastewater or effluent, and thus do not generally impact ground water.

5.16.2 Surface Water

The federal Clean Water Act (CWA) and the Connecticut General Statutes establish water quality standards for all surface waters of the state. Surface water features in the vicinity of the Airport include a network of streams, wetlands, and floodplains that flow/drain south and west as part of the Little River watershed. Little River itself is located south of the Airport and flows in a southerly direction to the Naugatuck River. The Connecticut DEP Aquifer Protection Program has determined that there are no State Identified Aquifer Protection Areas in the project area.

There will be no increase in total impervious surface resulting from the removal of trees and therefore no significant changes in drainage patterns or flow rates are expected and as a result no permanent stormwater management systems are will be constructed.

5.17 WETLANDS

Palustrine forested (PFO) wetlands within the obstruction removal areas exhibit a variation in canopy closure of the woody overstory. In some areas, the canopy is contiguous. In other areas the PFO is interspersed with gaps. In either case, removal of the canopy layer would impact PFO wetland cover types as tree removal work would not be required in emergent (PEM) or open water (POW) areas. Scrub/Shrub (PSS) swamps may require selective cutting of a few trees but, since tree cover is not the dominant cover type in these wetlands, the loss of the tree cover would be negligible. Thus, woody overstory within PFO wetlands would change from Palustrine Forested to Palustrine Scrub/Shrub as the understory layer that is currently being shaded by the overstory would be released and exposed to more sunlight, thereby allowing it to develop fully. Existing sapling hydrophytes would eventually grow to form a woody overstory canopy over time (if periodic maintenance is not conducted). Since a tall overstory layer is produced by succession over time, the loss of overstory tree layer cannot realistically be immediately replaced through wetland enhancement or mitigation measures.

However, there are a number of reasons why impact to palustrine wetlands are not expected to be significant. They include the following:

- 1) The primary wetland functions of the wetlands would not change. The Palustrine wetlands would still provide sediment retention, bank stabilization, nutrient retention/transformation, pollution retention/ transformation, production export, groundwater recharge/discharge, and wildlife habitat, as only the tree layer would be substantially reduced.
- 2) Wildlife habitat function for certain species of conservation concern reported to occur within or proximal to the project area would potentially improve (e.g., potentially breeding Canada Warblers, and migratory or wintering Rusty Blackbirds).
- 3) An increase in the understory of water loving shrubs would increase the diversity of nectar, pollen and soft mast-producing plants as they responded to better sunlight conditions reaching the lower vegetation strata (e.g. Highbush Blueberry, Winterberry, Northern Arrowwood, Elderberry, various dogwoods, etc.). This would increase the diversity of production export from the wetland.
- 4) Since trees will be felled in place, the crowns and boles will remain in their wetland of origin and will continue to serve as cover for wildlife.
- 5) Nutrients tied up in the tree biomass will return to the system via the natural decomposition process.
- 6) Loss of a mature tree layer is a natural ecological endpoint along a successional trajectory for many palustrine wetlands as windstorms topple shallowly rooted trees (e.g., Red Maples), flooding from beaver ponds drown existing trees, or disease causes the demise of some stands (e.g., Tobacco Ringspot Virus of Ash, Tobacco Mosaic Virus of Ash, Ash Yellows, etc.).

Furthermore, impact to a number of ecological functions and values would be avoided or minimized by employing best management practices (BMPs) for timber treatment implementation within wetlands. These BMPs include the installation and maintenance of erosion and sedimentation control measures, seasonal work restrictions if applicable to breeding wildlife resources of conservation concern, and by felling timber in place with no or minimal harvest. No large-scale clearing, grubbing, excavation, dredging, or filling within wetland or watercourse resources is included as part of the Proposed Action. Vehicular access to many of the designated tree removal areas is possible using the existing network of roads, trails, and driveways within the adjacent upland. The project specifications will avoid the use of timber mats by requiring non-mechanized removal techniques. Alternatively, if frozen ground is present during tree removal, traditional clearing may be possible without temporary fills or soil disturbance. As frozen ground cannot be relied upon, hand cutting (i.e. using chainsaws) is anticipated within wetland areas thus avoiding vehicular traffic. The final methods of access, tree cutting, work schedule, timing, and sequencing would be finalized during the design process in coordination with ACOE and CT DEEP Land and Water Resources Division. To avoid impacting native plants, no chipping of felled trees would be allowed to occur within sensitive natural areas.

Therefore, impacts to hydric and wetland soils is not expected to be significant as large areas of bare soil will not be generated or exposed to the erosive forces of wind and water. Implementation, inspection, and maintenance of erosion and sedimentation control BMPs would further reduce the risk of soil loss from the occasional areas where limited amounts of soil disturbance might occur in adjacent upland areas from construction vehicle movements. These measures would prevent sedimentation of wetlands and waterbodies.

The removal of tree cover from Riverine systems typically raises concerns regarding bank stabilization and related erosion and sedimentation issues. Thermal pollution of the system is also generally a concern. When overhanging

branches that shade the stream's waters are removed, sunlight can warm the water below. Warmer waters hold less dissolved oxygen, and many of the coldwater fisheries within the system (e.g., trout) are typically sensitive to low oxygen levels. Since tree root masses are not being removed from the system but will be left in place, bank stabilization is not expected to be compromised by tree cutting. Many of the cut stumps will remain viable and re-sprout multiple stems (termed coppicing) allowing the tree to regenerate. Additionally, understory trees, shrubs and herbaceous ground cover along the stream banks will proliferate since they will be released from the low light conditions in which they had formerly been growing. Impact to riverine riverbank occurs in a very limited extent along the Little River.

Conclusion: During the design phase of the project, coordination with the United States Army Corps of Engineers (ACOE) and the CT DEEP will be conducted, to provide the plan details and process to avoid wetland impacts. Based on similar completed efforts in New England, it is anticipated that a Section 401 Water Quality Certification and Section 404 Permit will not be required, based on winter removal and the planned means and methods described above. Application to the local inland wetland and conservation commission is not required for the proposed activities.

Coordination with the CT DEEP Inland Water Resources Division (IWRD) will be completed to determine any requirements to satisfy the Connecticut Inland Wetland Protection Act. Although there will be no actual filling of wetlands the conversion of existing forested wetlands to scrub/shrub and emergent systems will alter the wetland systems and it is anticipated that state wetland permits will likely be needed. These changes will need to be documented and considered by CT DEEP, along with BMPs and mitigation measures. Presently the CAA is exempt from having to file Flood Management Certifications (FMC) with the CT DEEP Inland Water Resources Division (IWRD).

As this project advances into the permitting phase, more detail regarding which specific trees are to be removed and the methodology used for their removal will be thoroughly coordinated with the CTDEEP and other regulatory agencies. Tree removal methodologies to be used in upland areas, within critical habitat areas, and within forested wetland areas will differ and will proceed as directed in the approved project permits.

5.18 WILD and SCENIC RIVERS

According to the National Park Service website, there are two rivers in Connecticut that are designated as Wild and Scenic Rivers: the Eight Mile River and Farmington River West Branch. These rivers are not in the vicinity of Waterbury-Oxford; therefore there will be no impact to any designated Wild and Scenic Rivers.

5.19 SUMMARY OF CONSEQUENCES

Table 5.19 provides a summary of the anticipated impacts and key issues associated with the proposed project. The project is not anticipated to result in any permanent impacts or to environmental concerns.

TABLE 9 – SUMMARY OF POTENTIAL IMPACTS AND KEY ISSUES	
Impact Category	Potential Impact or Key Issue
Air Quality	The project is not anticipated to worsen the existing marginal non-attainment under NAAQS related to 8-hour ozone.
Compatible Land Use	The project will not cause a change in land use and is consistent with local zoning. No compatible land use impacts are anticipated.
Construction Impacts	Construction activity is restricted to a small project areas and will be completed in short timeframes. Tree removal will be conducted during daytime hours and employ proper erosion controls. As such, significant construction impacts (i.e., noise, air quality, erosion, traffic, etc.) are not anticipated.
Department of Transportation Act: Section 4(f)	The selective removal of trees adjacent to the Larkin State Park Trail will not limit access or use of this area. As such, no impacts to 4(f) lands are expected.
Farmland	The farmland soils identified in the project area have not been used as farmland in recent history. The project will not impact farming or soils classified as prime farmland.
Fish, Wildlife, and Plants	Conducting removals during winter conditions will prevent significant impacts to critical species.
Hazardous Materials	No potential hazardous materials or concerns were identified by the regulatory database review and no hazardous materials were observed during the visual site inspection. As of July 2015 there were no known hazardous materials in the areas of concern at Waterbury-Oxford Airport.
Historical, Architectural, Archeological, and Cultural Resources	SHPO has determined that the removal of trees will not have an impact on cultural or historic resources.
Light Emissions & Visual Effects	The proposed action will not create significant light emissions or long term visual impacts.
Natural Resources & Energy Supply	The proposed action will required only a limited amount of natural resources and energy during construction activities. No additional resources are needed following implementation.
Socioeconomic Impacts	The project will not result in any changes to land uses, the delivery of public services or the availability of jobs.
Water Quality	No water quality impacts are anticipated.
Wetlands	Based on the Means and Methods of removal, the ACOE has routinely determined that no wetland impacts are created by this type of project, and federal permits are not needed. Coordination with the CT DEEP Inland Wetlands Resources Division (IWRD) will occur during the design process to satisfy the Connecticut Inland Wetland Protection Act and if any permits are necessary. It is anticipated that no mitigation will be necessary or if required will be minor.
Other Categories	The analysis identified that no coastal resources, floodplains, solid waste, or wild or scenic rivers located within the tree removal areas.

6.0 LIST OF PREPARERS

The following individuals prepared this EA on behalf of the CAA.

Federal Aviation Administration

Richard Doucette, Environmental Protection Specialist

Connecticut Airport Authority

Molly Parsons, Airport Planner

Colin Goegel, Senior Manager of Engineering

Clough Harbor & Associates LLP (CHA)

Jeremy Martelle, Project Manager

Paul McDonnell, AICP, Principal Planner

Jean Loewenstein, AICP, Principal Planner

Scott Rosecrans, Senior Scientist

Fitzgerald and Halliday, Inc.

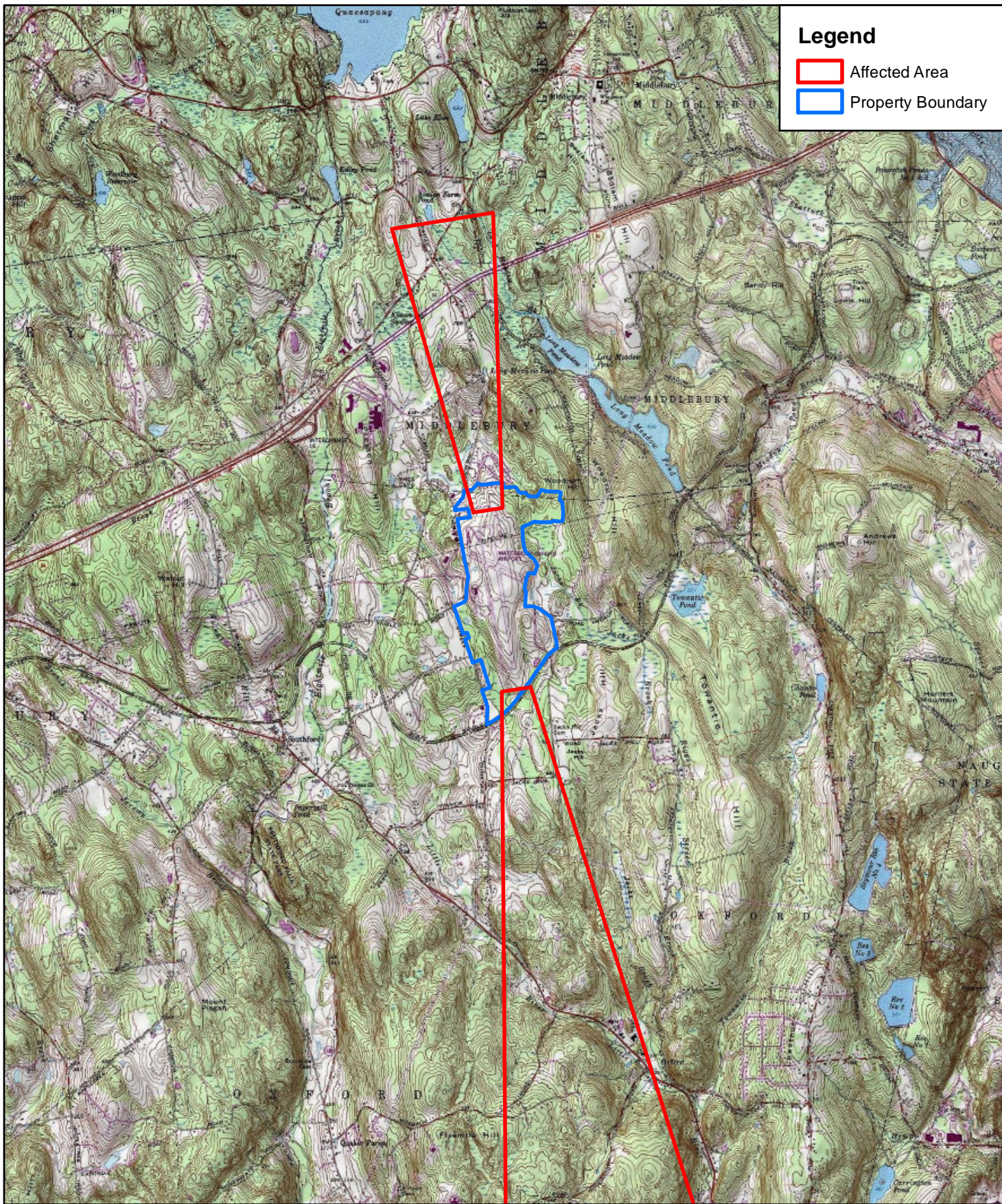
Paul Stanton, Senior Project Manager

Anthony Zumba, Environmental Specialist

David Laiuppa, Wetland Scientist

APPENDIX A

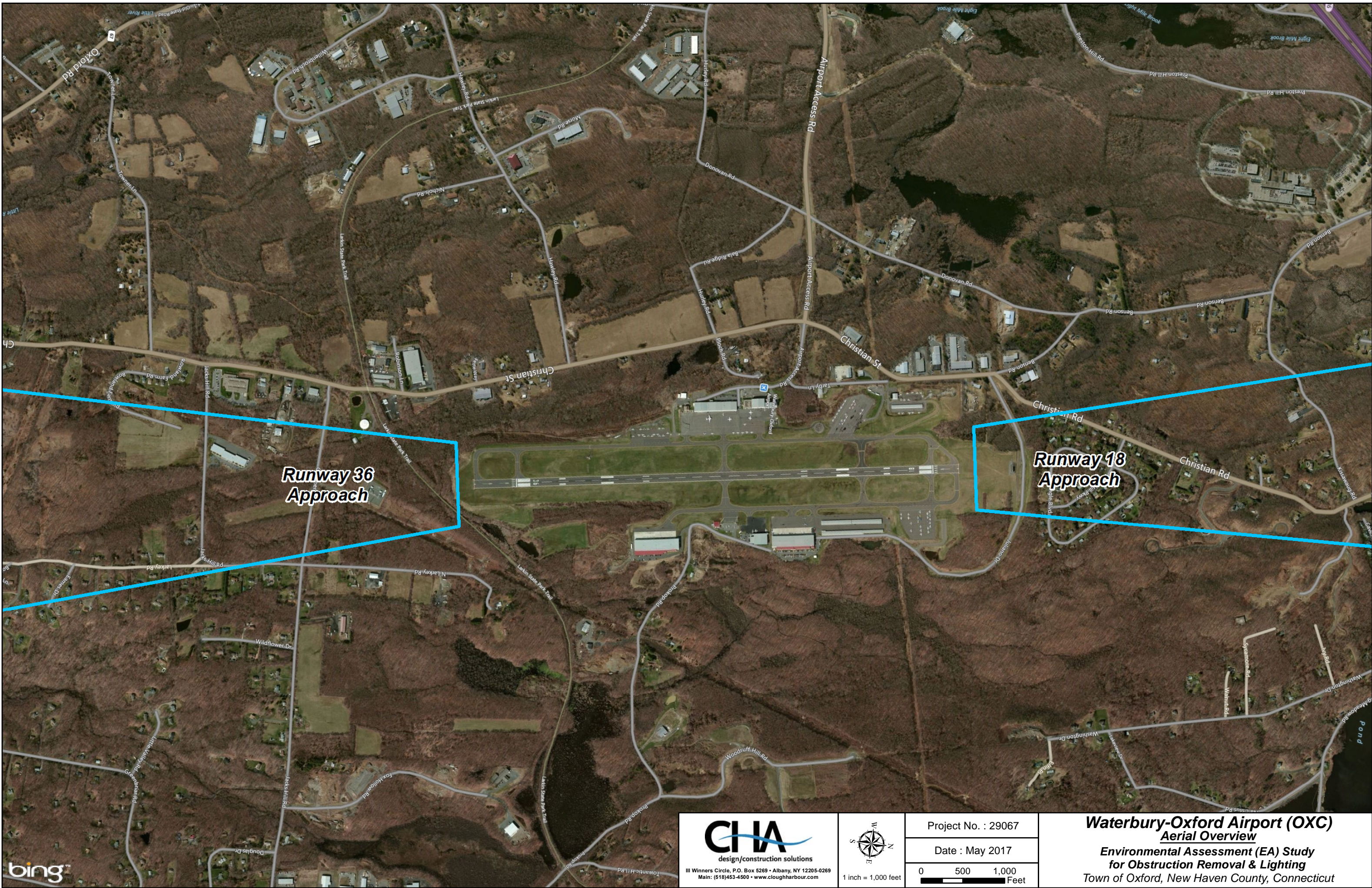
AIRPORT OBSTRUCTION MAPS



Legend

- Affected Area
- Property Boundary

		<p>Environmental Assessment (EA) & Environmental Impact Evaluation (EIE) for Obstruction Removal Study Area</p>	
<p>Scale 1" = 2000'</p>	<p>Project No. 29067</p>	<p>Waterbury - Oxford Airport (OXC) Oxford, New Haven County, Connecticut Southbury, Woodbury & Naugatuck USGS Quadrangles</p>	



**Runway 36
Approach**

**Runway 18
Approach**

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1 inch = 1,000 feet

Project No. : 29067
Date : May 2017

0 500 1,000 Feet

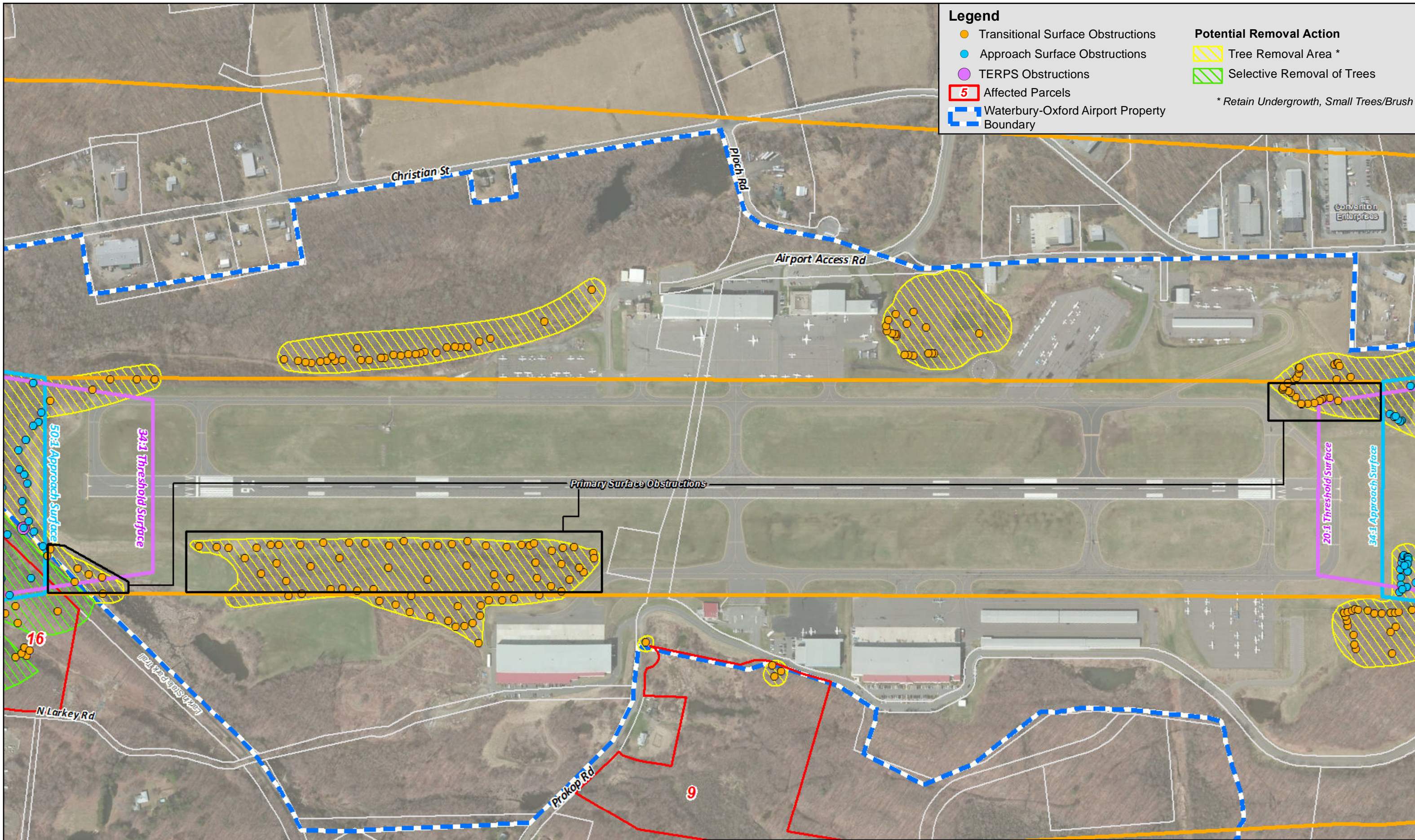
**Waterbury-Oxford Airport (OXO)
Aerial Overview**
**Environmental Assessment (EA) Study
for Obstruction Removal & Lighting**
Town of Oxford, New Haven County, Connecticut

Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions
- 5 Affected Parcels
- Waterbury-Oxford Airport Property Boundary

Potential Removal Action

- Tree Removal Area *
- Selective Removal of Trees
- * Retain Undergrowth, Small Trees/Brush

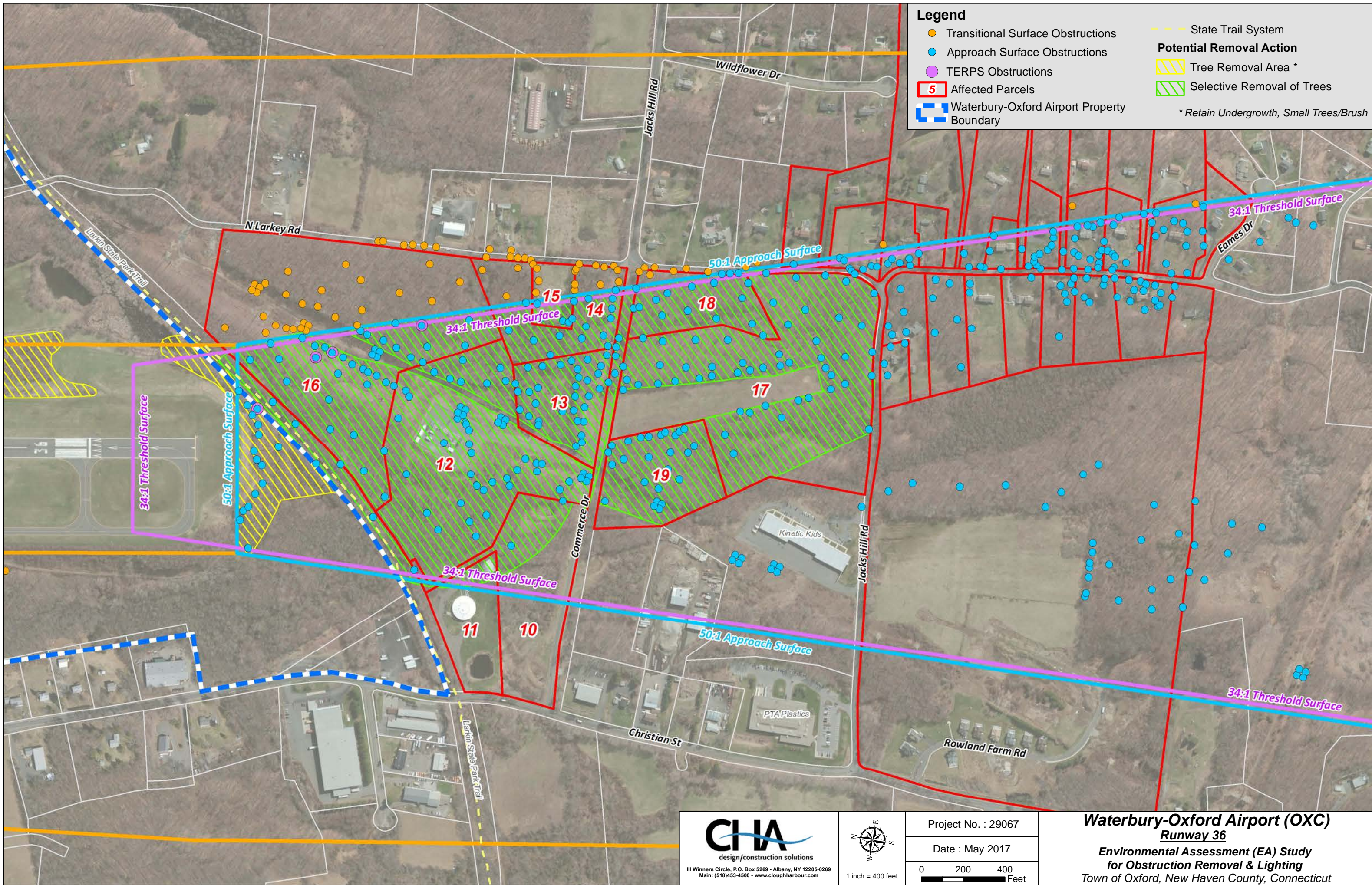


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North arrow and scale: 1 inch = 400 feet

Project No. : 29067
 Date : May 2017
 Scale: 0 200 400 Feet

Waterbury-Oxford Airport (OXC)
Runway 18 - 36
 Environmental Assessment (EA) Study
 for Obstruction Removal & Lighting
 Town of Oxford, New Haven County, Connecticut



Legend

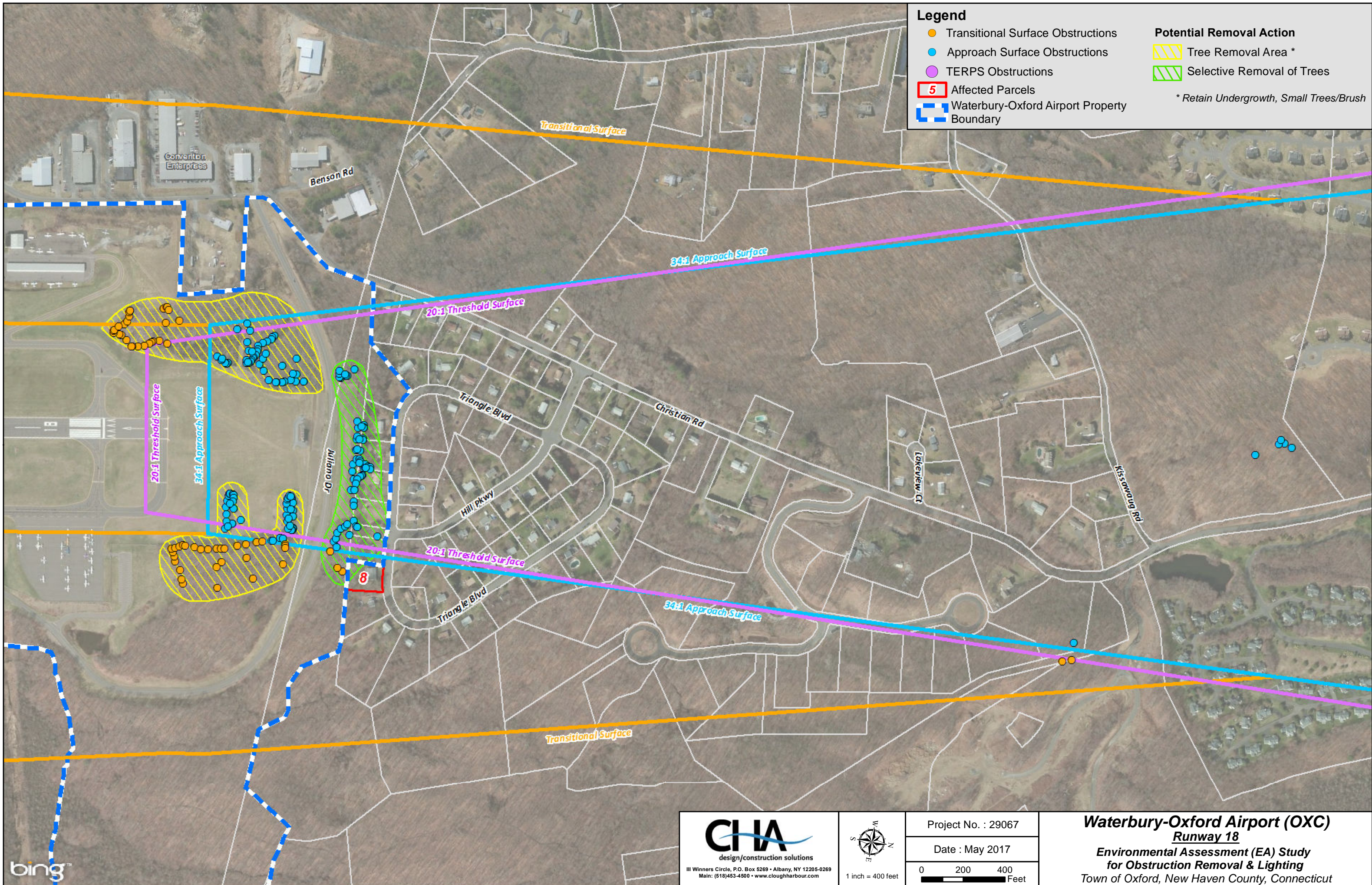
- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions
- 5 Affected Parcels
- Waterbury-Oxford Airport Property Boundary
- State Trail System
- Potential Removal Action**
- Tree Removal Area *
- Selective Removal of Trees
- * Retain Undergrowth, Small Trees/Brush

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North Arrow
 1 inch = 400 feet

Project No. : 29067
 Date : May 2017
 0 200 400 Feet

Waterbury-Oxford Airport (OXC)
Runway 36
 Environmental Assessment (EA) Study
 for Obstruction Removal & Lighting
 Town of Oxford, New Haven County, Connecticut



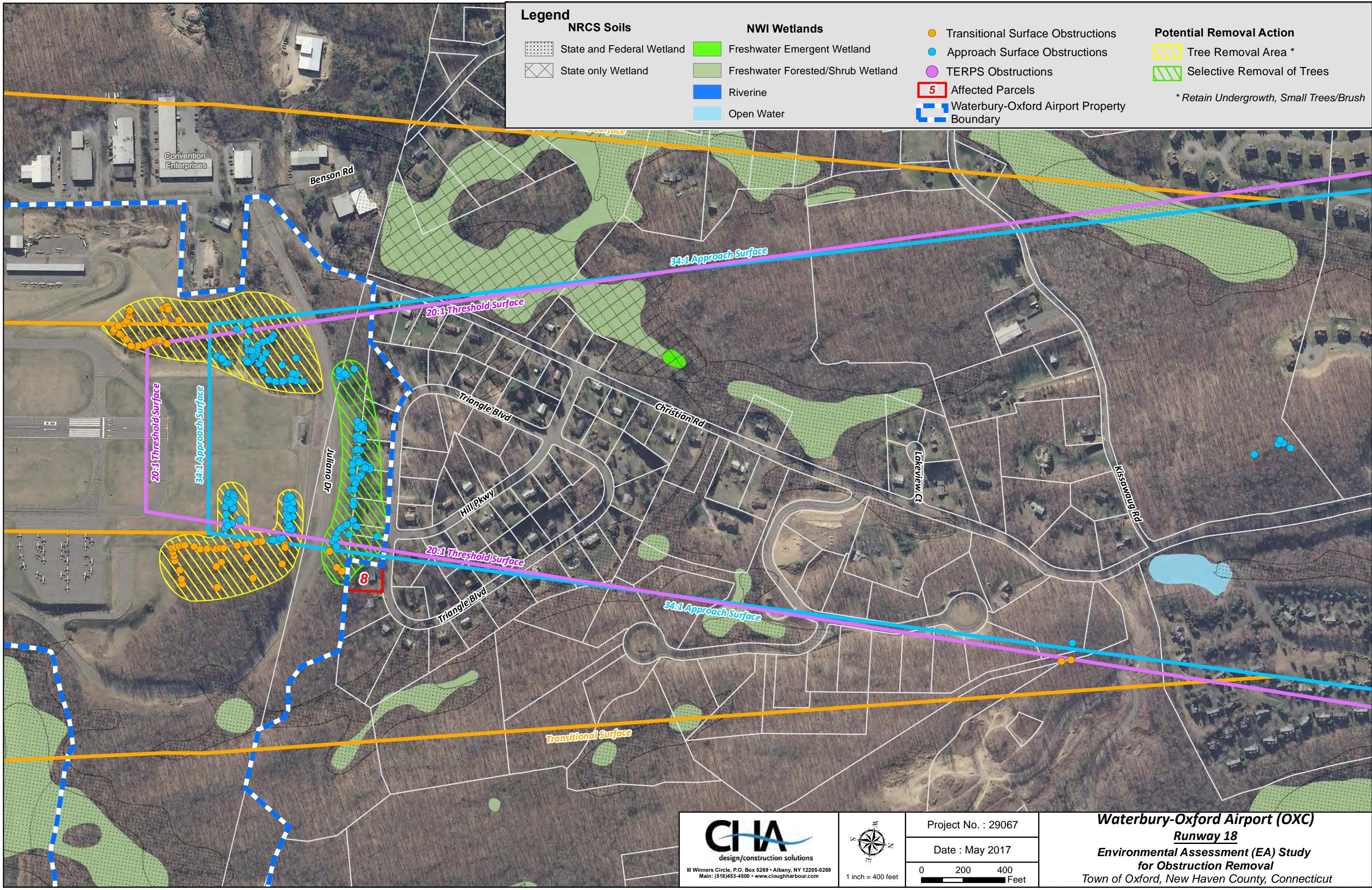
Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions
- 5 Affected Parcels
- Waterbury-Oxford Airport Property Boundary

Potential Removal Action

- Tree Removal Area *
- Selective Removal of Trees

* Retain Undergrowth, Small Trees/Brush



Legend

- | | | | | | |
|-----------------------------|----------------------|-------------------------------|-------------------------------------|--|--|
| NRCS Soils | | NWI Wetlands | | ● Transitional Surface Obstructions | Potential Removal Action |
| ▨ State and Federal Wetland | ▨ State only Wetland | ■ Freshwater Emergent Wetland | ■ Freshwater Forested/Shrub Wetland | ● Approach Surface Obstructions | |
| | | ■ Riverine | ■ Open Water | ● TERPS Obstructions | ▨ Tree Removal Area * |
| | | | | ■ Affected Parcels | ▨ Selective Removal of Trees |
| | | | | ▨ Waterbury-Oxford Airport Property Boundary | <i>* Retain Undergrowth, Small Trees/Brush</i> |

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North Arrow
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Project No. : 29067
 Date : May 2017
 0 200 400 Feet





**Waterbury-Oxford Airport (OXC)
 Runway 18
 Environmental Assessment (EA) Study
 for Obstruction Removal
 Town of Oxford, New Haven County, Connecticut**






Legend

NRCS Soils



-  State and Federal Wetland
-  State only Wetland

NWI Wetlands

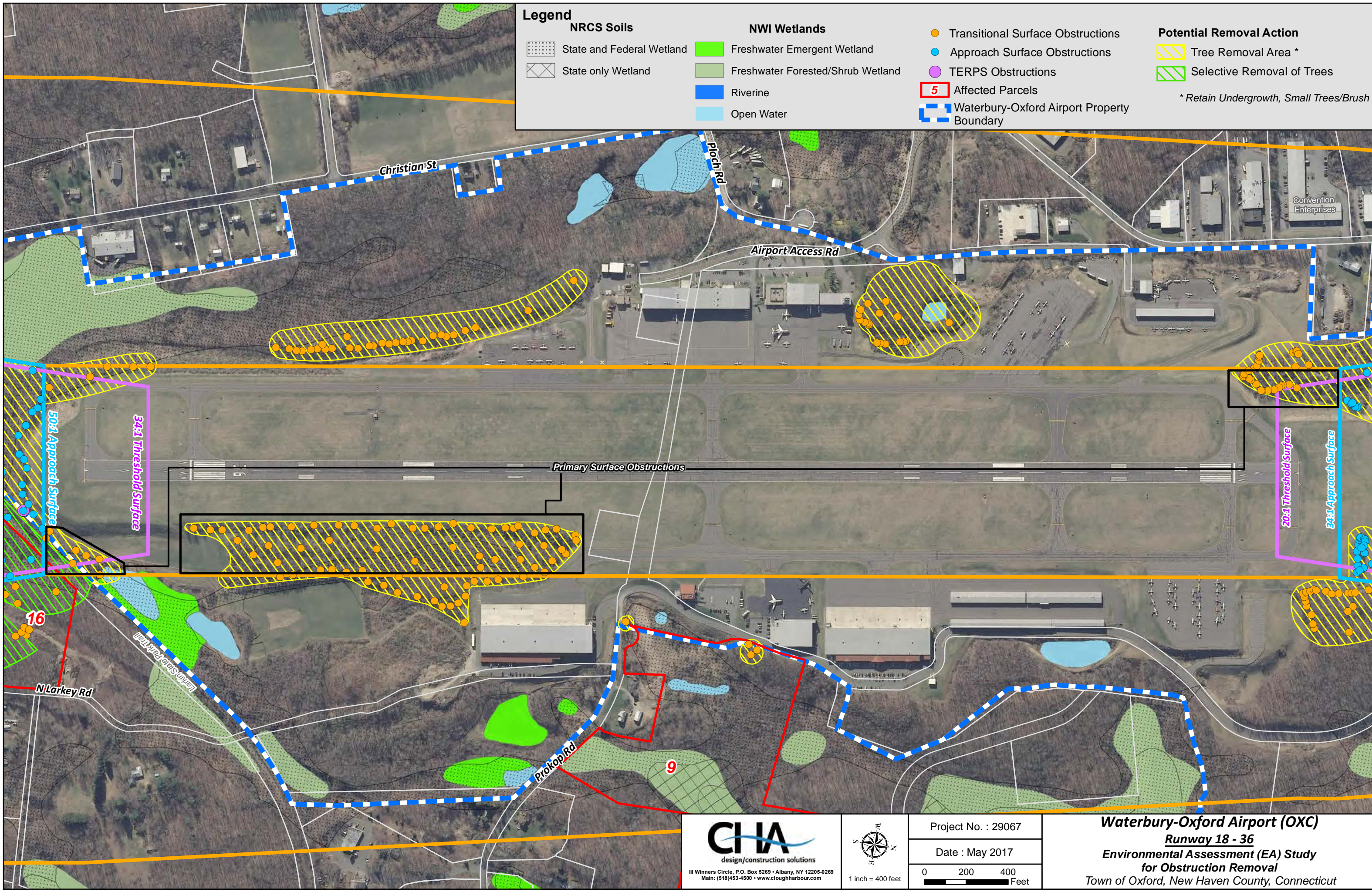
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Riverine
-  Open Water

-  Transitional Surface Obstructions
-  Approach Surface Obstructions
-  TERPS Obstructions
-  Affected Parcels
-  Waterbury-Oxford Airport Property Boundary


Potential Removal Action

-  Tree Removal Area *
-  Selective Removal of Trees

* Retain Undergrowth, Small Trees/Brush

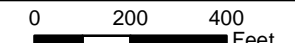


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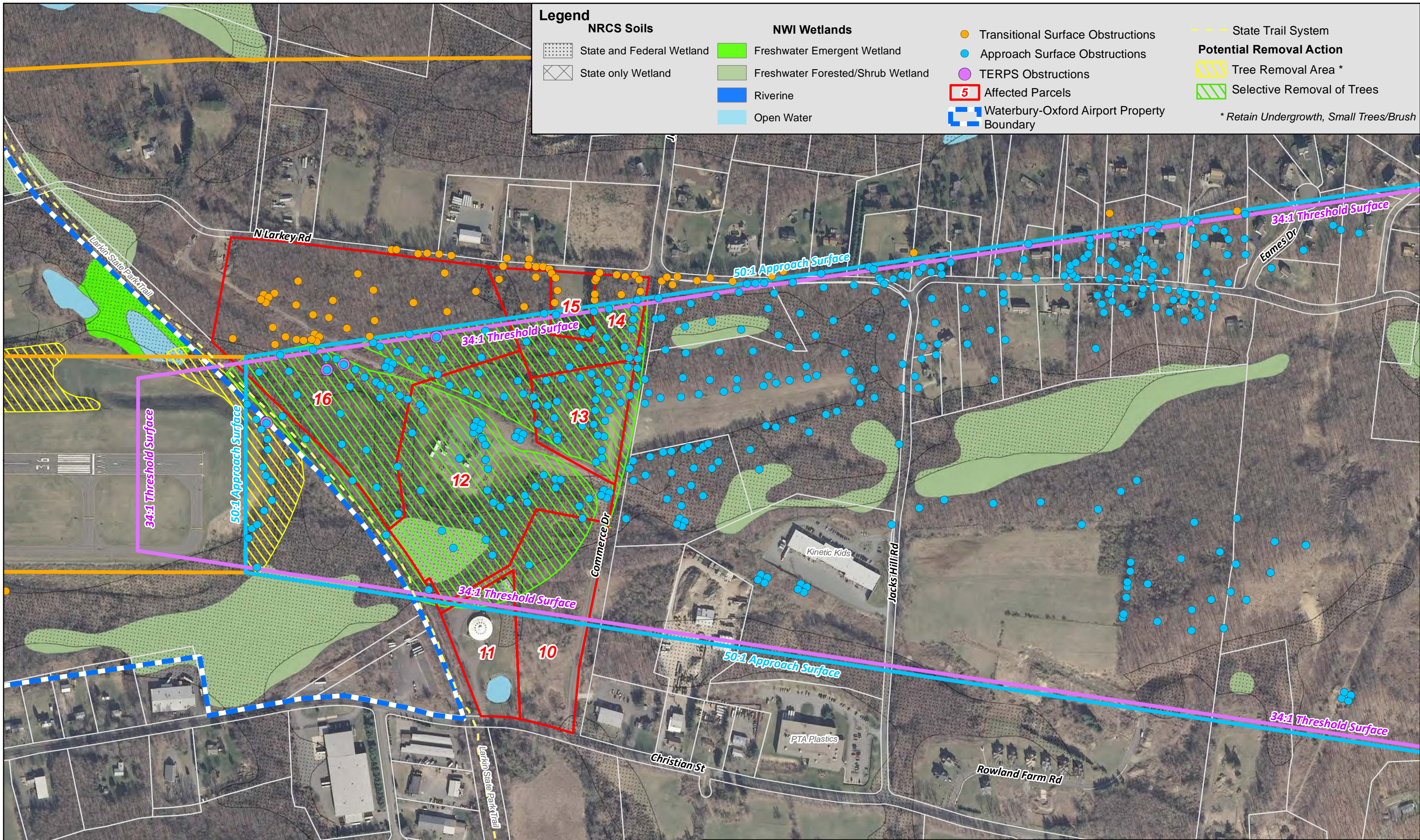
Project No. : 29067
 Date : May 2017



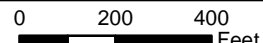


Waterbury-Oxford Airport (OXC)
Runway 18 - 36
Environmental Assessment (EA) Study
for Obstruction Removal
 Town of Oxford, New Haven County, Connecticut

Legend

NRCS Soils		NWI Wetlands		● Transitional Surface Obstructions	--- State Trail System
▨ State and Federal Wetland	■ Freshwater Emergent Wetland	■ Freshwater Forested/Shrub Wetland	● Approach Surface Obstructions	● TERPS Obstructions	Potential Removal Action
▩ State only Wetland	■ Riverine	■ Open Water	■ Affected Parcels	■ Waterbury-Oxford Airport Property Boundary	▨ Tree Removal Area *
					▨ Selective Removal of Trees
					* Retain Undergrowth, Small Trees/Brush



 design/construction solutions 111 Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269 Main: (518)453-4500 • www.cloughharbour.com	 1 inch = 400 feet	Project No. : 29067	Waterbury-Oxford Airport (OXO) Runway 36 Environmental Assessment (EA) Study for Obstruction Removal Town of Oxford, New Haven County, Connecticut
		Date : May 2017	
		 0 200 400 Feet	

APPENDIX B CORRESPONDENCE

EMAIL:

From: CT Office of Policy and Management
To: CAA
Date: 11/11/17
Subject: CEPA applicability to CAA airports and projects

From: "Bye, Gareth" <Gareth.Bye@ct.gov>
Date: 11/9/17 5:02 PM (GMT-05:00)
To: Paul Pernerewski <ppernerewski@ctairports.org>
Cc: "Morley, Dan D." <Daniel.Morley@ct.gov>, "Wittchen, Bruce" <Bruce.Wittchen@ct.gov>, "Pafford, Matthew" <Matthew.Pafford@ct.gov>, "Sullivan, Michael" <Michael.J.Sullivan@ct.gov>
Subject: Record of Decision pending for Bradley, Waterbury-Oxford, and Danielson GA Airport Projects

November 11, 2017

Paul,

This will serve to close out the underlying issue of whether OPM has a role in reviewing the Record of Decision (ROD) that the Airport Authority (CAA) prepared for the joint Environmental Assessment (EA) and Environmental Impact Evaluation (EIE), regarding tree work proposed for off-airport tree obstruction at Bradley, Waterbury-Oxford, and Danielson.

Section 22a-1c of the Connecticut General Statutes (CGS) states only "actions ... proposed to be undertaken by state departments, institutions or agencies, or funded in whole or in part by the state" are subject to the CT Environmental Policy Act (CEPA).

Subsection (a) of Connecticut General Statutes § 15-120bb states that "the [CAA] shall not be construed to be a department, institution or agency of the state."

OPM has determined that there is no "state action" for the captioned project because the proposed actions are not being sought by a state department, institution or agency funded in whole or part by the state, as required by Section 22a-1c of the Connecticut General Statutes.

It is clear in statute CAA has the duty, power and authority to manage, operate and develop Bradley, the general aviation airports and the other airports defined in Chapter 267b of the Connecticut General Statutes. See CGS §§ 15-120aa and 15-120bb. Any remaining bond money that may have been allocated to the DOT's Bureau of Aviation could no longer could be used by DOT because such duties moved to CAA. Consistent with CAAs authority under CGS § 15-120cc(28)(32), such bond monies, in fact, have been transferred by DOT to CAA at its request for CAA's use. Further, since DOT has no grant in place with CAA concerning such projects and there are no DOT "strings" attached to such transfers, DOT's role is simply ministerial. Stated alternatively, DOT has no involvement in the direct management, funding or authority chain associated with the applicable projects.

Therefore, the environmental review for the projects is not under CEPA.

Please feel free to contact this agency should you or your staff have any other questions.

Regards,

Gareth D. Bye
Director of Legal Affairs
Office of The Secretary
State of Connecticut
Office of Policy and Management
450 Capitol Avenue
Hartford, CT 06106-1379
860-418-6433 (direct)
860-418-6487 (fax)
gareth.bye@ct.gov (e-mail)

Notice of Scoping for Connecticut Airport Authority (CAA) Off-Airport Obstruction Removal and Lighting Project

Municipalities where proposed project might be located: Windsor Locks (Bradley International Airport), Willimantic (Windham Airport), Groton (Groton-New London Airport), Oxford (Waterbury-Oxford Airport), Hartford (Hartford-Brainard Airport) and Killingly (Danielson Airport).

Address of Possible Project Location: Various (see above)

Project Description: The proposed undertaking involves preparation of National Environmental Policy Act (NEPA) and Connecticut Environmental Policy Act (CEPA) documentation as required to evaluate the potential impacts associated with tree obstruction removal and obstruction lighting at Bradley International Airport and the five state-owned general aviation airports as identified and listed above. The evaluation will address obstruction removals and lighting associated with Federal Aviation Regulations (FAR) Part 77, *Safe, Efficient Use, and the Preservation of Navigable Airspace* and published Terminal Instrument Procedures (TERPS), which define and regulate the airspace beyond the ends of runways through the establishment of imaginary surfaces. Objects that penetrate these surfaces are classified as airspace obstructions, and should be removed to safely accommodate approaching and departing aircraft.

The project sponsoring agency, the Connecticut Aviation Authority (CAA), and Federal Aviation Administration (FAA) have identified that trees penetrate the airspace at Bradley International Airport and airspace at the five state-owned general aviation airports, including locations beyond defined airport property boundaries. Per FAA practice, review of off-airport obstruction removal should be evaluated and documented per federal (NEPA) and state (CEPA) environmental guidelines and requirements. This project also includes the identification of each affected property owner and associated parcels (both public and private) with necessary obstruction removals, obstruction lighting, and anticipated project access routes.

Project Maps: Project maps for each airport can be found at the following locations:

[Bradley International Airport Obstruction Removal and Lighting Documents](#)

[Danielson Airport Obstruction Removal and Lighting Documents](#)

[Groton-New London Airport Obstruction Removal and Lighting Documents](#)

[Hartford-Brainard Airport Obstruction Removal and Lighting Documents](#)

[Waterbury-Oxford Airport Obstruction Removal and Lighting Documents](#)

[Windham Airport Obstruction Removal and Lighting Documents](#)

Written comments from the public are welcome and will be accepted until the close of business on: **Friday, July 17, 2015.**

Any person can ask the sponsoring agency (CAA) to hold a Public Scoping Meeting by sending such a request to the address below. If a meeting is requested by 25 or more individuals, or by an association that represents 25 or more members, the sponsoring agency shall schedule a Public Scoping Meeting. Such requests must be made by **Friday, June 26, 2015.**

Written comments and/or requests for a Public Scoping Meeting should be sent to:

Name: Mr. Robert J. Bruno, Director of Planning, Engineering & Environmental

Agency: Connecticut Airport Authority

Address: 334 Ella Grasso Turnpike, Suite 160
Windsor Locks, CT 06096

Phone: (860) 254-5516

E-Mail: rbruno@ctairports.org

If you have questions about the public meeting, or other questions about the scoping for this project, contact:

Name: Mr. Robert J. Bruno, Director of Planning, Engineering & Environmental

Agency: Connecticut Airport Authority

Address: 334 Ella Grasso Turnpike, Suite 160

Windsor Locks, CT 06096

Phone: (860) 254-5516

E-Mail: rbruno@ctairports.org

The agency expects to release an environmental document for this project, for public review and comment, in October 2015.



STATE OF CONNECTICUT

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

To: Robert J. Bruno – Director of Planning, Engineering & Environment
Connecticut Airport Authority, 334 Ella Grasso Turnpike, Windsor Locks

From: David J. Fox - Senior Environmental Analyst **Telephone:** 860-424-4111

Date: July 17, 2015 **E-Mail:** david.fox@ct.gov

Subject: Obstruction Removal & Lighting Project

The Department of Energy & Environmental Protection (DEEP) has reviewed the Notice of Scoping for the proposed tree obstruction removal and obstruction lighting beyond airport property in areas surrounding Bradley International Airport and five stated-owned general aviation airports operated by the Connecticut Airport Authority (CAA). The following comments are submitted for your consideration.

In general, the document should:

- Identify the location and height of encroachments into the various applicable airspaces,
- Identify the extent of clearing required,
- Develop plans that, in order, avoid, minimize and mitigate potential impacts,
- Identify alternative site access/egress and staging areas needed to conduct proposed work,
- Evaluate cumulative impacts if project phasing is proposed, and
- Identify opportunities for habitat and outdoor recreational enhancements to mitigate unavoidable impacts.

At four of the airports, the affected areas identified encroach into several DEEP properties that could be impacted if obstruction clearing is proposed at these locations. These include the properties in the table below.

Groton - New London Airport	Bluff Point State Park Bluff Point Coastal Reserve Bluff Point Natural Area Preserve
Windham Airport	Mansfield Hollow Wildlife Management Area Airline State Park Trail Natchaug State Forest Beaver Brook State Park Scenic Reserve
Waterbury - Oxford Airport	Larkin State Park Trail
Brainard Airport	Connecticut River Wildlife Management Area (or Keeney Cove WMA)

The document should identify both direct and indirect (visual or aesthetic) impacts to DEEP property and evaluate the consistency of proposed vegetative clearing or beacon installation with any applicable State policies that apply to the various management designations (e.g., State Park, Coastal Reserve, Natural Area Preserve, etc.). The Department is particularly concerned about potential impacts to Bluff Point.

The Bluff Point peninsula is often considered the last significant undeveloped area on the Connecticut coastline. In 1975, the Connecticut Legislature designated a portion of Bluff Point as a "Coastal Reserve" in recognition of its ecological importance and to preserve its ecological integrity. One of the largest undeveloped coastal areas in the state, this mostly forested 700-acre site contains a variety of habitats supporting state threatened and endangered species. Special Act 76-27 established land use controls at the coastal reserve: "Living and nonliving resources contained within the reserve shall not be disturbed or removed for other than scientific or management purposes and only upon the approval of the commissioner of environmental protection."

The southeast section of Bluff Point is a designated Connecticut Natural Area Preserve. Governor Rowland designated these 117 acres to maintain the preserve in as natural and wild a state as is consistent with the preservation and enhancement of protected resources and educational, biological, geological, paleontological and scenic purposes. The designation is due in part to a unique coastal forest on a concave slope, known as a 'cove forest,' which supports trees that are nearly 100-years old.

Pursuant to section 23-5e of the Connecticut General Statutes (CGS), "An area designated as a natural area preserve is declared to be put to its highest, best and most important use for public benefit and no interest therein owned by the state shall be alienated or put to any use other than as a natural area preserve, except upon a finding by the commissioner in consultation with the natural area preserves committee that (1) such alienation or other use serves a public necessity and that no prudent alternative exists or (2) the features of the land found worthy of preservation have been destroyed or irretrievably damaged so that the public purpose in preserving such land has been frustrated, and after the approval of such proposed alienation or other use by the Governor."

The document should explain any procedures for obtaining variances from FAA regulations or relaxation of requirements regarding penetration by trees or other obstructions into the airspace formed by imaginary surfaces. For example, a Draft Environmental Assessment for removing off-airport airspace obstructions at T.F Green Airport proposed, as the preferred alternative, a partial clear plan for "tree removal only in those areas where trees obstruct priority operational surfaces in order to minimize impacts to the community and environment and to reduce the number of easements to achieve project goals. The priority surfaces were established through a review process conducted by RIAC and FAA and ultimately approved by FAA in the RIAC Airspace Determination." Alternative analysis should evaluate the use of variances or reduced standards in order to avoid adverse impacts at particularly sensitive locations, such as DEEP property.

In the case of Bluff Point, the relative benefit of tree clearing for the lesser used crosswind runway should be weighed against the potential impacts to this particularly sensitive area. Proposals to remove trees at Bluff Point have been the subject of several meetings between

DEEP staff and the CAA with their consultants to discuss minimizing and mitigating impacts of clearing. These efforts should be resumed if it is determined through the NEPA/CEPA process that impacts are unavoidable.

Any proposal that involved DEEP property would entail a need for property rights from the Department. Requests for temporary or permanent property rights from DEEP should be requested using DEEP's Land Management Request Application (copy attached). All such requests are reviewed by a multidisciplinary panel of DEEP staff that comprise the DEEP Property Management Review Team. After the NEPA/CEPA process has identified alternatives that avoid and minimize adverse impact, this review process can identify more specific mitigation measures for any project elements on DEEP property.

The DEEP Natural Diversity Data Base has reviewed the maps depicting the potentially affected areas surrounding the six airports to determine whether there are any records of extant populations of Federally listed endangered or threatened species or species listed by the State, pursuant to section 26-306 of the CGS, as endangered, threatened or special concern in the area. There are records of state listed species within or very close to the boundaries of these areas at five of the airports; there are no records at the Danielson Airport. Lists of these species are attached.

In addition, the Federal Threatened bat species *Myotis septentrionalis* (northern long-eared bat) may be impacted by tree-clearing activities. Additional information on this bat species can be found at: [Long-Eared Bat](#). Consultation with the U.S. Fish & Wildlife Service (FWS) may be required pursuant to Section 7 of the Endangered Species Act. The FWS contact for the northern long-eared bats for New England is Susi von Oettingen: (Susi_vonOettingen@fws.gov).

Consultations with the NDDDB Program should not be substitutes for onsite surveys required for environmental assessments. Depending on the extent of clearing proposed and the habitats that may be affected, surveys for some of the listed species may be required.

A report summarizing the results of surveys should include:

- survey date(s) and duration,
- site descriptions and photographs,
- list of component vascular plant and animal species within the survey area (including scientific binomials),
- data regarding population numbers and/or area occupied by State-listed species,
- detailed maps of the area surveyed including the survey route and locations of State-listed species,
- statement/resumé indicating the biologist's qualifications, and
- protection or conservation strategies and plans to protect species from project impacts.

The environmental document should include an evaluation of potential impacts to federal and state listed species as well as mitigation measures to protect these species. Based on the information included in the EIE, the NDDDB will re-evaluate species impacts related to these projects.

Please be advised that this is a preliminary review and not a final determination. A more detailed review will be necessary to move forward with any subsequent environmental permit applications submitted to DEEP for the proposed project. Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Existing inland wetlands and watercourses at the sites of proposed clearing should be delineated by a certified soil scientist and their functional values should be evaluated. Any clearing and access roadways should avoid regulated areas to the maximum extent practicable. Unavoidable impacts should be mitigated and buffer areas established to further protect wetlands and watercourses. The degree of impact should be quantified by acreage and a discussion of the functional values that would be lost or impaired should be included in any CEPA document. Because the CAA is a public instrumentality, any work or construction activity within inland wetland areas or watercourses will require a permit from the Inland Water Resources Division (IWRD) pursuant to section 22a-39(h) of the Connecticut General Statutes.

If there are any potential tidal wetlands at sites of proposed clearing, a qualified botanist should delineate regulated areas as defined by section 22a-29(2) of the CGS. Any regulated activity will require a permit from the Office of Long Island Sound Programs pursuant to section 22a-32 of the CGS.

Because the CAA is not a state department, institution or agency, it is not subject to flood management certification pursuant to section 25-68d of the CGS, even if activities are proposed within the 100-year flood zone on the community's Flood Insurance Rate Map.

Stormwater discharges from construction sites where one or more acres are to be disturbed, regardless of project phasing, require an NPDES permit from the Permitting & Enforcement Division. The *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEEP-WPED-GP-015) will cover these discharges. The construction stormwater general permit dictates separate compliance procedures for Locally Approvable projects and Locally Exempt projects (as defined in the permit). Locally Exempt construction projects, such as those performed by CAA, disturbing over 1 acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to the Department. The SWPCP must include measures such as erosion and sediment controls and post construction stormwater management. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing post-construction stormwater management measures. The general permit also requires that post-construction control measures incorporate runoff reduction practices, such as LID techniques, to meet performance standards specified in the permit. For further information, contact the division at 860-424-3018. A copy

of the general permit as well as registration forms may be downloaded at: [Construction Stormwater GP](#).

If there are any questions concerning these comments, please contact me.

cc: Robert Hannon, DEEP/OPPD
Jeff Caiola, DEEP/IWRD
David Kozak, DEEP/OLISP
Dawn McKay, DEEP/NDDDB
Graham Stevens, DEEP/OPPD



STATE OF CONNECTICUT

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

To: Colin Goegel - Supervising Engineer
Connecticut Airport Authority, 334 Ella Grasso Turnpike, Windsor Locks, 06096

From: David J. Fox - Senior Environmental Analyst **Telephone:** 860-424-4111

Date: December 2, 2016 **E-Mail:** david.fox@ct.gov

Subject: Waterbury - Oxford Airport Obstruction Removal Project

The Department of Energy & Environmental Protection (DEEP) has reviewed the Environmental Assessment (EA)/Environmental Impact Evaluation (EIE) prepared by the Connecticut Airport Authority (CAA) for proposed obstruction removal in the area surrounding Waterbury - Oxford Airport. The following comments are submitted for your consideration.

The Department recognizes that the need to remove obstructions to the airspace surrounding airports to ensure their safe operation will require clearing of trees beyond the airport. We also understand the CAA's challenge in striking the correct balance between public safety and resource impacts in developing a plan to remove obstructions. Our comments on the document focus on clarifying the extent of proposed tree clearing and recommending measures to consider to further minimize impacts.

The document is titled an Environmental Impact Evaluation and was noticed in the Environmental Monitor as a Connecticut Environmental Policy Act (CEPA) document. However, section 15-120bb of the Connecticut General Statutes (CGS), states that the CAA "shall not be construed to be a department, institution or agency of the state." Since CEPA applies to state departments, institutions or agencies, it appears that CAA is exempt from its requirements.

In describing the preferred Modified Obstruction Removal Alternative, the document notes that FAA has recognized that full off-airport clearing of Part 77 surfaces is often impractical due to environmental impact, among other considerations, and has defined different approach surfaces to address the most critical obstructions, while maintaining an acceptable margin of safety. For Runway 36, only a few trees are obstructions using the more lenient Threshold Surface criteria. However, CAA proposes to remove trees that are obstructions using the stricter Approach Surface criteria to improve visibility of the electric transmission line and substation within approach surface zone.

As we noted in our scoping comments, it would be instructive for reviewers if maps could be generated by using GIS data for ground elevation and threshold or approach surface elevation that would depict the height of obstructions that would penetrate the threshold or approach surface at various locations. It would also be helpful if some rough of numbers of trees to be eliminated could be estimated.

The Larkin State Park Trail traverses the approach zone between the runway and the transmission right-of-way. The trail elevation generally lies approximately 20' below the transmission corridor and over 40' below the runway. The transmission towers are 80' to 100' high. Very few trees along the trail would be at an elevation similar to the power line. Also, when viewed from above, it would seem that a clearly demarcated right-of-way would more easily denote the potential for transmission lines than if the right-of-way were made less distinct as a result of removal of nearby trees.

Page 3-6 states that during design, individual trees can be identified for removal to minimize clearing activities and that activities will be coordinated with DEEP. The Department recommends that, in the area proximate to the trail, only trees that are critical obstructions or that truly mask the presence of the power line be removed.

In addition, we note that the September 2007 *Airport Master Plan Update* states the ConnDOT is working with Northeast Utilities to potentially lower or bury the power line. It concludes that although the safety benefit of line burial is clear, funding availability is a significant challenge to be addressed by the FAA and ConnDOT. The likelihood of this safety improvement being achieved should also be considered in assessing the need for clearing near the trail.

As also discussed during scoping, clearing on DEEP property would entail a need for property rights from the Department. Requests for temporary or permanent property rights from DEEP should be requested using DEEP's Land Management Request Application (copy attached). All such requests are reviewed by a multidisciplinary panel of DEEP staff that comprise the DEEP Property Management Review Team. After the CAA has developed a plan that avoids and minimizes adverse impact, this review process can identify more specific mitigation measures for any project elements on DEEP property.

Normally during NEPA/CEPA review, the Department would identify issues to be resolved and additional information required during subsequent permitting. However, the application for the Inland Wetlands and Watercourses Permit has already been submitted. A preliminary review by the Land & Water Resources Division (LWRD) has revealed a number of discrepancies between the application and the Environmental Assessment. For example, the application proposes use of swamp matting and removal of trees from the wetlands, in contradiction to the discussion on page 5-14. As the permit review progresses, the LWRD will contact the CAA for any clarifications or additional information required for permitting.

Although not discussed in the document, you explained that the permit application is limited to on-airport activities, which are exempt from NEPA review. Off-airport tree removal will be a separate project following NEPA review. The protocols and mitigation measures that are incorporated into the on-airport project permit can be used as templates in developing the subsequent off-airport obstruction removal application.

The Natural Diversity Data Base (NDDDB) would like to take this opportunity to clarify our concerns with regard to eastern box turtles. Concurrence with the plan initially proposed was based on Phase 1 starting early enough to have turtle exclusionary fencing installed to prevent entry into work zones, including upland areas slated for tree removal. Box turtles over-winter in forested upland habitats. They use brush or leaf piles, wood piles, abandoned mammal burrows,

stump holes and similar locations that will provide soft dirt and minimum freeze/thaw conditions. They are unlikely to select areas that are exposed hillsides or low pockets or depressions where conditions can be wetter and less well-drained. They are not a turtle species that overwinters in wetland areas. Since the work area has not been proactively fenced off, any clearing activities should avoid likely overwintering habitats as described above. Tree removal work performed by hand cutting will greatly reduce possible impacts to hibernating eastern box turtles. Avoidance of stumping or grubbing until after the turtles hibernate will also minimize potential impacts. Alternately, a herpetologist can be onsite during any stump removal activity or an updated plan developed to address issues that might arise if a hibernating turtle is discovered. Jenny Dickson, a wildlife biologist specializing in box turtles, can provide technical assistance in revisions or adjustments to your turtle management plan (jenny.dickson@ct.gov).

NDDDB would also like to clarify that three tree-roosting bat species were identified from this area: red, hoary, and silver-haired bats. The red bat was listed by its scientific name in the NDDDB response materials, but has not been included in subsequent discussion of mitigation. This species has very similar life-history requirements to the other two tree-roosting bats and will be adequately addressed by similar mitigation practices. While June and July are peak pup birthing and rearing periods, it is also important to avoid possible roost tree removal in May when pregnant female bats are seeking maternity roosts and have very limited flight capabilities. Weather conditions in the late winter and early spring can also influence the date pups are born, so ideally tree removal work should be completed in advance of May 1st not June 1st.

For both bats and box turtles, tree removal in wetland areas **does not** need to be completed in spring. The revised recommendations for both species in this regard are not in conflict with one another as stated in the Inland Wetlands and Watercourses Permit (Attachment A: Executive Summary, page 2). Provided there are no specific wetland protection related concerns, tree removal should preferably occur during the winter, when the tree-roosting bats have migrated out of the area and when box turtles are wintering in well-drained, protected upland areas. Review of the initial guidance provided on this issue identified that there were unclear and inaccurate recommendations made as part of the initial review. Installation of bat houses is not a mitigation recommendation appropriate for tree-roosting bats. As a result, they are not required in this application. They may certainly benefit the cave bats impacted severely by white-nose syndrome and would still provide benefits to those species should you wish to retain them in the proposed plan. If you have additional questions on coordinating mitigation efforts for both bats and box turtles, please feel free to contact Jenny Dickson as indicated above.

Over the years, the Department and ConnDOT had worked together to complete various projects and conduct operations at the airport in a manner that protected the biological diversity at Waterbury-Oxford Airport. DEEP anticipates that CAA, as the successor entity, will honor all legal commitments pursuant to statutory requirements made by their predecessor. We look forward to continuing collaboration with CAA toward that goal.

Page 5-14 explains the importance of maintaining streambank vegetation. In accordance with the Inland Fisheries Division Riparian Corridor policy, the Department recommends that every effort be made to maintain a 100 ft. wide natural undisturbed riparian buffer adjacent to the Little River. See link for a copy of the policy: [Riparian Corridor Policy](#). A significant riparian buffer adjacent to the river that regulates water temperatures and minimizes sedimentation into the river.

Stormwater discharges from construction sites where one or more acres are to be disturbed, regardless of project phasing, require an NPDES permit from the Permitting & Enforcement Division. The *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEEP-WPED-GP-015) will cover these discharges. The construction stormwater general permit dictates separate compliance procedures for Locally Approvable projects and Locally Exempt projects (as defined in the permit). Locally Exempt construction projects, such as those undertaken by CAA, disturbing over 1 acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to the Department. The SWPCP must include measures such as erosion and sediment controls and post construction stormwater management. The construction stormwater general permit registrations can now be filed electronically through DEEP's e-Filing system known as ezFile. Additional information can be found on-line at: [Construction Stormwater GP](#).

Thank you for the opportunity to review this proposal. If there are any questions concerning these comments, please contact me.

cc: Robin Blum, DEEP/NDDDB
Jeff Caiola, DEEP/IWRD
Jenny Dickson, DEEP/WD
Laurie Giannotti, DEEP/SPD
Robert Hannon, DEEP/OPPD
Graham Stevens, DEEP/LM
Jamie Sydoriak, DEEP/LM

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH



Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

Drinking Water Section

December 2, 2016

Mr. Colin Goegel
Supervising Engineer
Connecticut Airport Authority
334 Ella Grasso Turnpike, Suite 160
Windsor Locks, CT 06096

Re: Notice of EIE for the Connecticut Airport Authority (CAA)—Off-Airport Tree Obstruction Removal at the Waterbury-Oxford Airport

Dear Mr. Goegel:

The Drinking Water Section of the Department of Public Health has reviewed the above-mentioned project for potential impacts to any sources of public drinking water supply. This project does not appear to be in a public water supply source water area; therefore, the Drinking Water Section has no comments at this time.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia Bisacky".

Patricia Bisacky
Environmental Analyst 3
Drinking Water Section



Phone: (860) 509-7333 • Fax: (860) 509-7359 • VP: (860) 899-1611
410 Capitol Avenue, P.O. Box 340308, MS#51WAT
Hartford, Connecticut 06134-0308

www.ct.gov/dph/publicdrinkingwater

Affirmative Action/Equal Opportunity Employer



STATE OF CONNECTICUT

OFFICE OF POLICY AND MANAGEMENT

DIVISION OF TRANSPORTATION, CONSERVATION, AND DEVELOPMENT POLICY AND PLANNING

December 2, 2016

Mr. Colin Goegel, Supervising Engineer
Connecticut Airport Authority
334 Ella Grasso Turnpike, Suite 160
Windsor Locks, CT 06096

Re: Environmental Impact Evaluation: Connecticut Airport Authority (CAA) – Off Airport Tree Obstruction Removal for Waterbury-Oxford Airport

Dear Mr. Goegel:

The Office of Policy and Management (OPM) has reviewed CAA's Environmental Impact Evaluation for Off Airport Tree Obstruction Removal for Waterbury-Oxford Airport and has the following comments.

OPM notes that these comments address issues similar to those OPM raised regarding the EIE for Bradley International Airport. Therefore, the comments below broadly re-state issues that are discussed in greater detail in OPM's comments regarding the proposed removals at Bradley Airport.

- The EIE does not identify alternatives to tree removal, such as tree trimming, that might reasonably accomplish the project goal with less of an impact on neighbors and on the environment. Furthermore, a pro-active airport-funded trimming program might be the means to reduce or avoid the need for future removals and perhaps reduce the number or complexity of avigation easements necessary to conduct such removals.
- Appendix B contains correspondence letters to affected parties, including a generic letter addressed to "Property Owner". How did FAA/CAA determine who would and would not receive such notification related to the project? What is the process for negotiating access and easements with property owners and what method will be used when conducting appraisals?
- The EIE is unclear about the full scope of the proposed removals. OPM finds the EIE's descriptions to be confusing, such as the following statement from section 3.1.3 regarding potential removals near Runway 36:

For Runway 36, only a few Threshold Surface obstructions exist (magenta dots); however, in this unique case a portion of the tree obstructions to the Approach Surface (blue dots) are being recommended for removal.

That explanation suggests that a number of approach surface obstructions (blue dots) are being targeted for removal. The accompanying map in appendix A, however, indicates an even broader area is designated for selective tree removal (green hatching). Depending on the number of obstructions (blue dots) and the degree of tree removal in the additional

area, this could amount to a large number of tree removals, some of which would directly impact a section of the adjacent Larkin State Park Trail.

- As expressed in OPM's comments for Bradley Airport, OPM had expected a level of mapping that would better enable property owners and others to understand the impacts they should expect now and in the future.

Thank you for the opportunity to respond to this EIE and please feel free to contact me if you have any questions.

Sincerely:



Bruce Wittchen
Office of Policy & Management
450 Capitol Ave, MS# 54ORG
Hartford, CT 06106
(860) 418-6323
bruce.wittchen@ct.gov

Martelle Sr, Jeremy

From: attystephensavarese@gmail.com
Sent: Friday, December 02, 2016 13:47
To: Easton, Glenn; cgoegel@ctairports.org; Loewenstein, Jean; mparsons@ctairports.org; Martelle Sr, Jeremy
Cc: attystephensavarese@gmail.com
Subject: Waterbury Airport Comment

First Name:	Stephen
Last Name:	Savarese
Address:	103 South Main Street
Phone Number: (with area code)	2032701144
E-mail Address:	attystephensavarese@gmail.com
Question or comment?	<p>To the extent that the presentation at the Public Information Meeting held in Oxford on October 25, 2016 regarding the Environmental Assessment (EA) & Environmental Impact Evaluation (EIE) for Obstruction Removal at the Waterbury - Oxford Airport (OXC) confirmed that the project (designated Project No. 29067) was proceeding and limited to the area of the airport and only areas outside the airport property in the Town of Oxford, The Town of Middlebury has NO OBJECTION. The understanding that the project is limited to the ground of the airport property, and not extending beyond the area of the airport is and as more specifically represented in the scope of the submission by the Connecticut Airport Authority (CAA) application to the State of Connecticut, Department of Environmental and Energy Department (DEEP) and U.S. Army Corps of Engineers for removal of trees and brush within areas to the designated wetlands and watercourses and adjacent uplands. The Town of Middlebury reserve the right to further comment is the scope of the project is changed and extended beyond the boundaries of the airport property.</p>



June 5, 2015

George R. Temple, First Selectman
Oxford Town Hall
486 Oxford Road
Oxford, CT 06478-1298

RE: Waterbury-Oxford Airport
Environmental Assessment for Obstruction Removal and Lighting
Connecticut Airport Authority

Dear First Selectman Temple:

The Connecticut Airport Authority (CAA) has conducted a detailed study to evaluate existing obstructions that penetrate Waterbury-Oxford Airport's (Airport) federally protected airspace. These obstructions are primarily trees located near runway ends or located on small hills surrounding the Airport. As a follow-up study, the CAA is reviewing the potential impacts of removing trees and/or installing a pole-mounted red obstruction light in areas that contain airspace obstructions.

To accomplish this, the CAA is conducting an Environmental Assessment (EA) under federal and state regulations to identify affected properties and any potential environmental issues of removing trees and/or installing pole-mounted red obstruction lights. No actual tree removal or construction activities are pending at this time; just the required evaluation. As more information becomes available it will be posted on the following website: <http://waterburyairport.caa-analysis.com>.

Several properties in the Town of Oxford have been identified as potentially having an obstruction that penetrates the federally protected airspace. A map identifying the existing tree obstruction areas and a list of affected parcel is enclosed.

The CAA has contracted with the consulting firm of Clough Harbour Associates (CHA) to prepare the required environmental assessment. CHA will be conducting visual reviews of the subject areas. In many instances the field personnel will complete their review from the public right-of-way; however in certain instances personnel may find it necessary to briefly enter private property to observe trees and site conditions with permission from homeowners. These inspections will occur in the spring and summer of 2015. These personnel will all carry proper identification (sample attached).

Should you have any questions or concerns regarding this project, please contact Jean Loewenstein with CHA. She can be reached (518) 453-8771 or via email at jloewenstein@chacompanies.com.

Sincerely,

Kevin A. Dillon, A.A.E.
Executive Director

Enclosure



June 5, 2015

Edward B. St. John, First Selectman
Middlebury Town Hall
1212 Whittemore Road
Middlebury, CT 06762

RE: Waterbury-Oxford Airport
Environmental Assessment for Obstruction Removal and Lighting
Connecticut Airport Authority

Dear First Selectman St. John:

The Connecticut Airport Authority (CAA) has conducted a detailed study to evaluate existing obstructions that penetrate Waterbury-Oxford Airport's (Airport) federally protected airspace. These obstructions are primarily trees located near runway ends or located on small hills surrounding the Airport. As a follow-up study, the CAA is reviewing the potential impacts of removing trees and/or installing a pole-mounted red obstruction light in areas that contain airspace obstructions.

To accomplish this, the CAA is conducting an Environmental Assessment (EA) under federal and state regulations to identify affected properties and any potential environmental issues of removing trees and/or installing pole-mounted red obstruction lights. No actual tree removal or construction activities are pending at this time; just the required evaluation. As more information becomes available it will be posted on the following website: <http://waterburyairport.caa-analysis.com>.

Several properties in the Town of Middlebury have been identified as potentially having an obstruction that penetrates the federally protected airspace. A map identifying the existing tree obstruction areas and a list of affected parcel is enclosed.

The CAA has contracted with the consulting firm of Clough Harbour Associates (CHA) to prepare the required environmental assessment. CHA will be conducting visual reviews of the subject areas. In many instances the field personnel will complete their review from the public right-of-way; however in certain instances personnel may find it necessary to briefly enter private property to observe trees and site conditions with permission from homeowners. These inspections will occur in the spring and summer of 2015. These personnel will all carry proper identification (sample attached).

Should you have any questions or concerns regarding this project, please contact Jean Loewenstein with CHA. She can be reached (518) 453-8771 or via email at jloewenstein@chacompanies.com.

Sincerely,

Kevin A. Dillon, A.A.E.
Executive Director

Enclosure



June 31, 2015

RE: Waterbury-Oxford Airport
Environmental Assessment for Obstruction Removal and Lighting
Affected Property Address:

Dear Property Owner:

The Connecticut Airport Authority (CAA) has conducted a detailed study to evaluate existing obstructions that penetrate the federally protected airspace. These obstructions are primarily trees located near runway ends or located on small hills surrounding the Airport. As a follow-up study, the CAA is reviewing the potential environmental impacts of tree removal, and selective clearing and/or thinning in areas that contain airspace obstructions.

To accomplish this, the CAA is conducting an Environmental Assessment (EA) under federal and state procedures to identify affected properties and any potential environmental issues of removing trees and/or installing a pole-mounted red obstruction lights. No actual tree removal or construction activities are pending at this time; just the required evaluation. A map of the existing tree obstruction areas is included. As more information becomes available it will be posted on the following website: <http://waterburyairport.caa-analysis.com/>.

Your property has been identified as potentially having an obstruction that penetrates the federally protected airspace. As a result of the possible obstruction, the study requires a CAA contractor, Clough Harbour Associates (CHA) to conduct visual reviews of the subject areas. In many instances the field personnel will conduct their review from the public right-of-way; however in certain instances personnel may find it necessary to briefly enter private property to observe trees and site conditions in the summer and fall of 2015. These personnel will all carry proper identification.

Should you have any questions or concerns regarding the field observation, please contact Jean Loewenstein with CHA. She can be reached at (518) 453-8771 or via email at rloewenstein2@chacompanies.com.

Sincerely,

Robert J. Bruno
Director of Planning, Engineering and Environmental
Connecticut Airport Authority

Loewenstein, Jean

From: Labadia, Catherine <Catherine.Labadia@ct.gov>
Sent: Wednesday, January 04, 2017 2:27 PM
To: Loewenstein, Jean
Cc: McDonnell, Paul
Subject: RE: Environmental Assessment for Obstruction Removal and Lighting- CAA General Aviation Airports and Bradley International Airport

Jean,
I am very embarrassed to say that I am finally getting to review items from November – my apologies. Yes, the surveys are not required if the beacons are no longer part of the project.
Thank you for providing the additional information,
Cathy

From: Loewenstein, Jean [mailto:RLoewenstein2@chacompanies.com]
Sent: Tuesday, October 18, 2016 10:55 AM
To: Labadia, Catherine
Cc: McDonnell, Paul
Subject: FW: Environmental Assessment for Obstruction Removal and Lighting- CAA General Aviation Airports and Bradley International Airport

Good Morning Catherine,
I am following up on my email and phone call of last week regarding the CAA's Environmental Assessments for Obstruction Removal. We would like to confirm that as the installation of beacons is no longer a part of any of these projects, the request for professional cultural resource assessment and reconnaissance surveys no longer applies.

Please contact me with any questions.

Jean

From: Loewenstein, Jean
Sent: Monday, October 10, 2016 10:22 AM
To: 'Labadia, Catherine' <Catherine.Labadia@ct.gov>
Cc: McDonnell, Paul <PMcDonnell@chacompanies.com>; Martelle Sr, Jeremy <JMartelle@chacompanies.com>
Subject: Environmental Assessment for Obstruction Removal and Lighting- CAA General Aviation Airports and Bradley International Airport

Good Morning Catherine,
I am contacting you in regard to the above referenced projects and correspondence from your office dated November 17, 2015 (attached). In this correspondence your office indicated that while tree removal would not result in impacts to archeological sites, the installation of beacons would require the completion of professional cultural resource assessment and reconnaissance surveys prior to their installation. Since the date of this correspondence, the planned beacons have removed from all five general aviation airports and Bradley International airport and as such the projects will not require the completion of the above referenced surveys.

Should you have any questions, please do not hesitate to contact me.

Jean Loewenstein
Principal Planner



U.S. Department
of Transportation
**Federal Aviation
Administration**

Federal Aviation Administration
New England Region

12 New England Executive Park
Burlington, MA 01803

November 8, 2016

Ms. Catherine Labadia, Staff Archeologist
Connecticut Department of Economic & Community Development
Offices of Culture and Tourism, State Historic Preservation Office
One Constitution Plaza-2nd Floor
Hartford, CT. 06103

RE: Connecticut Airport Authority - Obstruction Removal at various Airports

Dear Ms. Labadia:

This is in regards to past correspondence dated September 30, 2015 to your office as it relates to historic and archeological resources. In your November 17, 2015 response SHPO identified no issues with tree removal but did identify a potential concern as it relates to the installation of beacons. Past correspondence is attached for your convenience.

Since that time the installation of beacons has been eliminated from consideration at all the above referenced airports. After review of the relevant information, the FAA issues a Section 106 Finding of No Adverse Effects to Historic Properties.

If you have any questions, please feel free to contact me at 781-238-7613 or richard.doucette@faa.gov or the CAA Director of Engineering Robert Bruno at (860) 254-5516 or rbruno@ctairports.org

Sincerely,

Richard P. Doucette
Manager of Environmental Programs
FAA New England Region

Enclosures

Cc: Colin Goegel, Project Manager, CAA
Robert Bruno, Director of Planning Engineering and Environmental, CAA
Kurt Sendlein, Airport Manager



November 17, 2015

Ms. Jean Lowenstein
CHA, Inc.
3 Winners Circle
Albany, NY 12205

Subject: Connecticut Airport Authority NEPA Environmental Assessment for Obstruction
Removal and Lighting at
Hartford-Brainard Airport, Hartford (CHA 29067)
Danielson Airport, Killingly (CHA 29067)
Waterford-Oxford Airport, Oxford (CHA 29067)
Windham Airport, Windham (CHA 29067)
Bradley International Airport, Windsor Locks (CHA 29055)

Dear Ms. Lowenstein:

The State Historic Preservation Office (SHPO) has reviewed your request for our comments regarding potential effects to historic properties for the referenced project. The existing airports referenced above have been identified as needing tree removal and pole mounted obstruction beacons. The review request currently exceeds the staffing available at this office. A preliminary review completed by this office identified archeological sites and/or historic districts within or in close proximity to each of the identified facilities. SHPO understands that the tree removal will be done with as little ground disturbance as possible, without grubbing and grading. As a result, this office considers the potential impact to archeological sites from obstruction removal to be minimal, if any.

SHPO is concerned, however, with the effects of the proposed beacons on archeological sites and historic buildings. Several of the proposed beacons are located in areas where archeological sites have been reported, as well as historic buildings or districts. We are therefore requesting that a professional cultural resources assessment and reconnaissance survey be completed prior to construction of any beacons. The survey should take into consideration potential indirect impacts on structures older than fifty years that may be eligible for listing on the National Register of Historic Places. An archeological assessment should determine the appropriate level of investigation based on sufficient research and field visits. Subsurface testing for archeological resources, if warranted, should assess all areas of anticipated ground disturbance that are considered to have a moderate/high sensitivity for containing significant archeological deposits. All work should be in compliance with our *Environmental Review Primer for Connecticut's Archeological Resources* and no construction or other project-related ground disturbance should be initiated until SHPO has had an opportunity to review and comment upon the requested survey.

The SHPO appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act, as amended. For additional information, please contact me at (860) 256-2764 or catherine.labadia@ct.gov.

Sincerely,

Catherine Labadia
Deputy State Historic Preservation Officer

State Historic Preservation Office

One Constitution Plaza | Hartford, CT 06103 | P: 860.256.2800 | Cultureandtourism.org

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September 30, 2015

Ms. Catherine Labadia, Staff Archeologist
Connecticut Department of Economic & Community Development
Offices of Culture and Tourism
State Historic Preservation Office
One Constitution Plaza-2nd Floor
Hartford, CT. 06103

**RE: Connecticut Airport Authority Waterbury-Oxford Airport
NEPA Environmental Assessment (and CEPA EIE) for Obstruction Removal &
Lighting
CHA Project No.: 29067**

Dear Ms. Labadia:

Thank you for your recent assistance regarding submittal requirements to the Connecticut SHPO. On behalf of the Connecticut Airport Authority, CHA is submitting a request for review of the above referenced project located at Waterbury-Oxford Airport and vicinity, in the Town of Oxford, New Haven County Connecticut.

The Connecticut Airport Authority (CAA) previously conducted a detailed study to evaluate existing obstructions that penetrate the federally protected airspace. These obstructions are primarily trees located near runway ends or located on small hills surrounding the Airport. As a follow-up study, the CAA is reviewing the potential impacts of tree removal, and selective clearing or installation of pole-mounted red obstruction beacons in areas that contain airspace obstructions. Objects that penetrate these surfaces are classified as airspace obstructions, and should be removed to safely accommodate approaching and departing aircraft.

To accomplish this, the CAA is conducting an NEPA Environmental Assessment (EA) and CEPA Environmental Impact Evaluation (EIE) to identify affected properties and any potential environmental issues of removing trees and/or installing obstruction lights. No actual tree removal or construction activities are pending at this time; just the required evaluation. Tree removal or obstruction light installation will be accomplished under a future project. Maps outlining the potential location for tree removal and possible siting locations for the beacons are enclosed and can also be found at the project website. The web address is as follows: <http://waterburyairport.caa-analysis.com>.

As part of this evaluation of potential impacts we are requesting that SHPO review the draft mapping of potential tree removal areas and beacon installation locations as it relates to historic and archeological resources so that potential impacts may be considered in future actions. It should also be noted that when tree removal does occur it will generally include clearing, without grubbing or grading and will be implemented with minimal soil disturbance (e.g., removal to trees, with retention stumps and undergrowth).

Thank you for your prompt attention to this matter. If you have any questions, please feel free to contact me at 518-453-8771 or jloewenstein@chacompanies.com or the CAA Director of Engineering Robert Bruno at (860) 254-5516 or rbruno@ctairports.org.

Sincerely,



Jean Loewenstein, AICP
Senior Planner

JL/sc

Enc.

Cc: Colin Goegel, Project Manager, CAA
Robert Bruno, Director of Planning Engineering and Environmental, CAA
Matt Kelly, Airport Manager

v:\projects\any\k3\29067\corres\shpo\waterbury.doc





September 30, 2015

Mr. Thomas Tyler, Director
Bureau of Outdoor Recreation
Connecticut Department of Energy & Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

**RE: Connecticut Airport Authority- Waterbury-Oxford Airport
Environmental Assessment for Obstruction Removal and Lighting
CHA File: 29067**

Dear Mr. Tyler:

On behalf of the Connecticut Airport Authority (CAA), CHA is submitting a request for review of the above referenced project located at Waterbury-Oxford Airport and vicinity, in the Town of Oxford, New Haven County Connecticut as it relates to resources defined by Section 4(f) of the Department of Transportation Act of 1966.

The CAA has conducted a detailed study to evaluate existing obstructions that penetrate the federally protected airspace. These obstructions are primarily trees located near runway ends or located on small hills surrounding the Airport. As a follow-up study, the CAA and FAA are reviewing the potential impacts of tree removal, and selective clearing or installation of pole-mounted red obstruction beacons in areas that contain airspace obstructions. Objects that penetrate these surfaces are classified as airspace obstructions, and should be removed to safely accommodate approaching and departing aircraft.


To accomplish this, the CAA is conducting a NEPA Environmental Assessment (EA) and CEPA Environmental Impact Evaluation (EIE) to identify affected properties and any potential environmental issues of removing trees and/or installing a pole-mounted red obstruction lights. No actual tree removal or construction activities are pending at this time; just the required evaluation. Tree removal or obstruction light installation will be accomplished under a future project following appropriate approvals. Maps identifying the potential location for tree removal and possible siting locations for the beacons are enclosed and can also be found at the project website. The web address is as follows:
<http://waterburyairport.caa-analysis.com/>.

A portion of the Larkin State Park Trail skirts the southern boundary of the airport near the end of Runway 36 in an area of that includes the potential for both the removal and selective removal of trees. Recognizing that the trail system is an important statewide resource, we would like your office to review the locations of the potential selective thinning and clearing as it relates to 4(f) resources. It should be noted that when tree removal does occur it will generally include clearing, without grubbing or grading

grubbing or grading and will be implemented with minimal soil disturbance (e.g., removal to trees, with retention stumps and undergrowth).

Thank you for your prompt attention to this matter. If you have any questions regarding this project, please feel free to contact me at 518-453-8771 or jloewenstein@chacompanies.com or the CAA Director of Engineering, Robert Bruno at (860) 254-5516 or rbruno@ctairports.org.

Sincerely,


Jean Loewenstein, AICP
Senior Planner

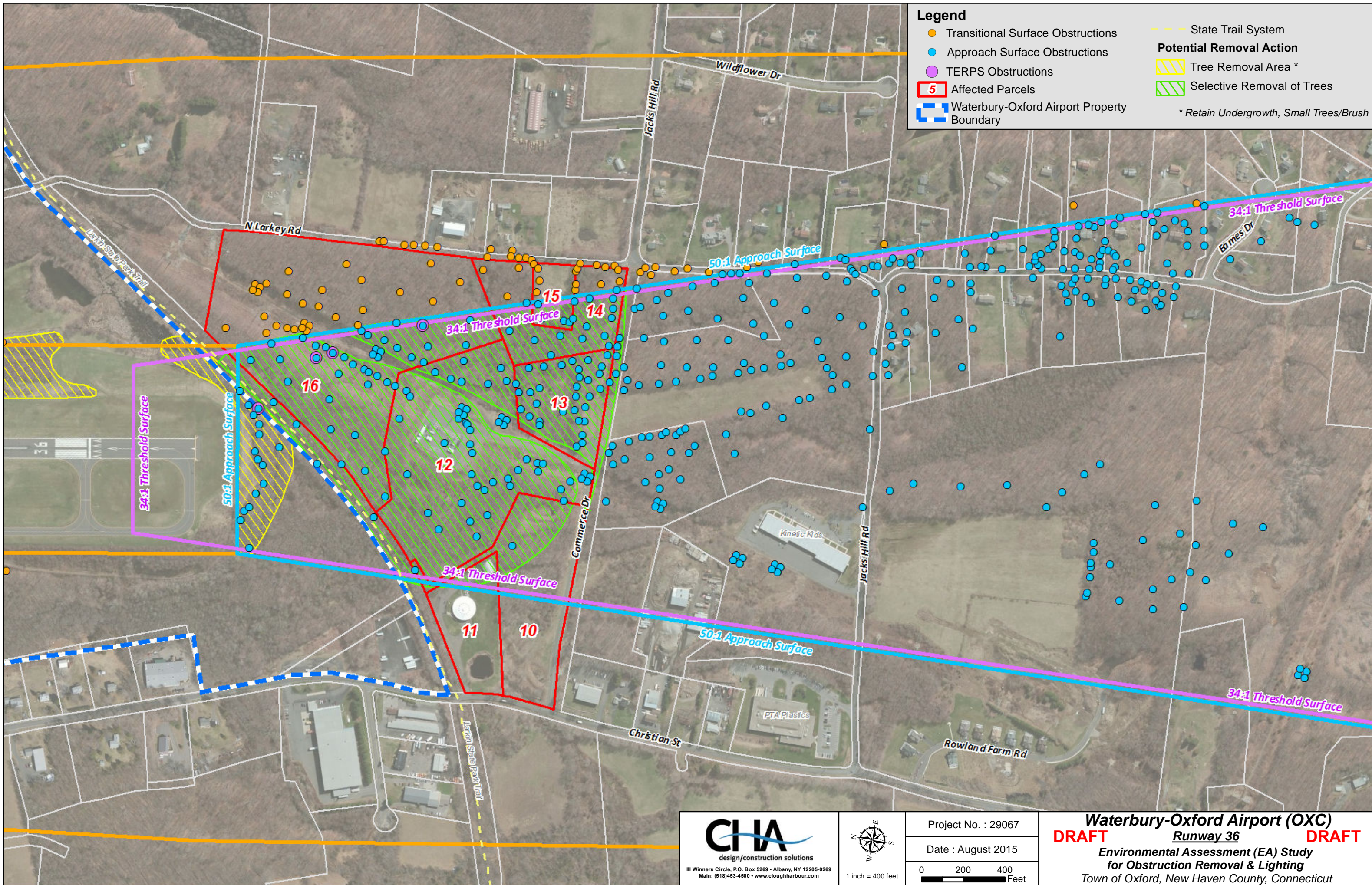
Enc.

cc: Colin Goegel, Project Manager, CAA
Robert Bruno, Director of Planning, Engineering and Environmental, CAA
Matt Kelly, Airport Manager

Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions
- 5 Affected Parcels
- Waterbury-Oxford Airport Property Boundary
- State Trail System
- Potential Removal Action**
- Tree Removal Area *
- Selective Removal of Trees

* Retain Undergrowth, Small Trees/Brush



CHA
design/construction solutions
111 Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
Main: (518)453-4500 • www.cloughharbour.com

North Arrow
1 inch = 400 feet

Project No. : 29067
Date : August 2015
0 200 400 Feet

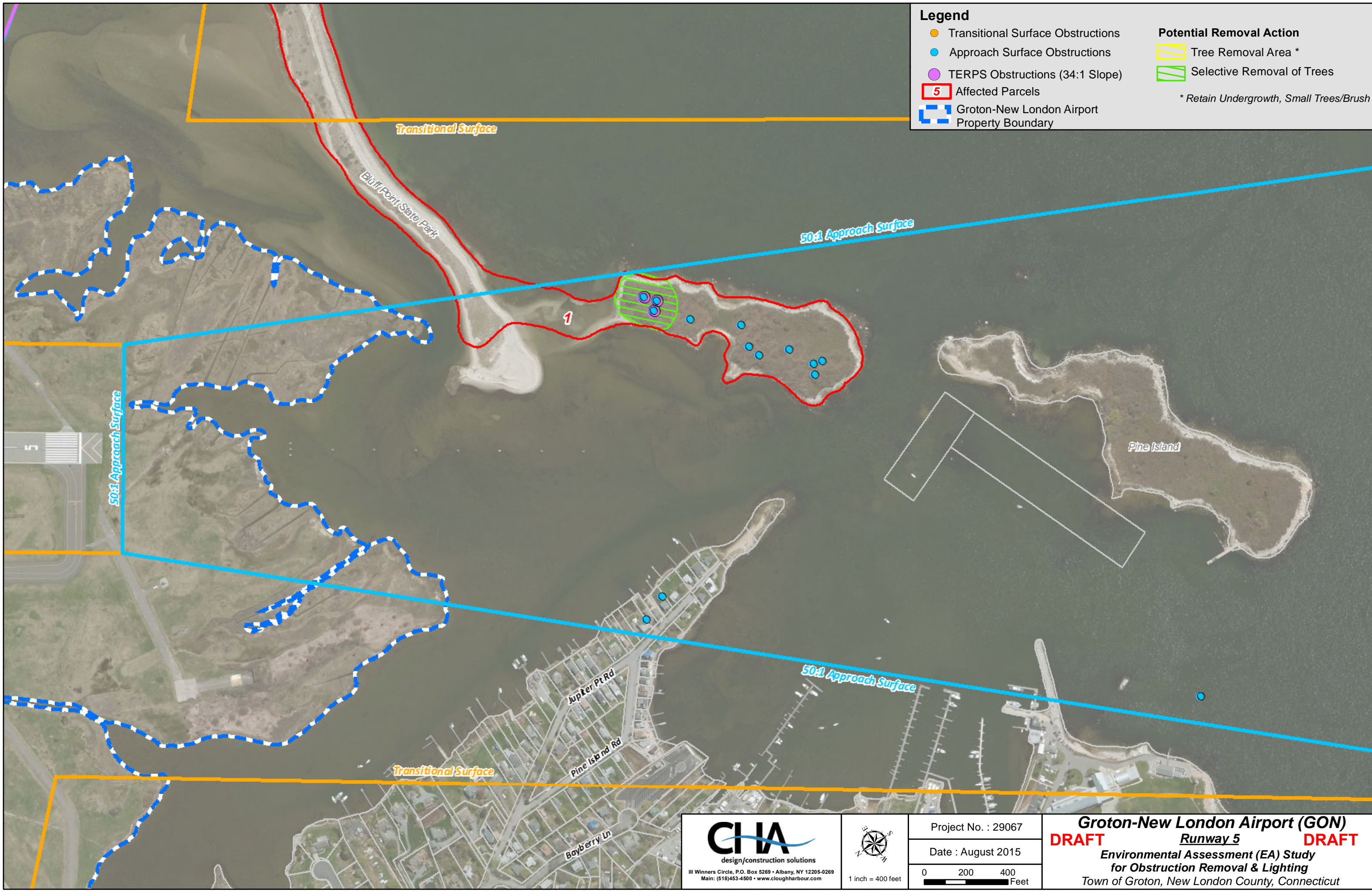
Waterbury-Oxford Airport (OXO)
DRAFT Runway 36 DRAFT
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
Town of Oxford, New Haven County, Connecticut

Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions (34:1 Slope)
- 5 Affected Parcels
- ▭ Groton-New London Airport Property Boundary

Potential Removal Action

- ▨ Tree Removal Area *
 - ▨ Selective Removal of Trees
- * Retain Undergrowth, Small Trees/Brush



CIA
 design/construction solutions
 III Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
 Main: (518)453-4500 • www.cloughharbour.com

1 inch = 400 feet

Project No. : 29067
 Date : August 2015

0 200 400 Feet

Groton-New London Airport (GON)
DRAFT Runway 5 **DRAFT**
 Environmental Assessment (EA) Study
 for Obstruction Removal & Lighting
 Town of Groton, New London County, Connecticut



Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions (20:1 Slope)
- 5 Affected Parcels
- ▬ Groton-New London Airport Property Boundary

Potential Removal Action

- ▨ Tree Removal Area *
- ▭ Selective Removal of Trees

* Retain Undergrowth, Small Trees/Brush

bing™

CHA
design/construction solutions
111 Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
Main: (518)453-4500 • www.cloughharbour.com

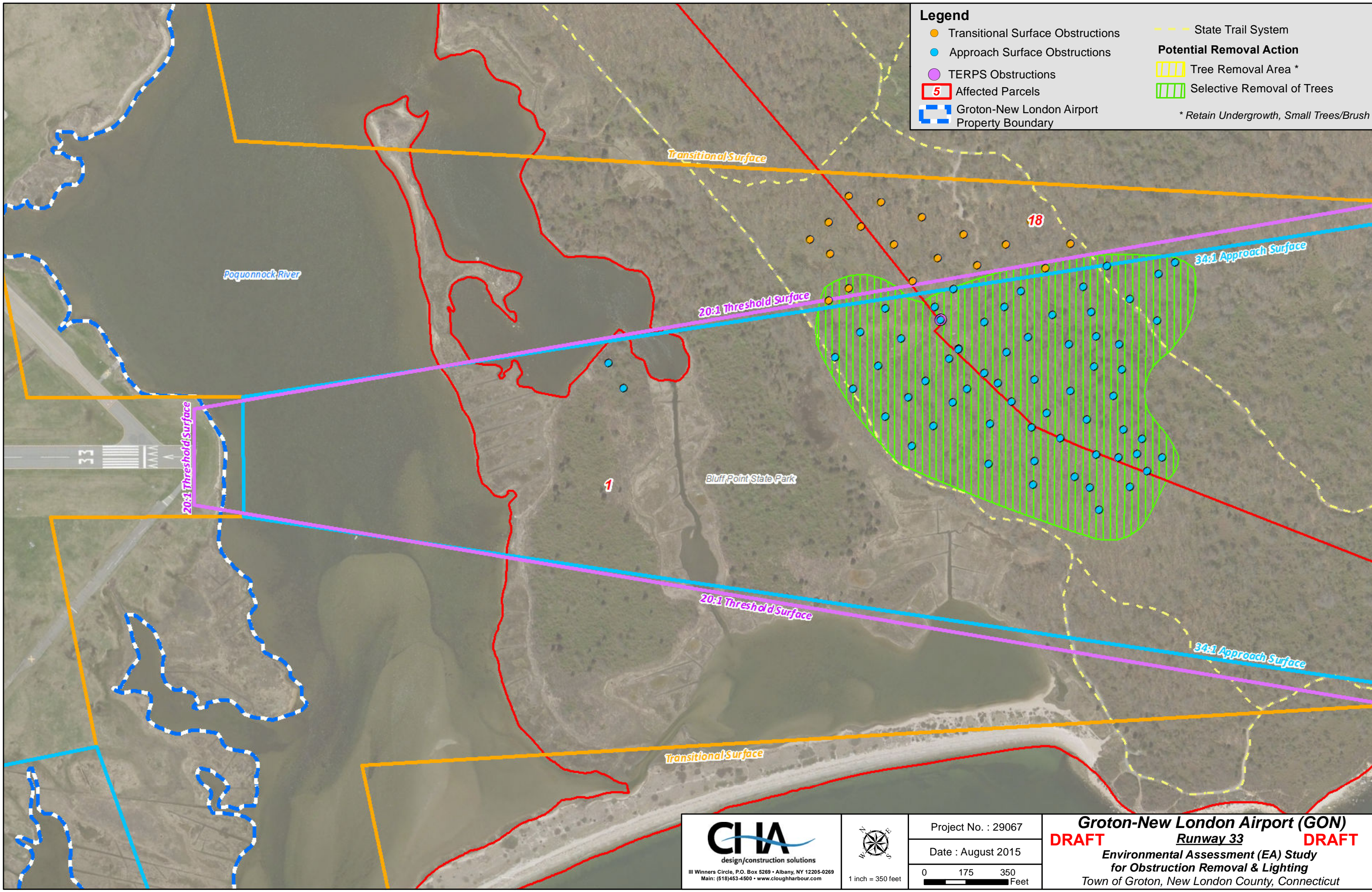
North Arrow
1 inch = 300 feet

Project No. : 29067
Date : August 2015
0 175 350 Feet

Groton-New London Airport (GON)
DRAFT **Runway 23** **DRAFT**
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
Town of Groton, New London County, Connecticut

Legend

- Transitional Surface Obstructions
 - Approach Surface Obstructions
 - TERPS Obstructions
 - 5 Affected Parcels
 - ▭ Groton-New London Airport Property Boundary
 - State Trail System
 - Potential Removal Action**
 - ▨ Tree Removal Area *
 - ▨ Selective Removal of Trees
- * Retain Undergrowth, Small Trees/Brush*

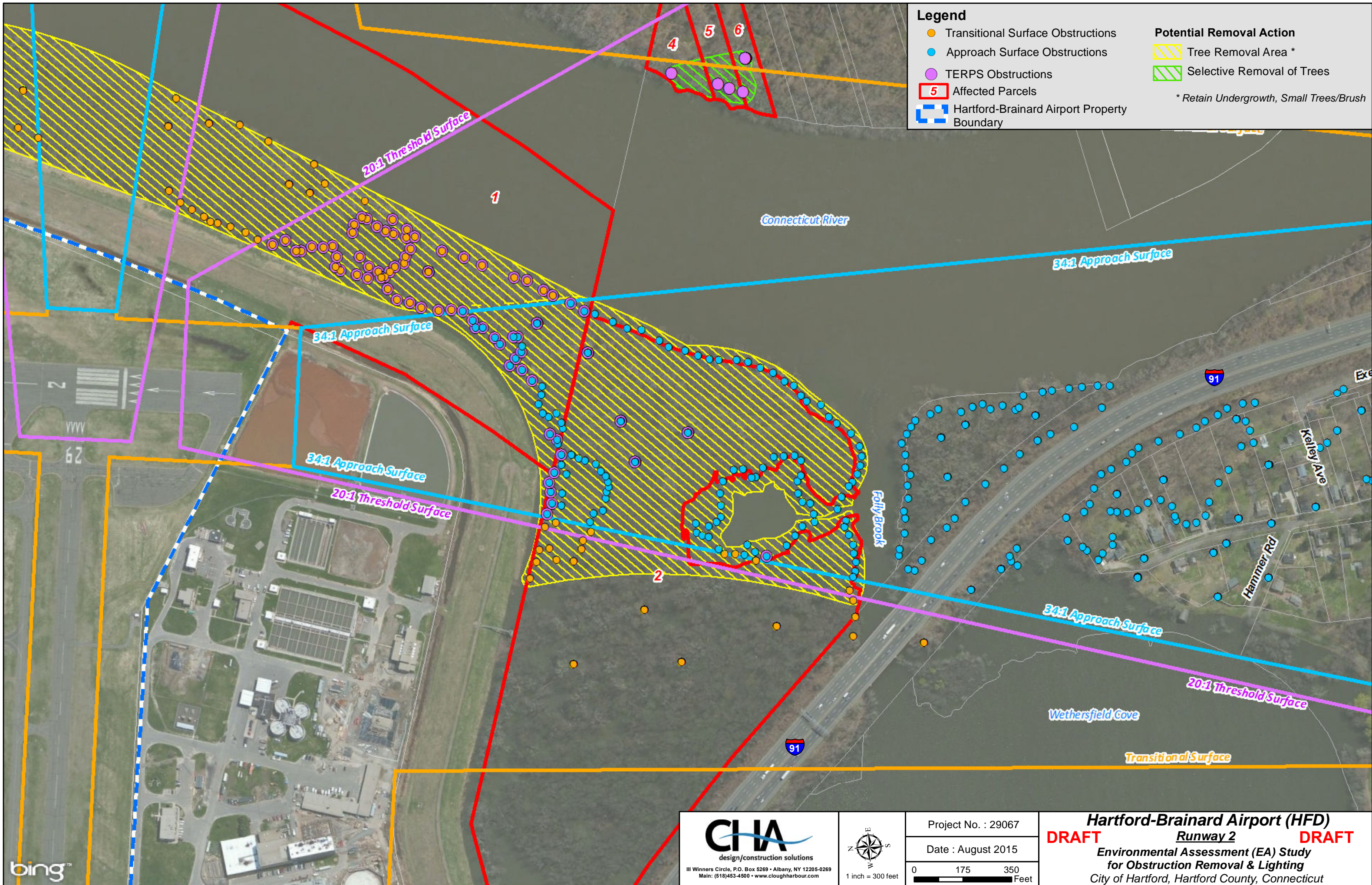


CHA
design/construction solutions
III Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
Main: (518)453-4500 • www.cloughharbour.com

North arrow and scale: 1 inch = 350 feet

Project No. : 29067
Date : August 2015
Scale: 0 175 350 Feet

Groton-New London Airport (GON)
DRAFT **Runway 33** **DRAFT**
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
Town of Groton, New London County, Connecticut



Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions
- 5 Affected Parcels
- Hartford-Brainard Airport Property Boundary

Potential Removal Action

- Tree Removal Area *
- Selective Removal of Trees

* Retain Undergrowth, Small Trees/Brush

CIA
 design/construction solutions
 III Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
 Main: (518)453-4500 • www.cloughharbour.com

North Arrow
 1 inch = 300 feet

Project No. : 29067
 Date : August 2015
 0 175 350 Feet

Hartford-Brainard Airport (HFD)
DRAFT Runway 2 DRAFT
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
 City of Hartford, Hartford County, Connecticut

bing™

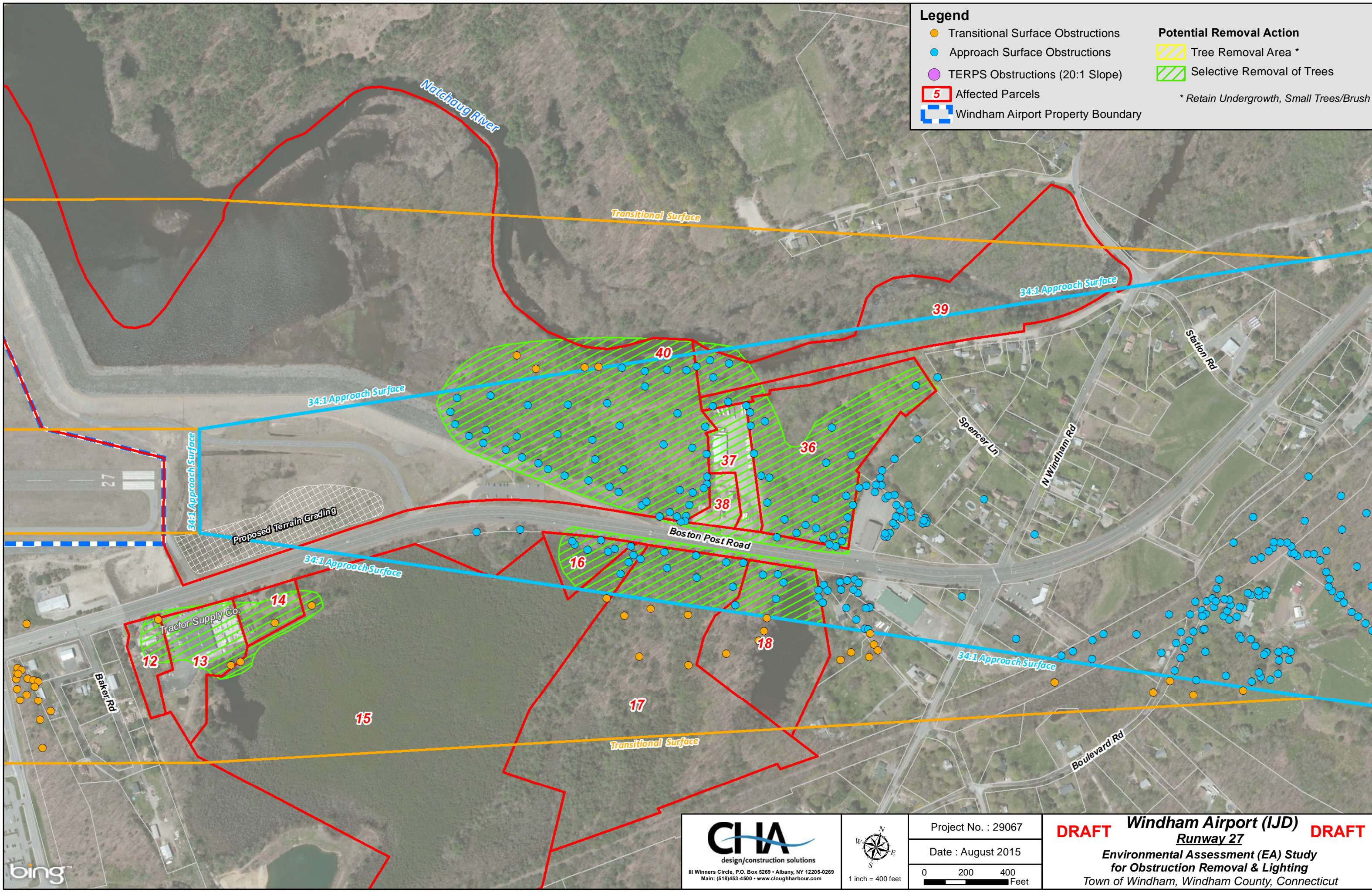
Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions (20:1 Slope)
- 5 Affected Parcels
- Windham Airport Property Boundary

Potential Removal Action

- Tree Removal Area *
- Selective Removal of Trees

* Retain Undergrowth, Small Trees/Brush



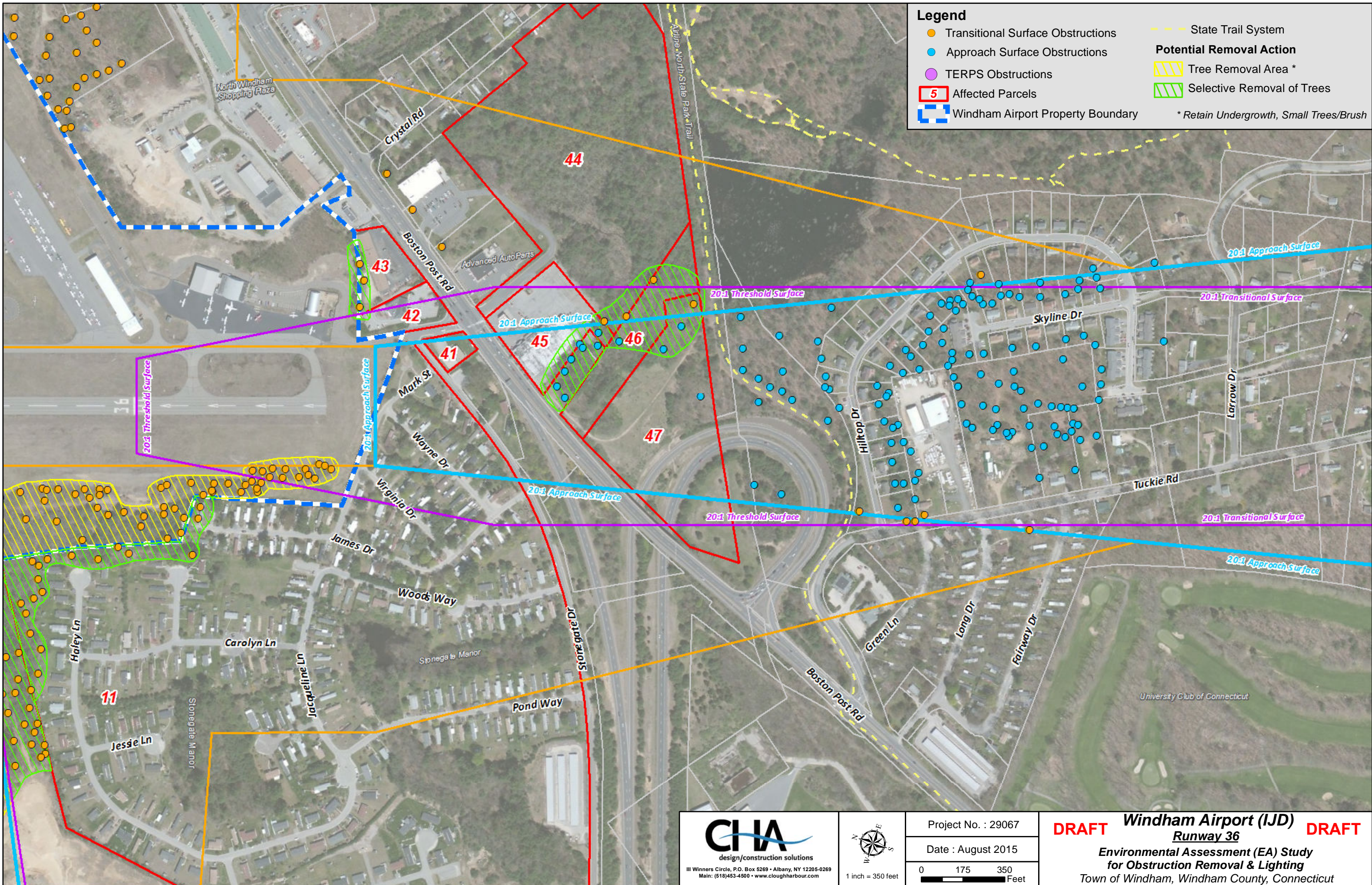
CIA
 design/construction solutions
 111 Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
 Main: (518)453-4500 • www.cloughharbour.com

1 inch = 400 feet

Project No. : 29067
 Date : August 2015

0 200 400 Feet

DRAFT *Windham Airport (IJD)* **DRAFT**
Runway 27
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
 Town of Windham, Windham County, Connecticut



Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions
- 5 Affected Parcels
- Windham Airport Property Boundary
- State Trail System
- Potential Removal Action**
- Tree Removal Area *
- Selective Removal of Trees
- * Retain Undergrowth, Small Trees/Brush

CIA
 design/construction solutions
 III Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
 Main: (518)453-4500 • www.cloughharbour.com

1 inch = 350 feet

Project No. : 29067
 Date : August 2015

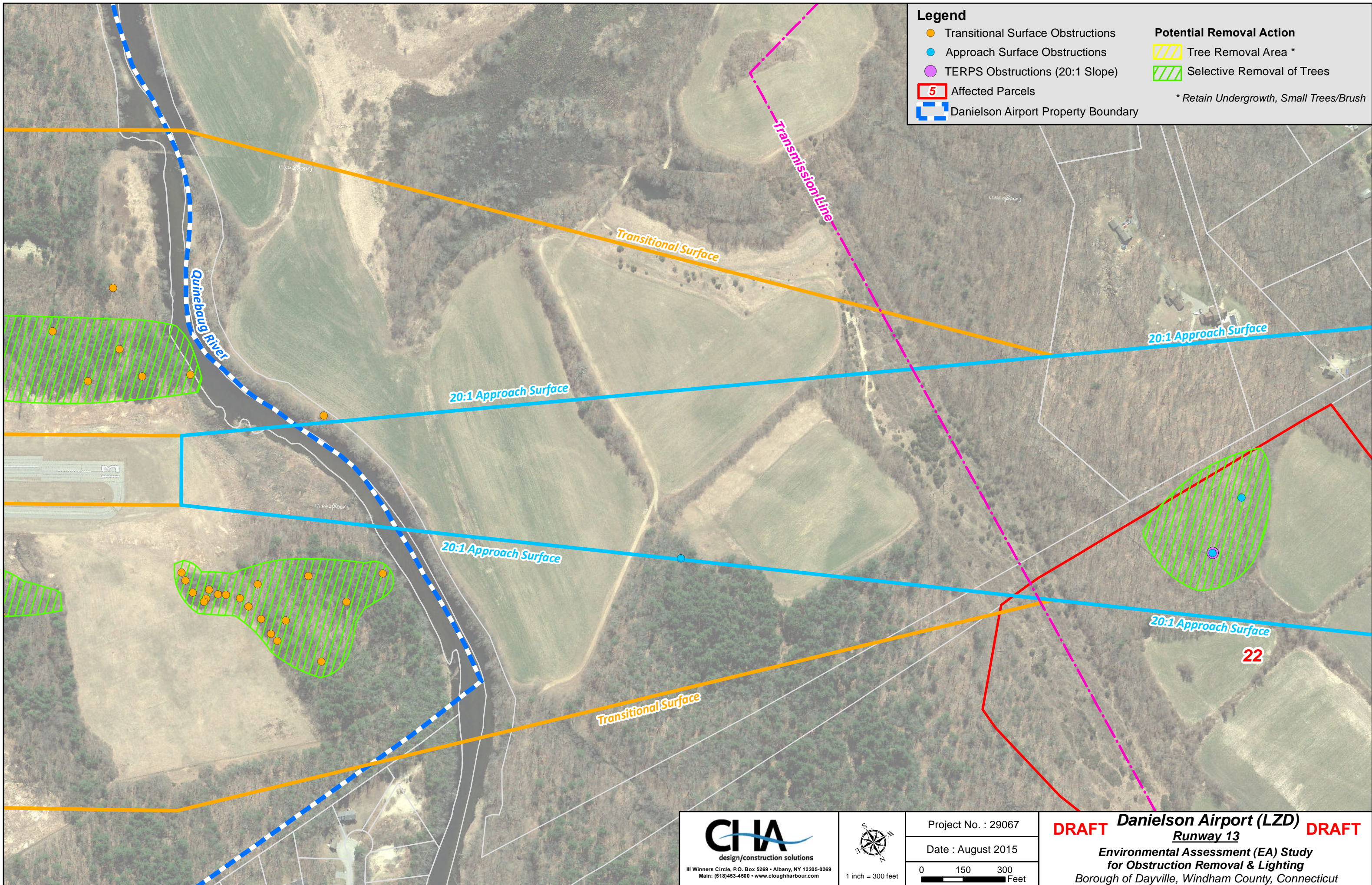
DRAFT **Windham Airport (IJD)** **DRAFT**
Runway 36
 Environmental Assessment (EA) Study
 for Obstruction Removal & Lighting
 Town of Windham, Windham County, Connecticut

Legend

- Transitional Surface Obstructions
- Approach Surface Obstructions
- TERPS Obstructions (20:1 Slope)
- 5 Affected Parcels
- Danielson Airport Property Boundary

Potential Removal Action

- Tree Removal Area *
 - Selective Removal of Trees
- * Retain Undergrowth, Small Trees/Brush

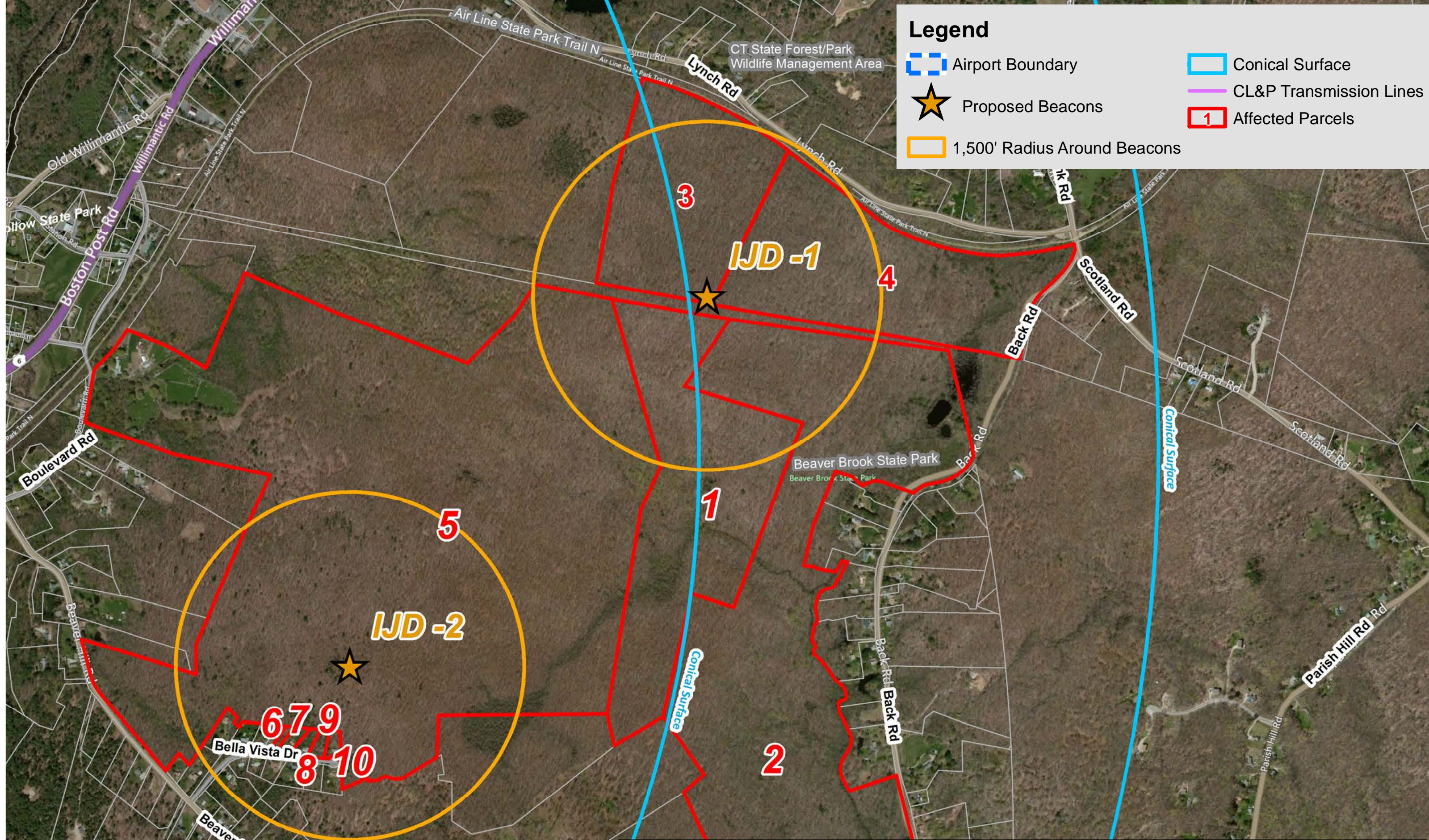


CIA
 design/construction solutions
 111 Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
 Main: (518)453-4500 • www.cloughharbour.com






1 inch = 300 feet

Project No. : 29067
 Date : August 2015

DRAFT Danielson Airport (LZD) Runway 13 DRAFT
Environmental Assessment (EA) Study for Obstruction Removal & Lighting
 Borough of Dayville, Windham County, Connecticut



Legend

-  Airport Boundary
-  Proposed Beacons
-  1,500' Radius Around Beacons
-  Conical Surface
-  CL&P Transmission Lines
-  Affected Parcels



Project No. : 29067
 Date : August 2015
 0 375 750 Feet

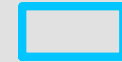
DRAFT *Windham Airport (IJD) Proposed Beacons* **DRAFT**
 Environmental Assessment (EA) Study
 for Obstruction Removal & Lighting
 Town of Windham, Windham County, Connecticut

bing

Legend



Proposed Beacons



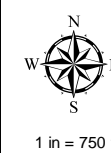
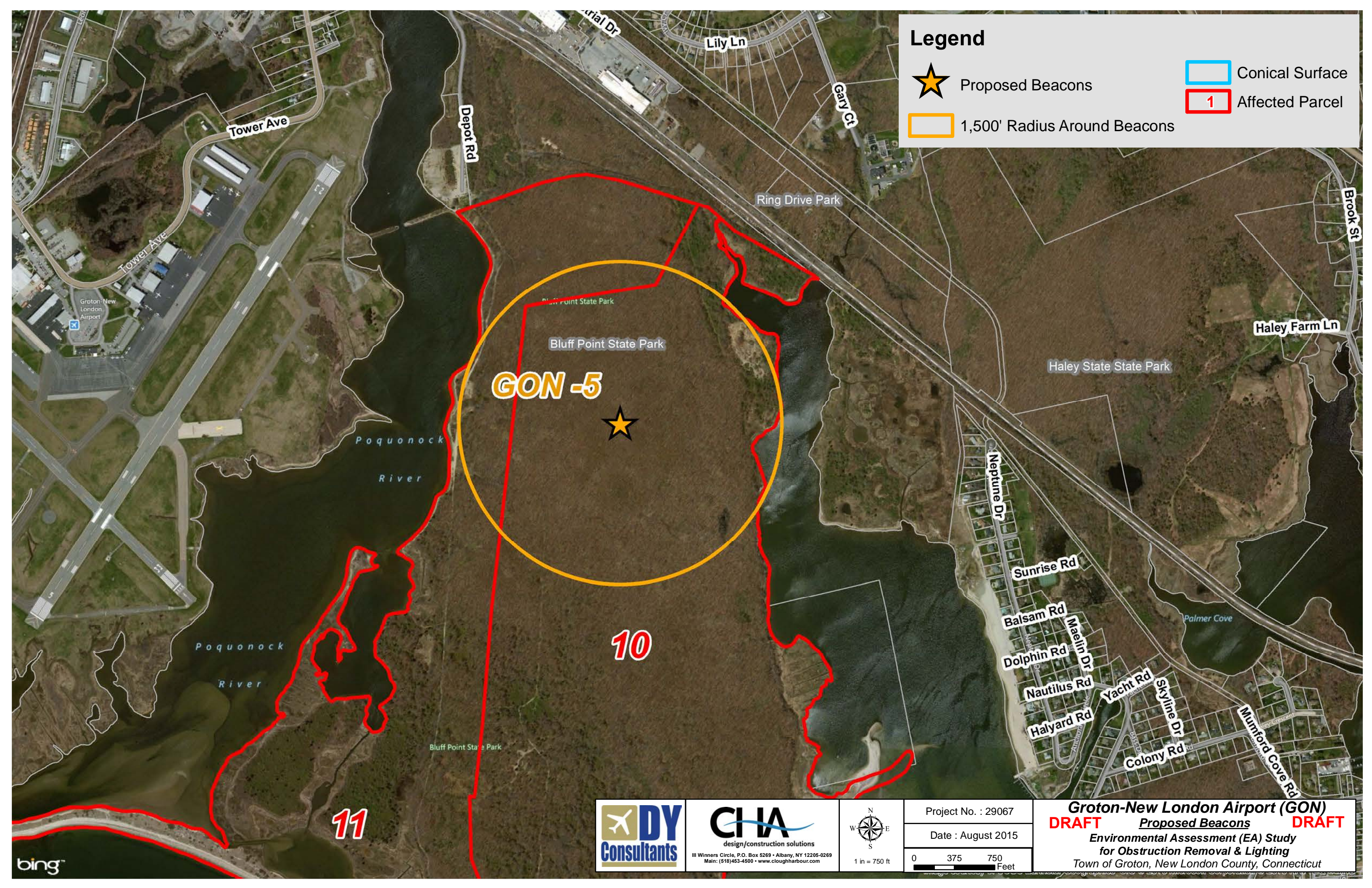
Conical Surface



Affected Parcel

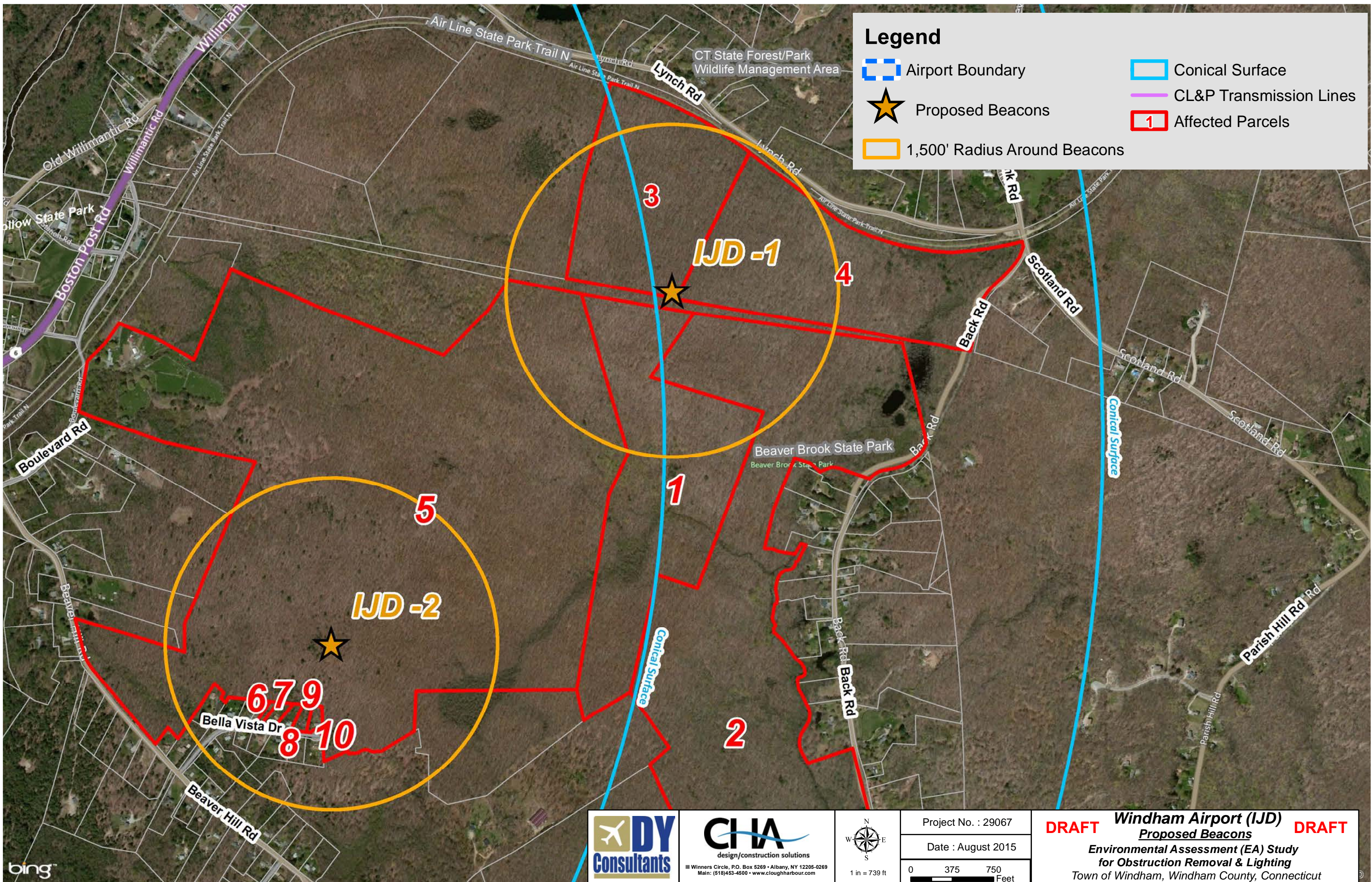


1,500' Radius Around Beacons



Project No. : 29067
Date : August 2015
0 375 750 Feet

Groton-New London Airport (GON)
DRAFT Proposed Beacons DRAFT
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
Town of Groton, New London County, Connecticut



Legend

- Airport Boundary
- Conical Surface
- ★ Proposed Beacons
- CL&P Transmission Lines
- 1 Affected Parcels
- 1,500' Radius Around Beacons



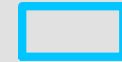
Project No. : 29067
 Date : August 2015
 0 375 750 Feet

DRAFT *Windham Airport (IJD) Proposed Beacons* **DRAFT**
Environmental Assessment (EA) Study for Obstruction Removal & Lighting
 Town of Windham, Windham County, Connecticut

Legend



Proposed Beacons



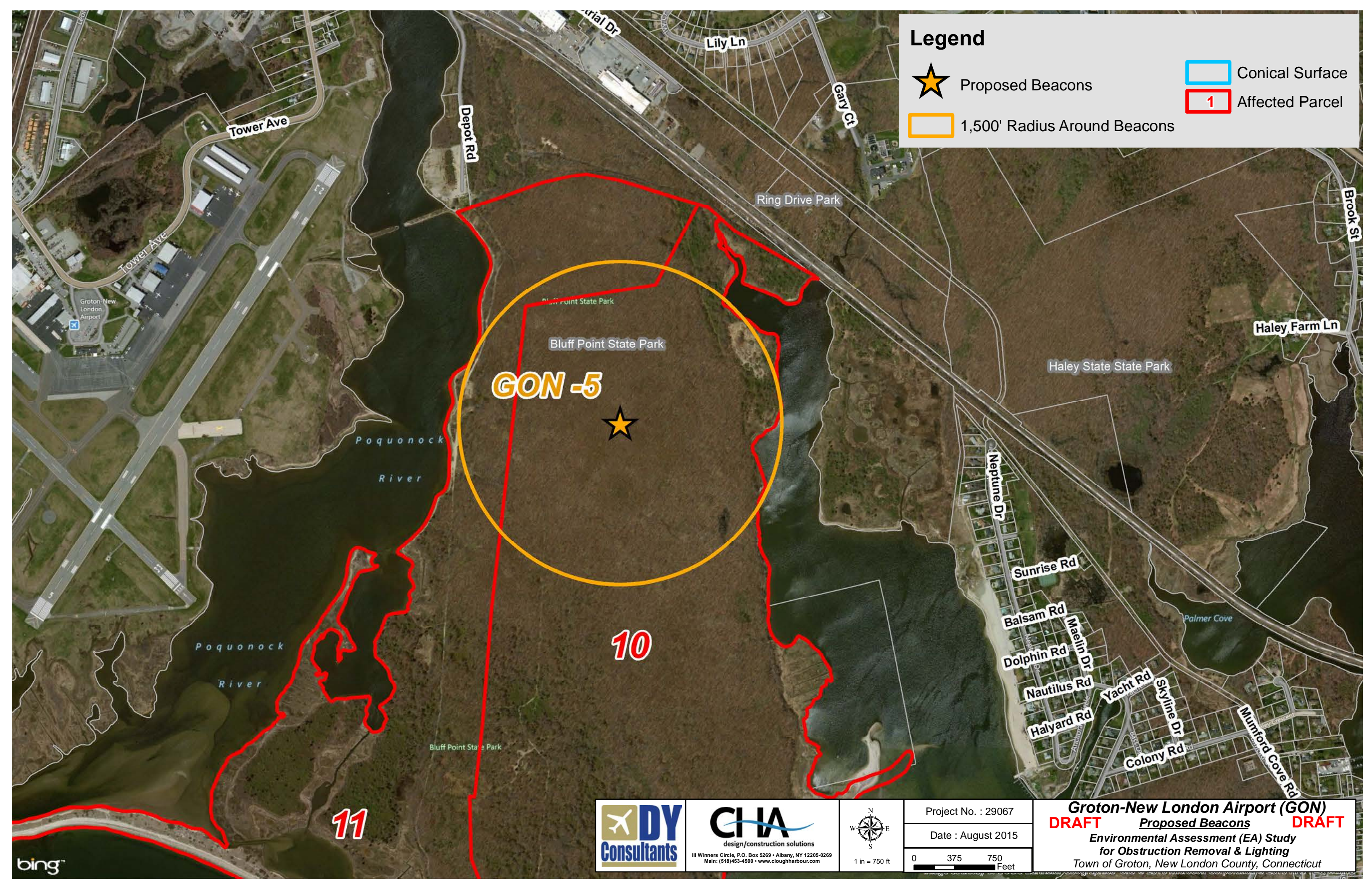
Conical Surface



Affected Parcel



1,500' Radius Around Beacons



Project No. : 29067
Date : August 2015
0 375 750 Feet

Groton-New London Airport (GON)
DRAFT Proposed Beacons DRAFT
Environmental Assessment (EA) Study
for Obstruction Removal & Lighting
Town of Groton, New London County, Connecticut



U.S. Department
of Transportation
**Federal Aviation
Administration**

OCT 20 2015

New England Region
Office of the Regional Administrator

12 New England Executive Park
Burlington, MA 01803

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Kathleen Knowles
Tribal Historic Preservation Officer
Mashantucket Pequot Tribal Nation
550 Trolley Line Blvd., P.O. Box 3202
Mashantucket, CT 06338

Dear Ms. Knowles:

**Government-to-Government Consultation Invitation
Airport Projects at six Connecticut Airports**

The Federal Aviation Administration (FAA), in cooperation with airport owners and operators, is proposing projects at six Connecticut Airports, as outlined herein.

Purpose of Government-to-Government Consultation

The purpose of Government-to-Government consultation as described in the National Historic Preservation Act, Section 106, Federal Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," and FAA's Order 1210.20, "American Indian and Alaska Native Tribal Consultation Policy and Procedures," is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA undertakings that uniquely or significantly affect Tribes.

Consultation Initiation

With this letter, the FAA is inviting the Mashantucket Pequot Tribal Nation to consult on concerns that may significantly affect your Tribe related to the proposed airport improvements. Early identification of Tribal concerns will allow the FAA and the airport owner and operator to consider ways to avoid, mitigate, or minimize potential impact to Tribal resources and practices as project alternatives are developed and refined.

Project Information

The Connecticut Airport Authority proposes to clear trees and install lights around Bradley International Airport, Waterbury-Oxford Airport, Danielson Airport, Hartford-Brainard Airport, Windham Airport and Groton-New London Airport. Enclosed are individual plans showing the location of the areas potentially affected by the proposed clearing and lighting. More detailed plans can be found at the Airport Websites. See the web links below. All the

maps are located under the *project documents* tab. Please let us know if you would like hardcopies of any individual plans.

- <http://bradleyairport.caa-analysis.com>
- <http://waterburyairport.caa-analysis.com>
- <http://hartfordairport.caa-analysis.com>
- <http://danielsonairport.caa-analysis.com>
- <http://grotonairport.caa-analysis.com>
- <http://windhamairport.caa-analysis.com>

Confidentiality

We understand that you may have concerns regarding the confidentiality of the information on areas or resources of religious, traditional, and cultural importance to the tribe. We would be happy to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

Your timely response will assist us in incorporating your concerns into project planning. For that reason, we respectfully request that you contact FAA within thirty days of your receipt of this correspondence as to your interest in Government-to-Government Consultation regarding these projects.

You may contact FAA's Regional Tribal Consultation Official, Todd Friedenbergh by telephone at 781-238-7022, or by email at Todd.D.Friedenbergh@faa.gov. At that time, the consultation request will be provided to the FAA, Airports Division.

Sincerely,



Amy L. Corbett
Regional Administrator

Enclosures



U.S. Department
of Transportation
**Federal Aviation
Administration**

New England Region
Office of the Regional Administrator

12 New England Executive Park
Burlington, MA 01803

OCT 20 2015

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

James Quinn
Tribal Historic Preservation Officer
Mohegan Tribe
13 Crow Hill Rd.
Uncasville, CT 06382

Dear Mr. Quinn:

Government-to-Government Consultation Invitation Airport Projects at six Connecticut Airports

The Federal Aviation Administration (FAA), in cooperation with airport owners and operators, is proposing projects at six Connecticut Airports, as outlined herein.

Purpose of Government-to-Government Consultation

The purpose of Government-to-Government consultation as described in the National Historic Preservation Act, Section 106, Federal Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," and FAA's Order 1210.20, "American Indian and Alaska Native Tribal Consultation Policy and Procedures," is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA undertakings that uniquely or significantly affect Tribes.

Consultation Initiation

With this letter, the FAA is inviting the Mohegan Tribe to consult on concerns that may significantly affect your Tribe related to the proposed airport improvements. Early identification of Tribal concerns will allow the FAA and the airport owner and operator to consider ways to avoid, mitigate, or minimize potential impact to Tribal resources and practices as project alternatives are developed and refined.

Project Information

The Connecticut Airport Authority proposes to clear trees and install lights around Bradley International Airport, Waterbury-Oxford Airport, Danielson Airport, Hartford-Brainard Airport, Windham Airport and Groton-New London Airport. Enclosed are individual plans showing the location of the areas potentially affected by the proposed clearing and lighting. More detailed plans can be found at the Airport Websites. See the web links below. All the

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- <http://waterburyairport.caa-analysis.com>
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- <http://grotonairport.caa-analysis.com>
- <http://windhamairport.caa-analysis.com>

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Sincerely,



Amy L. Corbett
Regional Administrator

Enclosure

APPENDIX C

THREATENED & ENDANGERED SPECIES DOCUMENTATION

Species List for NDDB Request: Waterbury-Oxford

Scientific Name	Common Name	State Status
Invertebrate Animal		
<i>Papaipema leucostigma</i>	Columbine borer	T
Vertebrate Animal		
<i>Caprimulgus vociferus</i>	Whip-poor-will	SC
<i>Falco sparverius</i>	American kestrel	T
<i>Lasionycteris noctivagans</i>	Silver-haired bat	SC
<i>Lasiurus borealis</i>	Red bat	SC
<i>Lasiurus cinereus</i>	Hoary bat Eastern	SC
<i>Terrapene carolina carolina</i>	Eastern box turtle	SC
<i>Buteo platypterus</i>	Broad-winged hawk	SC

Connecticut Airport Authority - Waterbury Oxford Airport

IPaC Trust Resource Report

Generated September 17, 2015 12:49 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Connecticut Airport Authority -
Waterbury Oxford Airport

PROJECT CODE

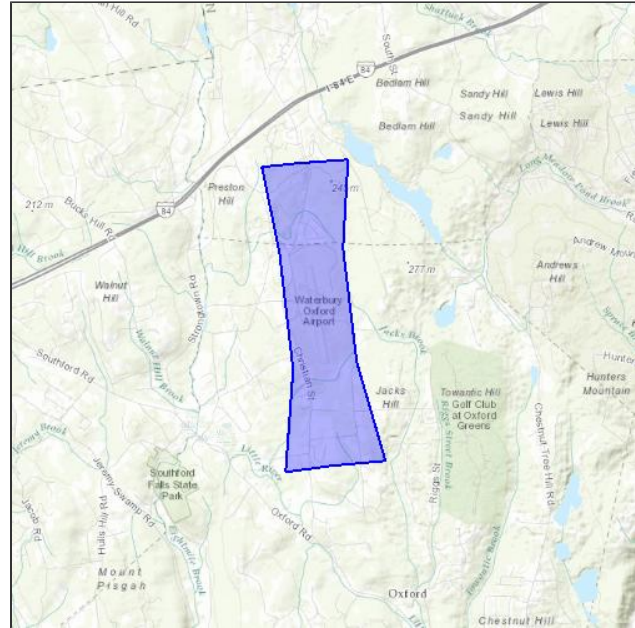
NZ2B7-R6W4F-BDZA4-MIFNI-DVR5RI

LOCATION

New Haven County, Connecticut

DESCRIPTION

Environmental Assessment for
Obstruction Removal and Lighting



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Mammals

Northern Long-eared Bat *Myotis septentrionalis*

Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>American Bittern <i>Botaurus lentiginosus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0F3</p>	Bird of conservation concern
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Canada Warbler <i>Wilsonia canadensis</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Hudsonian Godwit <i>Limosa haemastica</i> Season: Migrating</p>	Bird of conservation concern
<p>Least Bittern <i>Ixobrychus exilis</i> Season: Breeding</p>	Bird of conservation concern
<p>Peregrine Falcon <i>Falco peregrinus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Purple Sandpiper <i>Calidris maritima</i> Season: Wintering</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern
<p>Saltmarsh Sparrow <i>Ammodramus caudacutus</i> Season: Breeding</p>	Bird of conservation concern

Short-eared Owl *Asio flammeus*

Season: Wintering

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HD>**Bird of conservation concern****Snowy Egret** *Egretta thula*

Season: Breeding

Upland Sandpiper *Bartramia longicauda*

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HC>**Bird of conservation concern****Bird of conservation concern****Wood Thrush** *Hylocichla mustelina*

Season: Breeding

Worm Eating Warbler *Helminthos vermivorum*

Season: Breeding

Bird of conservation concern**Bird of conservation concern**

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.



U.S. Department
of Transportation
**Federal Aviation
Administration**

Federal Aviation Administration
New England Region

12 New England Executive Park
Burlington, MA 01803

December 6, 2016

Thomas Chapman
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301

Dear. Mr. Chapman:

The Connecticut Airport Authority proposes the removal of trees in the vicinity of several airports, in an effort to promote safe use of these airports. The Federal Aviation Administration may fund these tree removal projects.

The FAA has determined the tree clearing project is unlikely to adversely affect the northern long-eared bat (*Myotis septentrionalis*), and submits the attached Streamline Consultation Forms for USFWS review.

Please do not hesitate to contact this office if you have any questions on this matter. Thank you.

Sincerely,

Richard P. Doucette
Manager of Environmental Programs
FAA New England Region, Airports Division

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service’s (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if re-initiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Could the project disturb hibernating NLEBs in a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Could the project alter the entrance or interior environment of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You are eligible to use this form if you have answered yes to question #1 **or** yes to question #2 **and** no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³

Mr. Richard Doucette, Environmental Program Manager, Airports Division

USDOT Federal Aviation Administration – New England Region

(781) 238-7613

richard.doucette@faa.gov

¹ <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

² See <http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

Project Name: *Waterbury-Oxford Airport Tree Obstruction Removal*

Project Location: *Oxford, CT 41° 28' 43" N 073° 08'07" W*

Basic Project Description (provide narrative below or attach additional information):

The proposed action includes removal of trees on and surrounding the Waterbury-Oxford Airport that penetrate the federally-defined airport airspace. The project included an alternative evaluation to determine the critical areas of tree removal necessary to maintain a safe operating environment. The proposed removal includes both tree clearing and selective thinning of tall trees, with retention of stumps and undergrowth. For the purposes of this form, all areas of removal will be included in the estimate of 'forest conversion'. The tree obstructions removal at the Waterbury-Oxford Airport includes approximately 68 acres. These estimates are conservative; it is likely the final acreage of forest conversion will be less.

All removals will occur between December and March; there is no forest conversion between April through October or June through July.

All removals are for safety purposes and to satisfy Federal Aviation Administration (FAA) standards. None of these removals are for the purposes of timber harvest.

General Project Information	YES	NO
Does the project occur within 0.25 miles of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project occur within 150 feet of a known maternity roost tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include forest conversion ⁴ ? (if yes, report acreage below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Estimated total acres of forest conversion	68 acres	
If known, estimated acres ⁵ of forest conversion from April 1 to October 31	0 acres	
If known, estimated acres of forest conversion from June 1 to July 31 ⁶	0 acres	
Does the project include timber harvest? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

⁶ If the activity includes tree clearing in June and July, also include those acreage in April to October.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Signature: _____

Date Submitted: _____

APPENDIX D

PUBLIC MEETING SUMMARY

NATION

NSA contractor allegedly took classified info

BRIEFLY

FROM THE ASSOCIATED PRESS AND McCLATCHY NEWSPAPERS

Daycare provider pleads not guilty in infant's death

FAIRFIELD — Police in Connecticut say a woman who ran an unlicensed daycare at her home and is charged in connection with an infant's death purchased 90 bottles of children's Benadryl over three years. Fifty-three-year-old Carol Cardillo of Fairfield pleaded not guilty Tuesday in Bridgeport to charges including second-degree manslaughter. Police have said the 4-month-old child found unresponsive at Cardillo's home in March may have been given the antihistamine, which isn't for children under 2. Officials ruled the death a homicide and determined the cause to be acute diphenhydramine intoxication.

An arrest warrant says Cardillo made the Benadryl purchases between 2013 and 2016 when her home daycare was open.

Police say Cardillo's attorney told detectives his client told him she didn't have the medication in her house.

Suspect arrested in teen's shooting

GROTON — An arrest has been made in connection with a shooting in the parking lot of a Groton restaurant that left a teenager wounded.

Police early Wednesday morning announced the arrest of a 17-year-old.

Officers were called to the parking lot of the 99 Restaurant and Pub Sunday afternoon. When they arrived they found a 17-year-old boy with a gunshot wound to his abdomen. The teen was taken to a hospital, where police say he underwent emergency surgery.

Police have arrested and charged a 17-year-old with assault, robbery and carrying a pistol without a permit. They say the investigation is ongoing, and more arrests are expected.

Murderer gets wish: Execution

HUNTSVILLE, Texas — An East Texas man who pleaded guilty to killing a neighbor couple during a shooting rampage 13 years ago and said he wanted to be put to death for the crime was executed Wednesday evening.

Barney Fuller Jr., 58, has asked that all his appeals be dropped to expedite his death sentence.

Fuller never made any eye contact with witnesses, who included the two children of the slain couple.

Asked by Warden James Jones if he had any final statement, Fuller responded: "I don't have anything to say. You can proceed on, Warden Jones."

Vet gets double arm transplant

BOSTON — A former Marine sergeant who underwent a double arm transplant said Wednesday that the best part about having arms again is that he can hold his fiancée's hand and pursue his lifelong dream of becoming a chef.

Retired Sgt. John Peck, who lost all four limbs as the result of an explosion of a homemade bomb in Afghanistan in May 2010, underwent 14 hours of surgery at Brigham and Women's Hospital in August.

BY TAMI ABDOLLAH AND ERIC TUCKER
ASSOCIATED PRESS

WASHINGTON — A contractor for the National Security Agency has been arrested on charges that he illegally removed highly classified information and stored the material in his home and car, federal prosecutors said Wednesday.

Harold Thomas Martin III, 51, of Glen Burnie, Maryland, was arrested by the FBI in August after he admitted to having taken government secrets, authorities said. A defense attorney

said Martin did not intend to betray his country.

The arrest was not made public until Wednesday, when the Justice Department released a criminal complaint that accused Martin of having been in possession of top-secret information that could cause "exceptionally grave danger" to national security if disclosed.

AMONG THE CLASSIFIED documents found with Martin, the FBI said, were six that contain sensitive intelligence — meaning they were produced through sensitive government sources or

methods that are critical to national security — and date back to 2014. All the documents were clearly marked as classified information, according to a FBI affidavit accompanying the complaint.

The complaint does not specify what documents Martin is alleged to have taken. He was arrested around the same time U.S. officials acknowledged an investigation into a cyber leak of purported hacking tools used by the NSA. That tool kit consists of malicious software intended to tamper with firewalls, the electronic defenses protecting computer net-

works. Those documents were leaked by a group calling itself the "Shadow Brokers." The complaint does not refer to that group or allege a link to Martin.

THE ARREST could turn into another embarrassment for the U.S. intelligence community. It would be the second known case since 2013 of a government contractor being publicly accused of removing secret data from the NSA, which monitors and collects sensitive information and data, mostly from overseas.

At the White House,

spokesman Josh Earnest said President Barack Obama takes the situation "quite seriously. And it is a good reminder for all of us with security clearances about how important it is for us to protect sensitive national security information."

The New York Times first reported the arrest of an NSA contractor who worked for Booz Allen Hamilton. The complaint does not identify the agency Martin worked for as a contractor, but Adm. Mike Rogers, who heads the NSA, confirmed that Martin worked as a contractor for NSA.

Trump denies he 'loves' Putin

BY JONATHAN LEHIRE AND JOSH LEDERMAN
ASSOCIATED PRESS

HENDERSON, Nev. — Donald Trump pushed back Wednesday on Hillary Clinton's accusation that he's cozying up to Russian President Vladimir Putin after the charge put Trump's running mate on the defensive during the vice presidential debate.

Trump offered effusive praise for Mike Pence's performance — but also claimed credit for it — even as both campaigns acknowledged that the sole vice presidential debate was unlikely to alter the race's trajectory.

The celebrity businessman said his relationship with Russia's leader would be determined by how Moscow responds to strong U.S. leadership under a Trump administration.

"They say Donald Trump loves Putin. I don't love, I don't hate. We'll see how it works," Trump told a rally outside Las Vegas.

Clinton on Wednesday shrugged that off, saying Trump has "this weird fascination with dictators."

"My opponent seems not to know the difference between an ally and adversary," Clinton said at an evening fund raiser in Washington. "There seems to be some misunderstanding about what it means to have a dictatorship and provide leadership."

The billionaire candidate sought to take away an argument that Clinton and her



Doctors from the Las Vegas area pray with Republican presidential candidate Donald Trump during a visit to the International Church of Las Vegas Wednesday.

running mate, Tim Kaine, have ramped up in the final weeks of the campaign as they work to portray Trump as dangerous for American interests overseas. While U.S.-Russia relations nosedive over failed diplomacy in Syria,

Trump has complimented Putin, calling him a strong leader and even encouraging him to track down Clinton's missing e-mails, though Trump later said he was being sarcastic. "You guys love Russia," Kaine said in Tuesday's debate. "You both have said Vladimir Putin is a better leader than the president."

In a forceful rebuke, Pence described Putin as a "small and bullying leader."

The U.S. and Russia have opposing sides in Syria's civil war but both are fighting the Islamic State group there. The U.S. cut off talks with Russia about Syria this

week after the latest ceasefire collapsed, blaming Russia for failing to fulfill its commitments under the deal.

"I can say this: If we get along and Russia went out with us and knocked the hell out of ISIS, that's OK with me folks," Trump said, using an acronym for the extremist group.

Taking the stage in Henderson, Nev., Trump took his own victory lap for Pence's performance, which he called "phenomenal. Trump's cool demeanor contrasted with Trump's bluster during his own, top-of-the-ticket showdown against Clinton. However strong Pence's performance, Trump made clear he considers it a reflection of himself. "I'm getting a lot of credit, because that's really my first so-called choice, that was my first hire," Trump said of Pence.

First lady going all-out to protect her turf

BY NANCY BENAC
ASSOCIATED PRESS

WASHINGTON — MEMO FROM: Michelle Obama TO: Donald Trump and Hillary Clinton SUBJECT: Don't mess with the garden.

There's no actual memo, but first lady Michelle Obama is going all-out to make sure the White House kitchen garden that she cre-

ated in 2009 and expanded twice doesn't get plowed under by the next first family.

With less than four months left in the Obama administration, the first lady on Wednesday dedicated an expanded and improved garden with the hope that it will continue regardless of who takes office come January.

There's an inscribed stone

that reads: "White House Kitchen Garden, established in 2009 by First Lady Michelle Obama with the hope of growing a healthier nation for our children."

"Baby you were born (60 YEARS AGO!) to run!"



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Polls: Clinton up in key states, but Trump base solid

BY DAVID LAUTER
TRIBUNE WASHINGTON BUREAU

WASHINGTON — With the first two debates of the general election finished and early voting starting in many places, Hillary Clinton's lead has strengthened in opinion polls in key states needed to win the White House, especially those with large minority populations.

But Donald Trump's core support among blue-collar white voters remains largely intact, giving him a base from which to try to stage a comeback in the campaign's final phase, judging by a raft of new polls released in the past several days.

A key for Trump is tenacious support among men, whose backing for him increased after Clinton's health became an issue in early September, according to the USC Dornsife/Los Angeles Times "Daybreak" tracking poll of the race.

Nationally, the race has not shifted dramatically since the first debate between Clinton and Trump even though large majorities of voters say Clinton won the encounter. But beneath that relatively stable national picture, the lineup of states has shifted to Clinton's benefit, the polls indicate.

The Daybreak poll, a national survey which is updated daily, has shown almost no movement. National surveys by YouGov for the Economist and SurveyMonkey for NBC, both of which poll each week, also have shown a very stable race, although they disagree with the Daybreak poll about which candidate leads.

All three of those surveys are conducted online; several national surveys conducted by telephone have found a larger shift toward Clinton. That sort of difference, with telephone-based surveys having bigger ups and downs than online ones, has shown up in previous campaigns.

The Daybreak tracking poll is the only major survey that shows Trump ahead; as of Wednesday, he leads the poll 47 percent to 43 percent. Averages of recent polls, by contrast, show Clinton leading by four or five percentage points.

One important reason for the difference is how surveys account for people who are not certain to vote or are unsure about which candidate they support.

Clinton and Trump are now even in the Daybreak poll among the most committed voters — those who say they are absolutely certain to vote.

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Waterbury-Oxford Airport Environmental Assessment for Tree Clearing Notice of Public Information Meeting

NOTICE IS HEREBY GIVEN that the Connecticut Airport Authority (CAA) will be holding a Public Information Meeting for the Waterbury-Oxford Airport Environmental Assessment for Tree Clearing. At this meeting, information on the overall project and the study's findings, including the Preferred Alternative, will be presented. The meeting will be held on **Tuesday, October 25 at the Oxford High School in the Library Media Center** (61 Quaker Farm Road, Oxford, CT 06478), doors open at 6:30PM with the presentation beginning at 7:00PM. The Environmental Assessment for Tree Clearing is available at <http://waterburyairport.caa-analysis.com/>.

Security software triggered crash of state computers

BY PAUL HUGHES
REPUBLICAN-AMERICAN

HARTFORD — State officials determined security technology intended to protect state computer networks caused partial systems shutdowns at two state agencies on Friday.

The Department of Administrative Services reported Tuesday that intrusion prevention devices were somehow triggered while a piece of firewall equipment was being replaced.

The security safeguards severed internet connections for the Taxpayer Information Center in the Department of Revenue Services and the emissions testing system in the Department of Motor Vehicles.

"Resetting the connections between the firewall and the intrusion prevention devices restored service," DAS spokesman Jeffrey Beckham said. "We continue to work

with our vendors to prevent these devices from being triggered in the future by this routine installation process."

The governor's office reported Friday that state officials were investigating the possibility that computer hackers caused the partial shutdowns, but there were no indications that had occurred.

The computer troubles were reported two days after Gov. Dannel P. Malloy announced the creation of a new cybersecurity czar to identify threats to state computer systems and develop strategies to protect against computer hacking.

At that time, it was reported that computer hackers make hundreds of thousands of attempts to access state computer systems each month, but there have been no noteworthy thefts of data as a result.

Contact Paul Hughes at phughes@rep-am.com.

Officials: No talk of email quid pro quo

BY MICHAEL BIESECKER
AND ERIC TUCKER
ASSOCIATED PRESS

WASHINGTON — A now-retired FBI agent and a State Department official involved in a discussion over the classification of information in one of former Secretary of State Hillary Clinton's emails said Tuesday they had discussed mutual agency requests but had not linked the two as a bargain, as another FBI employee had reported.

The two men's accounts of a 2015 conversation were not identical and will likely not calm the furor over allegations of the State Department trying to arrange a "quid pro quo" to reduce the classification of an email from Clinton's private server in exchange for more FBI positions at the U.S. Embassy in Iraq. The issue was thrust into the presidential campaign Monday when the FBI published documents containing the allegation, which has been seized upon by Republican lawmakers and GOP presidential nominee Donald Trump.

In a statement released by



Undersecretary of State for Management Patrick Kennedy testifies on Capitol Hill in September.

the State Department, Under Secretary for Management Patrick Kennedy said he had called the agent, who was not named in the FBI documents but was identified by The Washington Post as Brian McCauley, "to better understand a proposal the FBI had made to upgrade one of former Secretary Clinton's emails prior to its public release."

Kennedy said he and other State Department officials understood the FBI's request, which they be-

lieved was unnecessary.

"The FBI official I spoke to raised the topic of FBI Iraq slots as an entirely separate matter," Kennedy said. "The two matters were not linked. There was no quid pro quo, nor was there any bargaining. At no point in our conversation was I under the impression we were bargaining. In the end, State upgraded the email at the FBI's request and in addition, no increase in FBI Iraq slots resulted from this conversation." Kennedy was a close aide

to Clinton during her tenure as the nation's top diplomat between 2009 and early 2013. He had served in his position since November 2007, under President George W. Bush. In his statement, he denied any political motive in making the call.

McCauley, the former FBI international operations official, recalled a 2015 phone call in which he said the two men each raised something that they wanted.

"He said: 'Brian, Pat Kennedy. I need a favor,'" McCauley told the Post. "I said: 'Good. I need a favor. I need our people back in Baghdad.'"

According to McCauley's account, Kennedy replied: "There's an email. I don't believe it has to be classified."

McCauley acknowledged that he had agreed to do a favor for Kennedy, but he said that after consulting with another FBI official about the email in question, he told Kennedy that he was unable to help him.

He said there was no "collusion" between the two men and nothing improper occurred.

BRIEFLY

FROM NEWS SERVICES

Trump urges term limits

COLORADO SPRINGS, Colo. — Donald Trump on Tuesday said that he'll push for a constitutional amendment to impose term limits on members of Congress if he's elected to the White House.

The proposal, announced at rallies in Colorado Springs and Grand Junction, came as the GOP nominee sharpened his focus on cracking down on government corruption. The Republican presidential nominee said he would propose a six-year limit for members of the House and a 12-year limit for members of the Senate. "Decades of failure in Washington and decades of special-interest dealing, must and will come to an end," he said. "We have to break the cycle of corruption."

Trump's running mate, Indiana Gov. Mike Pence, served 12 years, or six terms, in the House.

In recent days Trump has added to a list of proposed ethics reforms, including prohibiting executive branch officials and members of Congress and their staffs from lobbying the government for five years after they leave office.

President: Stop whining

WASHINGTON — President Barack Obama on Tuesday tore into Donald Trump for sowing suspicion about the integrity of the U.S. election, telling the Republican presidential nominee to "stop whining" and focus on winning votes.

Obama called Trump's intensifying, pre-emptive warnings about voter

fraud "unprecedented" in modern politics. The rhetoric is not based on any evidence, Obama said, but is simply aimed at discrediting the election before the first votes are counted.

"You start whining before the game's even over?" Obama said at a press conference. "Then you don't have what it takes to be in this job."

The president also accused Trump of showering praise and modeling his policies on Russian President Vladimir Putin to a degree that is "unprecedented in American politics."

Billboard taunts Trump

DETROIT — On a black billboard along westbound Interstate 94 entering Dearborn, Mich., white Arabic lettering sits next to these words in English: "Donald Trump."

Unlike English, though, Arabic is read right to left. The billboard translated reads: "Donald Trump, he can't read this, but he is afraid of it."

The billboard posted last weekend is funded by the Nuisance Committee super PAC, which was started by the creator of the Cards Against Humanity card game. It has raised more than \$410,000 through a satirical fund-raising campaign, and the billboard is unique among three others the group has posted across the country.

The billboard cost the group \$4,850, and will remain posted through Nov. 8. About 331,839 people drive by the billboard between Detroit and Dearborn each week.

Tussle over nude Hillary

NEW YORK — A statue of a topless, hooped Hillary Clinton appeared outside a subway station Tuesday, prompt-

ing a tussle after one woman purposely knocked it down and sat on it to prevent others from picking it back up.

The display marked the second time a life-size, exaggerated depiction of a naked presidential nominee has surfaced outside a Manhattan subway stop during the general election campaign. In August, an artist's statue of an unclothed Donald Trump was eventually hauled away by city workers.

A woman can be seen on video dragging the life-size structure of the Democratic presidential nominee to the ground, stomping on it and even sitting on top of it to prevent a man from standing it back up again.

"We shouldn't be treated this way. Period," another woman can be heard saying in the video.

It wasn't immediately clear who created the Clinton statue.

Witnesses back writer

WASHINGTON — People Magazine reported Tuesday that a half-dozen people have come forward to corroborate its writer's account of being sexually assaulted by Donald Trump and its aftermath.

Natasha Stoyanoff, a former staff writer at the celebrity magazine, wrote last week that Trump grabbed her, pinned her against a wall and forcibly kissed her in a room at his Mar-a-Lago mansion in Florida in 2005. She was on assignment to write a profile of the billionaire businessman and his then-pregnant wife, who Stoyanoff said was upstairs when it happened.

The Republican presidential nominee has denied the accusation, saying Stoyanoff fabricated the incident. He also suggested Stoyanoff, 51, is not physically attractive enough to merit his attention.

House Democrats pick majority leader

BY PAUL HUGHES
REPUBLICAN-AMERICAN

HARTFORD — Top House Democrats settled a leadership battle three weeks ahead of the Nov. 8 elections.

An announcement Tuesday said Rep. Toni N. Walker, D-New Haven, decided to end her campaign for House majority leader, leaving Rep. Matthew D. Ritter, D-Hartford, as the only contender for the No. 2 caucus leader's spot.

A statement said Walker, Ritter and House Majority Leader Joe Aresimowicz, D-Berlin, met Tuesday afternoon, and they decided the most beneficial course for House Democrats was to unite behind the new leadership team of Aresimowicz and Ritter and concentrate on the upcoming House elections.

If Democrats retain a House majority, Aresimowicz

is poised to succeed retiring House Speaker Brendan Sharkey, D-Hamden. He is running unopposed for speaker. He was elected majority leader following the 2012 elections.

The announcement said Walker, 64, will remain the House chairwoman of the budget-writing Appropriations Committee, a powerful and prized post. She joined the House after winning a special election in 2001.

"I believe Matt and Joe will do great things for our caucus," Walker said, adding that she believes she can most effectively serve House Democrats and the public in her current position.

Ritter, 34, is currently the House chairman of the Public Health Committee. He joined the legislature in 2011. He is the son of former House Speaker Thomas D. Ritter.

Rival blames Blumenthal for UConn's Big 12 failure

BY PAUL HUGHES
REPUBLICAN-AMERICAN

BETHEL — Republican challenger Dan Carter is blaming U.S. Sen. Richard Blumenthal for the University of Connecticut's troubles trying to break into a Power Five conference.

Carter slammed Blumenthal again over his record as state attorney general following the news Monday that UConn had not been invited to join the Big 12 Conference.

"This is just one more example of the long lasting impact of Dick Blumenthal's politically aggressive time as Connecticut's attorney general," he said. "Score a political point, get some press, and let someone else deal with the mess."

Carter was referencing lawsuits that UConn and four other universities in the origi-

nal Big East Conference brought against Boston College, the University of Miami and the Atlantic Coast Conference after the two schools decided to jump to the ACC in 2003.

Blumenthal filed suits in Rockville Superior Court in Connecticut that accused Miami and Boston College of conspiring with the ACC to weaken the Big East by luring away some of its biggest football powers.

The Big East and ACC eventually negotiated a settlement in 2005 that resolved their legal differences over the defections of Miami and Boston College.

In response to the Big 12 announcement, Carter said UConn and Connecticut continue to pay the price for Blumenthal's legal and political grandstanding over the ACC's expansion.

FBI: Fewer law enforcement officers killed on duty

ASSOCIATED PRESS

WASHINGTON — The number of law enforcement officers killed as a result of criminal acts decreased in 2015 from the year before, dropping from 51 to 41, the FBI said Tuesday.

The report covers officers who were killed during ambushes, traffic pursuits, tactical situations, domestic disturbance calls and while handling prisoners and individuals with mental illness, among other situations.

More than half of the officers killed were on vehicle patrol when they died. Most who died — 38 —

were killed with firearms.

In addition, more than 50,000 officers were assaulted last year while performing their duties, the FBI said. And the report says 45 law enforcement officers died accidentally in the line of duty, many during automobile and motorcycle accidents.

The report includes the cases of a Philadelphia police officer who was killed

during a robbery attempt; a New York City police officer fatally shot while investigating a suspicious person; and an Omaha, Nebraska, officer who was slain while pursuing a fugitive just as she was about to go on maternity leave.

It's too early to know what

the 2016 tally will be, but there have already been a series of high-profile police deaths this year, including the five officers in Dallas who were slain by a sniper over the summer and three law enforcement officers who were killed in Baton Rouge, Louisiana.

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Waterbury-Oxford Airport
 Environmental Assessment for Tree Clearing
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 NOTICE IS HEREBY GIVEN that the Connecticut Airport Authority (CAA) will be holding a Public Information Meeting for the Waterbury-Oxford Airport Environmental Assessment for Tree Clearing. At this meeting, information on the overall project and the study's findings, including the Preferred Alternative, will be presented. The meeting will be held on **Tuesday, October 25 at the Oxford High School in the Library Media Center** (61 Quaker Farm Road, Oxford, CT 06478), doors open at 6:30PM with the presentation beginning at 7:00PM. The Environmental Assessment for Tree Clearing is available at <http://waterburyairport.caa-analysis.com/>.

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Letters to the Editor

Letters from readers are welcome. They should be limited to 300 words. Voices reserves the right to edit. Letters must include name, address, phone number and signature of the writer. Anonymous letters are not considered. Letters may be mailed or faxed to Voices or dropped by the Voices' office. Letters by e-mail are not accepted.

Grateful for Community's Help

To the Editor:

The nationwide dedication of September as Hunger Action Month has found powerful expression throughout our Woodbury community during the past month. The Freemasons of King Solomon's Lodge No. 7 set the tone for the month with their open-hearted commitment and infectious enthusiasm that made their annual Labor Day week-end drive for the Woodbury Food Bank by far their most productive to date in yielding essential food and financial donations to replenish our shelves.

We greatly value the partnership we have built with our Mason brothers in community service and look forward to deepening that relationship.

The spirit of community inspired an especially meaningful day of fellowship on September 11 when scores of volunteers from seven Woodbury faith communities joined in holding the first townwide "Neighbors for Neighbors" Progressive Dinner to benefit the food, fuel and crisis assistance programs of the Community Services Council.

I am profoundly indebted to the faith communities of Beth El Synagogue, Mattatuck Unitarian Universalist Society, First Congregational, North Congregational, St. Paul's Episcopal, St. Teresa of Avila and Woodbury United Methodist for welcoming 185 guests to their tables so warmly.

I offer special thanks to Mariana Daniels, Wrey Trompeter, Jan Scruggs and Lauren D'Amato for their indispensable contributions to the event's success, and wish to credit our sponsors who supported our cause including the Connecticut Communi-

ty Foundation, The Farm CSA, LaBonne's Market, The Provender at New Morning, KEHE Foods, Ovens of France, Chatfield Rental and BTS Graphics and Printing.

Woodbury's seniors witnessed to their compassion on September 20 as they renewed their tradition of volunteering to prepare the CSCW Annual Appeal mailing.

I offer my heartfelt thanks to these volunteers, and to all in our community who participate in our mission to serve our neighbors in need.

Bob Taylor, president
Community Services Council
of Woodbury

Make That Choice and Vote

To the Editor:

This letter is addressed to voters having a hard time making a choice in this strange presidential election because you don't feel comfortable with the two major party candidates. I have suggestions that may help with this choice.

Don't sit this one out. Too many people have died and many more are suffering for defending your right to vote. It is too precious to throw away.

Don't cop out by voting for a third party. No matter that you don't like either of the major party candidates, one of them will inevitably win. The one you like least may be it. Imagine each as president. Choose the one who wants to include all segments in this diverse country.

If you are fed up with politicians and want to try a business-

Deadlines

News material intended for the Wednesday edition of Voices must be received by the news department by 4 p.m. the Friday prior to publication.

News for Voices Weekend must be received by the news department by 4 p.m. the Wednesday prior to publication.

man for a change, consider the kind you'd prefer. Certainly one who is ethical, not one who brags about great wealth gained after at least four bankruptcies at the expense of the contractor, suppliers and workers. Not to mention not paying taxes. Not one who calls it "good business." I call it monkey business.

Think about which candidate has the support not only of many leaders in their own party, but as importantly, the respect of world leaders.

Above all, one who has the experience and temperament to be calm and deliberate in making decisions in what is becoming an ever more dangerous world, versus one who might react impulsively.

It is important to think about a candidate who openly expresses admiration for Putin, the Russian dictator, and who has implied that the way to win the election is to shoot the adversary.

In my opinion these considerations can only lead to support for Hillary Clinton. I hope many facing a difficult choice will agree. Please think hard, take a deep breath and vote for Hillary

(Please turn to page 24)

Waterbury-Oxford Airport Environmental Assessment for Tree Clearing Notice of Public Information Meeting

NOTICE IS HERBY GIVEN that the Connecticut Airport Authority (CAA) will be holding a Public Information Meeting for the Waterbury-Oxford Airport Environmental Assessment for Tree Clearing. At this meeting, information on the overall project and the study's findings, including the Preferred Alternative, will be presented. The meeting will be held on **Tuesday, October 25 at the Oxford High School in the Library Media Center** (61 Quaker Farms Road, Oxford, CT 06478), doors open at 6:30PM with the presentation beginning at 7:00PM. The Environmental Assessment for Tree Clearing is available at waterburyairport.caa-analysis.com



Friends of the Southbury Public Library

Donation Day Sat., Oct. 15th

at the Southbury Library entrance
9:30 am - 3:30 pm
Rain or Shine

Donate: Books (All Categories - Current through Antiquarian), CDs, DVDs, Vinyl Records (33 RPMs), Books on CDs and All Other Media. Children's Pop-up Books and Educational Items, Puzzles, Music Sheets, Vintage - Paper, Maps, Posters, Prints, Boutique Items, etc.

For large or estate donations (250+ clean books or CDs/DVDs), we can box, pick up and provide tax receipts. Questions about donating, or discussing a pick up, call Chris Tolley (203-262-6855).



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Attorney
Courtney E. Dillon



The Taft School

110 Woodbury Road, Watertown, CT
invites area students, parents, and guidance counselors to an
Open House

Thursday, October 13, at 7-8:30 pm

Taft day students and faculty will present a panel discussion on student life, and an admissions officer will discuss Taft's admissions and financial aid process.

For more information please contact:
Taft Admissions Office

860-945-7700 • Admissions@TaftSchool.org

The Taft School actively seeks and admits students of any race to all its rights, privileges, programs and activities and does not discriminate on the basis of race, color, creed, sex, sexual orientation or national origin in the administration of its policies and programs.



SOUTHBURY DENTAL CARE CENTER

PLAYHOUSE CORNER
SUITE 209

2016 Is Almost Over

As 2016 draws to a close, so does the insurance benefits year for many patients. And though 2017 is just around the corner, there is still time to make appointments for missed visits or incomplete treatment plans.

Nancy, our financial coordinator, is knowledgeable and competent in getting your claim through the insurance paperwork jungle to have it right the first time.

Call and make your appointment today.
January 2017 will be another benefits year.

Dr. Steven Stirbl
General Family Dentistry

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PUBLIC INFORMATION MEETING SUMMARY

Project: Environmental Assessment (EA) & Environmental Impact Evaluation (EIE) for Obstruction Removal – Waterbury-Oxford Airport (OXC)
Location: Oxford High School – Media Center
Meeting: Public Information Meeting #1
Date: October 25, 2016 – 6:30 p.m.

Summary:

A public information meeting (PIM) for the Environmental Assessment & Environmental Impact Evaluation for Obstruction Removal - Waterbury-Oxford Airport (OXC) was held at the Oxford High School – Media Center on October 25, 2016 – 6:30 p.m. The meeting presentation outlined the overarching purpose of the EA and EIE, which is to promote safety by bringing the airport into compliance with Federal Aviation Administration (FAA) design standards and regulations regarding clear airspace as well as the process of identifying and evaluation potential obstructions. The study documents potential impacts of tree obstruction removal, includes trees both on and off the airport, satisfies the requirements of the National Environmental Policy Act (NEPA) and Connecticut Environmental Policy Act (CEPA) and is consistent with applicable FAA guidance. Those in present for the meeting were also briefed on the upcoming RW 18-36 reconstruction project.

There were approximately 16 persons in attendance, including the following representatives of the Connecticut Airport Authority and Airport.

Attendee	Affiliation
Colin Goegel	Connecticut Airport Authority
Molly Parsons	Connecticut Airport Authority
Mike Kelly	Waterbury-Oxford Airport
Sally Snyder	Connecticut Airport Authority
Paul McDonnell	CHA Consulting
Jeremy Martelle	CHA Consulting

The following is a summary of comments and questions discussed during the meeting:

- Q1. What height trees will be removed?
- A1. The height is unknown due to the varying elevations of the property surrounding the airport.

- Q2. Who pays for the project?
- A2. The FAA and the CAA.

- Q3. Is this a possible precursor to a runway extension?

- A3. There is no runway extension planned for the airport.
- Q4. Is the power plant that will be constructed an obstruction?
A4. The FAA has jurisdiction over the power plant and has been working with the owner directly on the permitting process.
- Q5. Are they changing the flight patterns and is this why they are doing this study?
A5. They are not changing the flight pattern, this study is required to ensure safety of the aircraft using the airport.
- Q6. If you remove the trees, will this project have to be done again in the future?
A6. If the trees grow and create a safety hazard in the future this process will need to be completed again.
- Q7. If you remove the trees, will the noise level increase due to the tree removal?
A7. FAA studies show that tree removal does not have a direct impact on the increase in noise levels.
- Q8. Will the tree removal allow for more or larger aircraft?
A8. Tree removal will have no impact on design aircraft for the airport. It is unknown if this project will increase the number of aircraft using the airport.
- Q9. Will this project change the runway length?
A9. This project will have no impact on the runway length.
- Q10. Should this project be done due to the costs involved?
A10. This is a philosophical question. The FAA requires the airport to maintain a safe approach and safety areas.
- Q11. What is the timeframe for this project?
A11. Depending on the property owners, this could take a couple years.
- Q12. What if a homeowner doesn't want a tree removed?
A12. The homeowner and the airport will try to see an agreeable solution.
- Q13. Would the project include a clearing of the cemetery on North Larkey Road?
A13. The current assessment has identified trees that will need to be removed in the cemetery on North Larkey Road.

Sign-In Sheet (Public Information Meeting)



PROJECT: Environmental Assessment & Environmental Impact Evaluation for Obstruction Removal at Waterbury-Oxford Airport

LOCATION: Oxford High School Library Media Center 61 Quaker Farm Road, Oxford, CT 06478

DATE: 10/25/2016

Name	Affiliation	Phone Number	Email (print clearly)
Robert DeBisschop	Southford Cemetery Assoc.	203-888-4159	bob@debisschop.net
Dorothy DeBisschop	Oxford Town Historian	203-910-4574	dottie@debisschop.net
Tim & Hildebjorn	Neighbor	203-216-1763	KLSPRES@Yahoo.com
KAREL JACOB	RESIDENT	908-507-5995	KAROL2@gmail.com
Brad Smith	Resident	446-528-3227	brodd@sonic.com
JAN ENGLISH	RESIDENT	203-257-3484	janenglish@gmail.com
COLIN GOEGL	CAA	860-254-5628	cgoegel@airports.org
Bill Duesing	Resident	203-231-1790	bduesing@mac.com
Stephen Savarez	Town of Milbury	203-270-1144	atty@stephensdrazate@gmail.com
Matthew J. Kelly	CAA	203-264-8010 860-518-5848	mkelly@CTAirports.Org

Sign-In Sheet (Public Information Meeting)



Name	Affiliation	Phone Number	Email (print clearly)
Bud Millspaugh	Oxford Greens	203-266-7476	kiesbeth@millsaugh-net
Kiesbeth Millspaugh	"	"	
Charles Bartlett	"	203-463-0354	

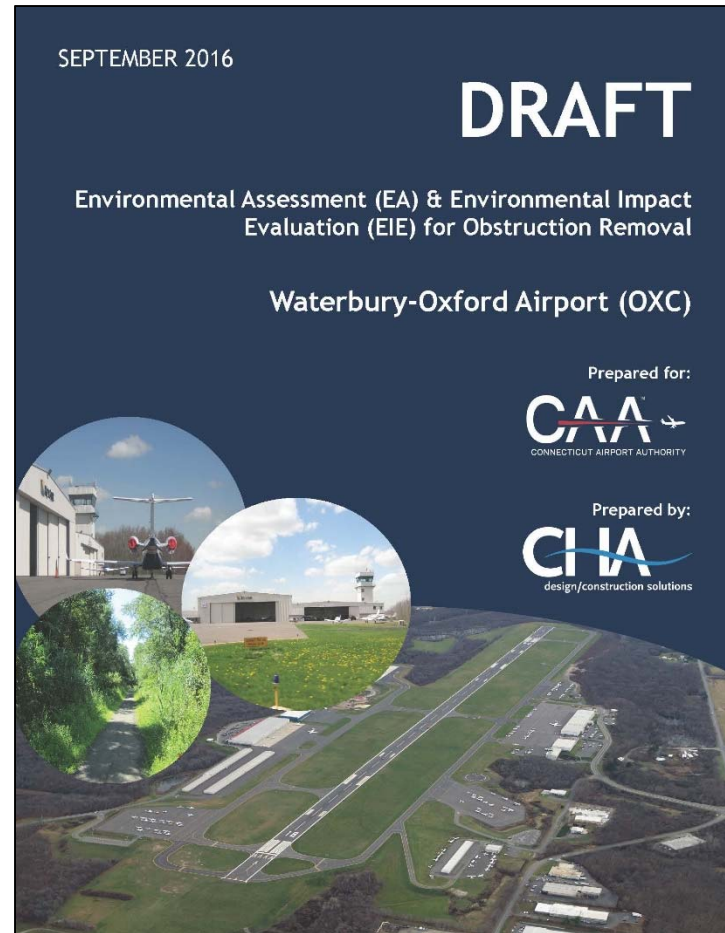
Waterbury-Oxford Airport (OXC)

Environmental Assessment for Tree Obstruction Removal



Draft Environmental Assessment Report for Waterbury-Oxford Airport

September 2016



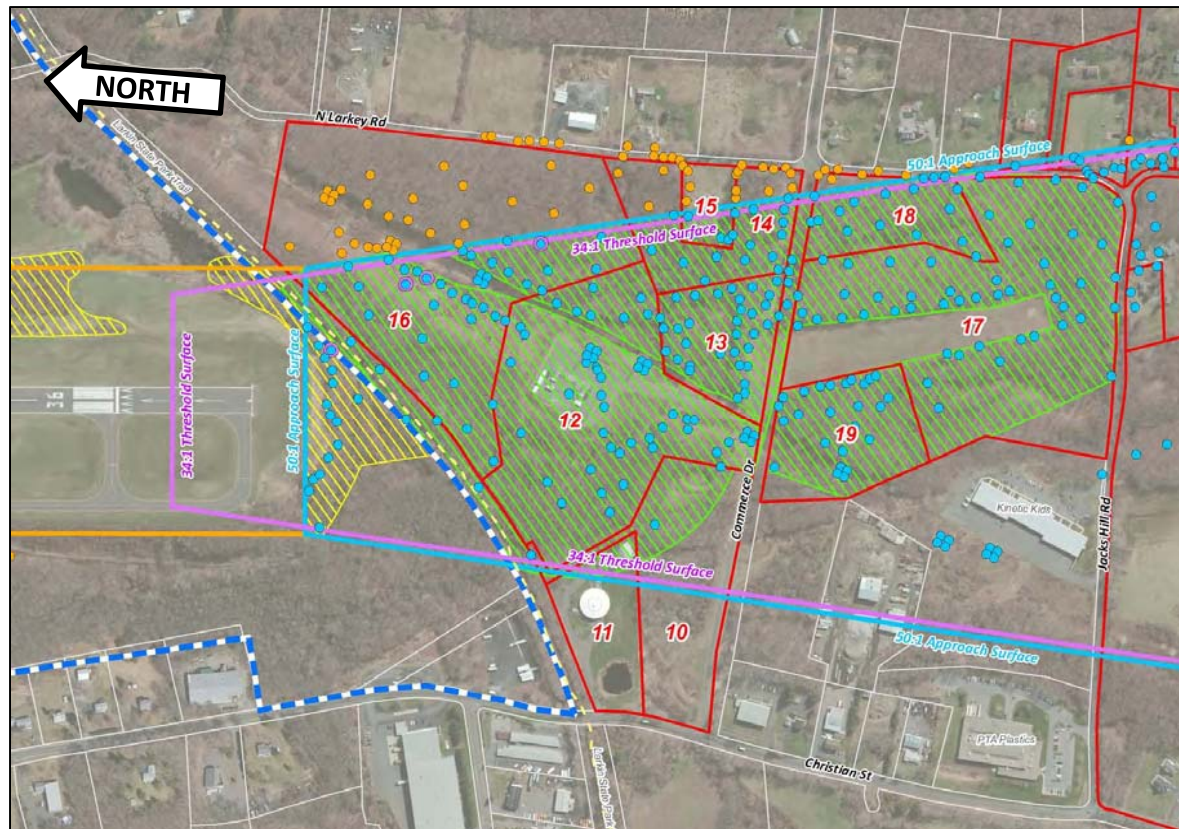
Project Background

- The Environmental Assessment (EA) documents the potential impacts of tree obstruction removal at Waterbury-Oxford Airport
- Include trees located on and off airport property
- Study satisfies both the National Environmental Policy Act (NEPA) and Connecticut Environmental Policy Act (CEPA)
- Consistent with FAA guidance:
 - Order 1050.1F – Environmental Impacts: Policies and Procedures
 - Order 5050.4B – NEPA Implementing Instructions for Airport Actions



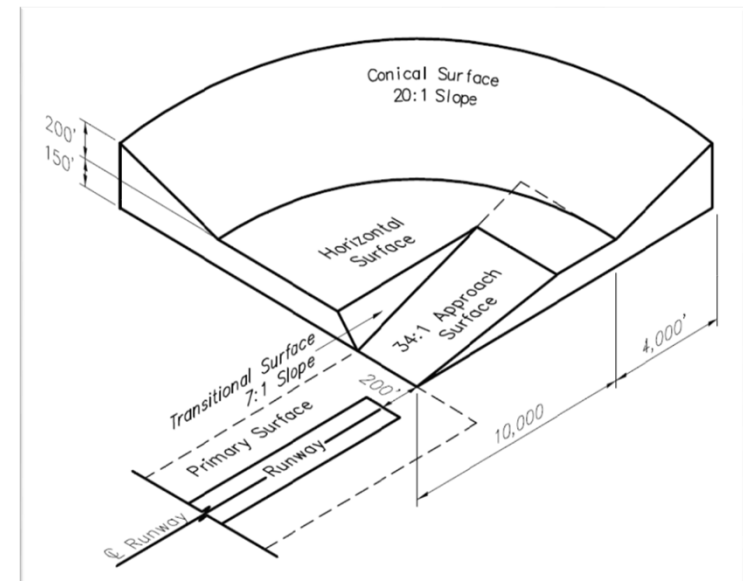
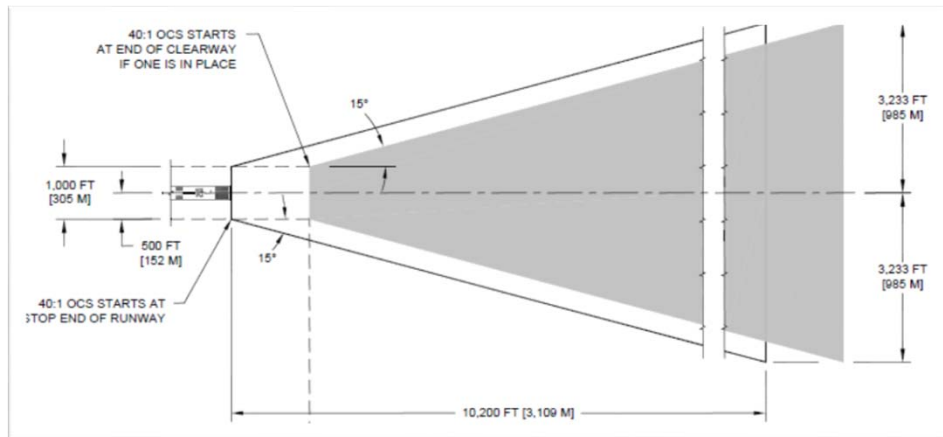
Project Background

- EA includes both on and off-airport obstruction removal

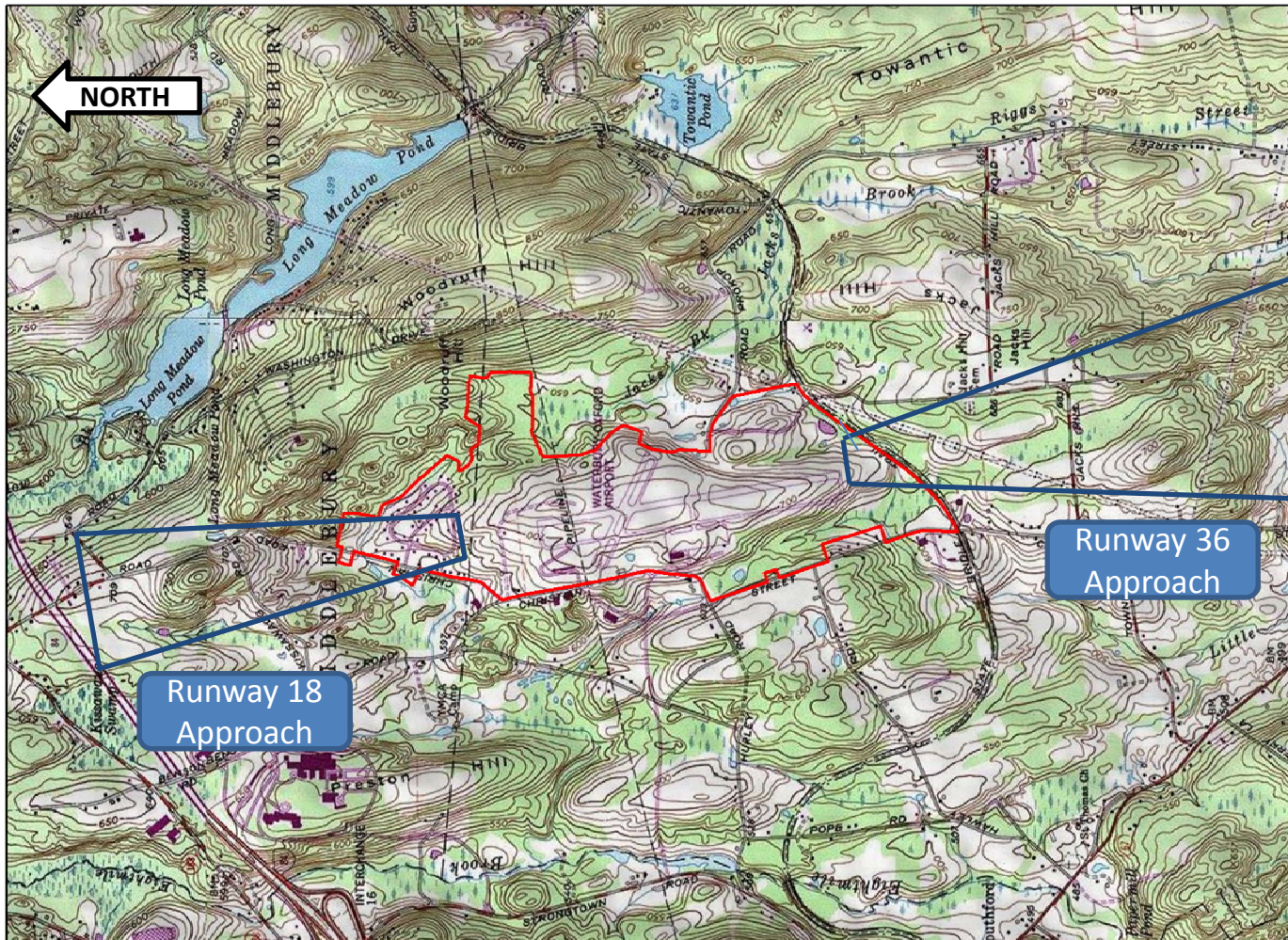


Project Background

- Objects that penetrate the defined airspace are classified as obstructions, and should be removed to safely accommodate aircraft operations
- The EA addresses tree removal associated with:
 - Federal (i.e., FAR Part 77) Navigable Airspace
 - Terminal Instrument Procedures (TERPS)
 - **FAA Design Standards**



Project Background



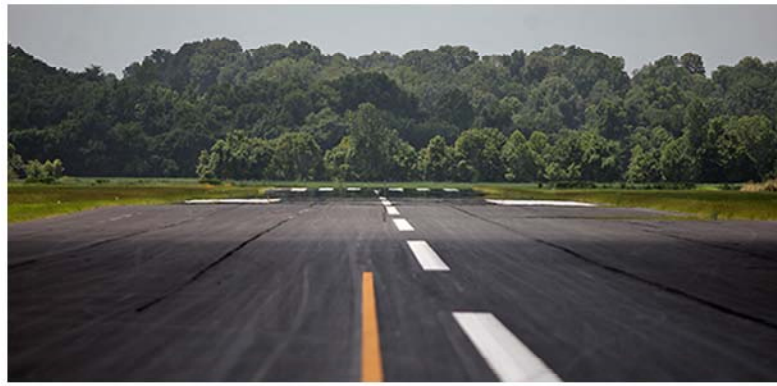
OXC Location Map

Project Background



Purpose and Need

- Purpose:
 - Improve airport safety by removing tree obstructions (compliance with FAA design standards).
- Need:
 - FAA has established airspace and design criteria to provide for safe aircraft operations.
 - The 2012 airspace analysis identified existing safety deficiencies.
 - **The Airport is required to address the safety deficiencies to the extent feasible.**



Alternatives Analysis and Proposed Action

- No Action Alternative
- Full Obstruction Removal Alternative
- Modified Obstruction Removal Alternative



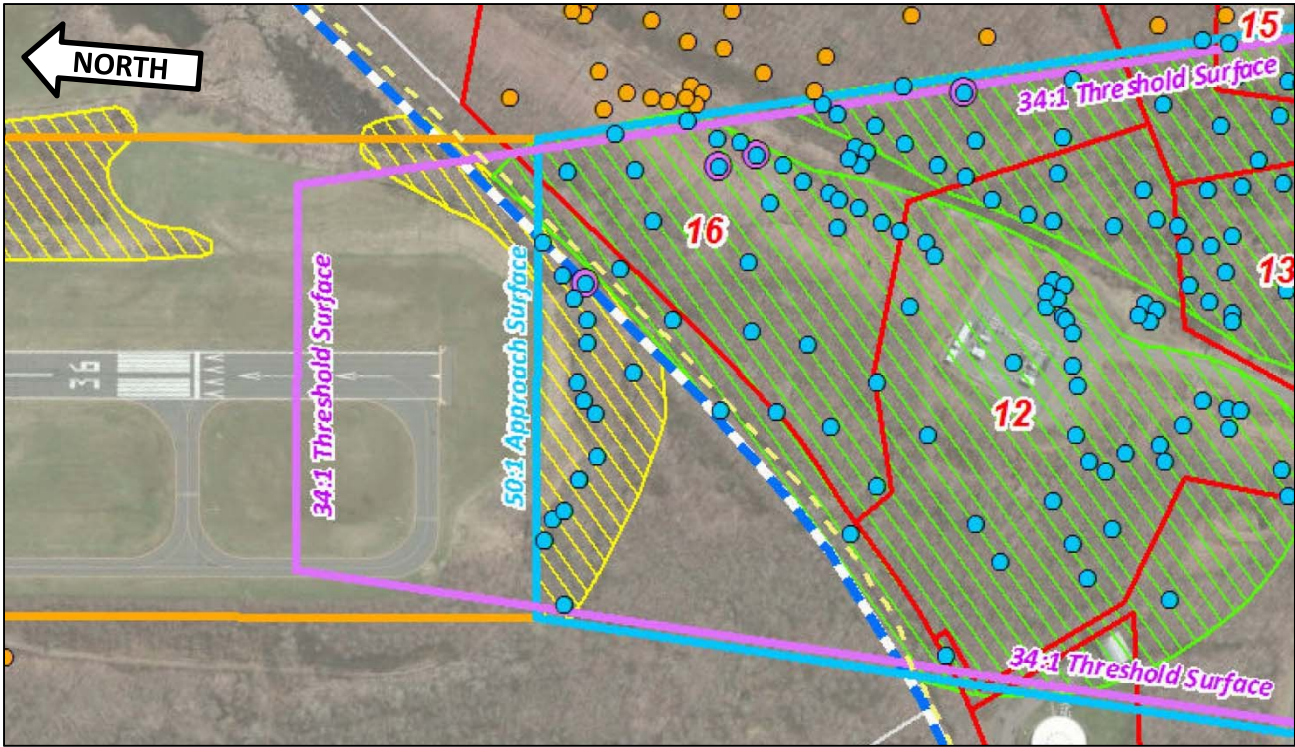
No Action Alternative

No Action Alternative	
<p>Goal(s): This option minimizes environmental impacts as it takes no action to remove, lower, mark, or mitigate existing or potential future airspace obstructions.</p>	
<p>Description: Tree obstructions have been identified beyond both runway ends, Transitional Surface areas, and the outer airspace of the Horizontal and Conical Surfaces. These presumed hazards would remain in place, and potentially increase in size and penetration with additional tree growth.</p>	
Advantages	Disadvantages
<ul style="list-style-type: none"> • No wetland impacts (temporary or permanent) • No impacts to biological resources, habitats, or species of concern • No impacts to parks or recreation • No impacts or disturbance to property owners • No project costs 	<ul style="list-style-type: none"> • Retains potential hazards to airport users • Retains a potential hazard to people and property on the ground surrounding the airport • Does not comply with FAA design standards or grant assurances • Risks future FAA funding for improvements to the airport

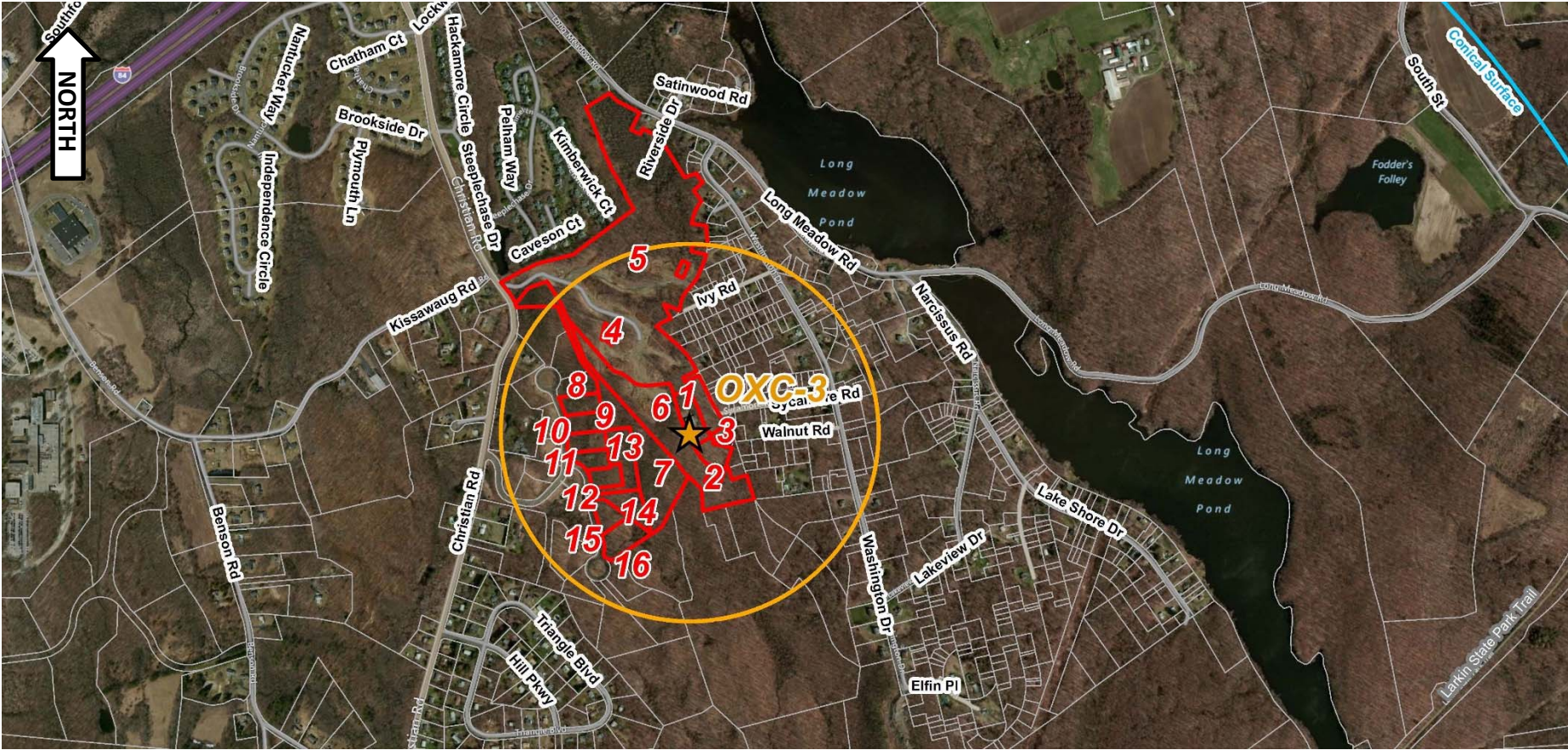
Full Obstruction Removal Alternative

Full Obstruction Removal Alternative	
<p>Goal(s): This option removes all penetrations to the FAR Part 77 Approach and Transitional Surfaces, with obstruction lighting for the Horizontal and Conical Surfaces.</p>	
<p>Description: A comprehensive removal of obstructions to the inner airspace surfaces, including substantial areas off-airport property. This alternative provides maximum benefit to airport users and safety enhancement. Outer surfaces are protected with lighting during nighttime operations.</p>	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Clears or lights virtually all defined aeronautical surfaces • Satisfies federal design standards and assurances • Comprehensive removal of potential hazards to airport users • Improves safety for people and property on the ground surrounding the airport 	<ul style="list-style-type: none"> • Potential for impacts to wetlands (temporary or permanent) • Potential impacts to biological resources, habitats, or species of concern • Substantial coordination and negotiation needed with property owners • The need for numerous avigation easements may prevent successful completion of project and significantly extend the required schedule • High project costs • Successful completion is questionable

Full Obstruction Removal Alternative



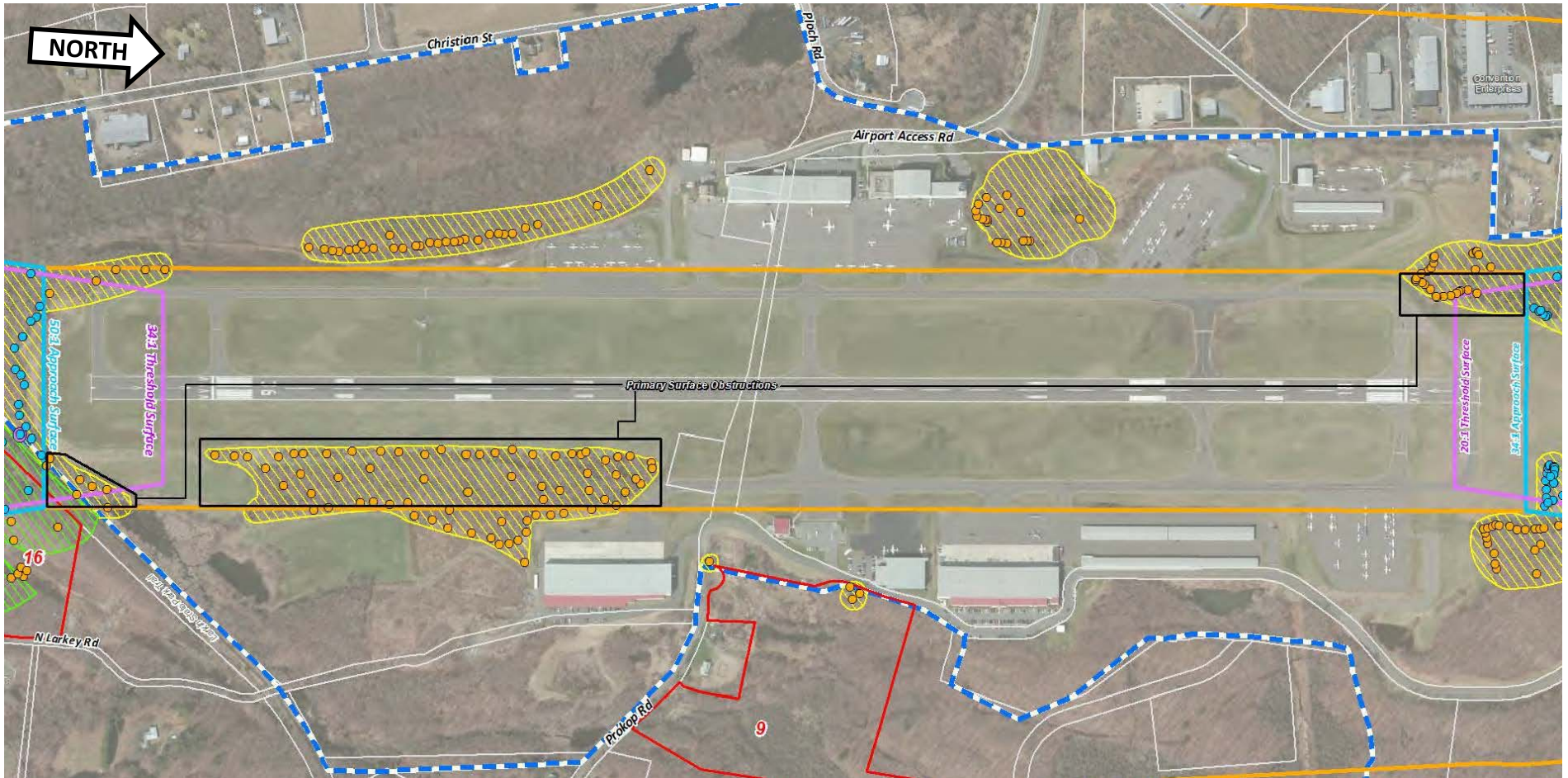
Full Obstruction Removal Alternative



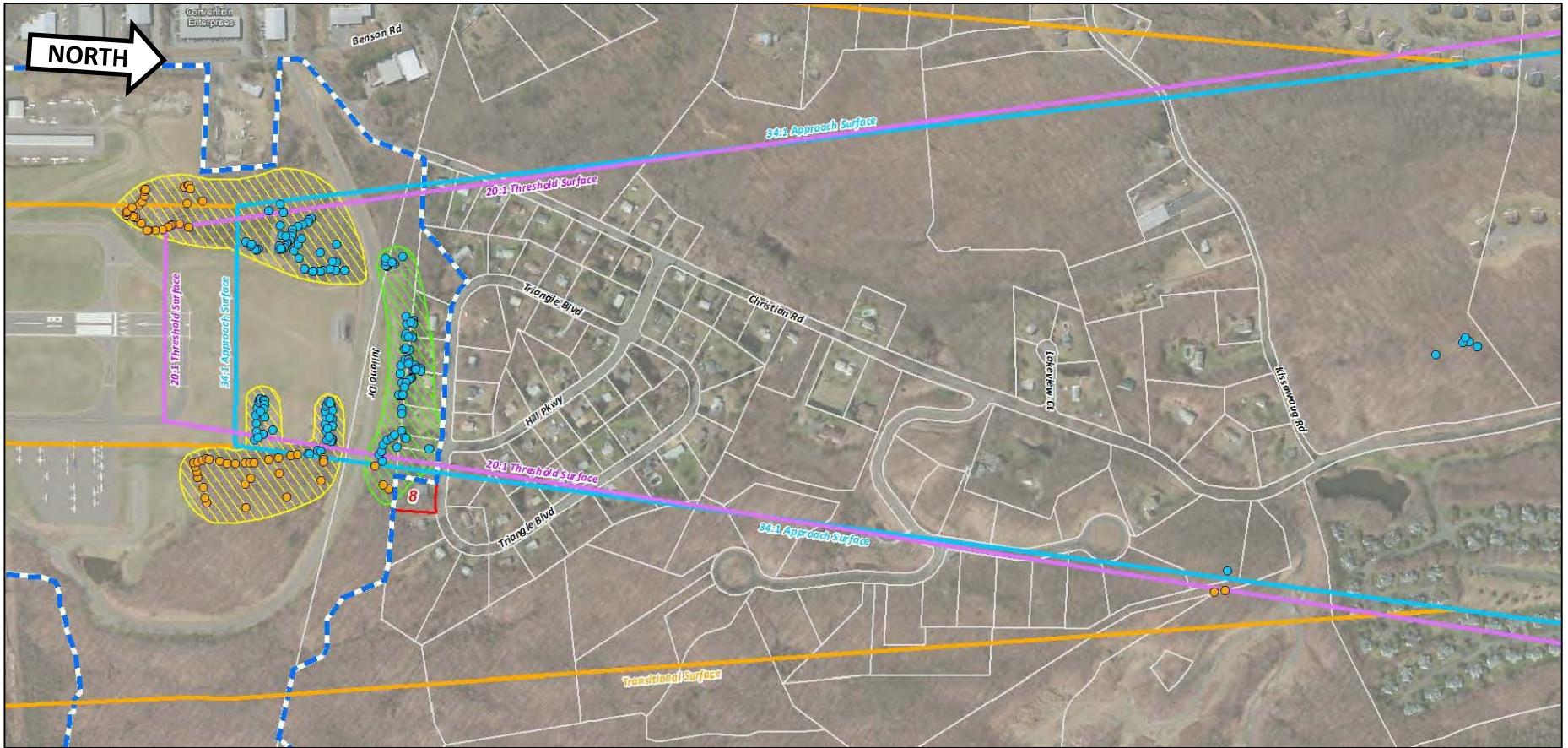
Modified Obstruction Removal Alternative

Modified Obstruction Removal Alternative	
<p>Goal(s): This option removes penetrations to the FAA Threshold Surface in off-airport locations (and to FAR Part 77 Approach and Transitional Surfaces on-airport)</p>	
<p>Description: A reduced removal alternative intended to clear the critical penetrations to the runway approaches to maintain operational safety, while minimizing the impact to off-airport properties and the natural environment.</p>	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Clears the critical obstructions • Satisfies federal design standards and assurances • Improves safety for people and property on the ground surrounding the airport • Reduces impacts to environmental resources • Reduces the number of affected property owners • Streamlines the project schedule and reduces costs 	<ul style="list-style-type: none"> • Potential impacts to wetland, biological, habitat, or species of concern remain present • Easement are required with property owners • Less critical obstructions will remain • Outer Part 77 surface are not protected with obstruction lighting

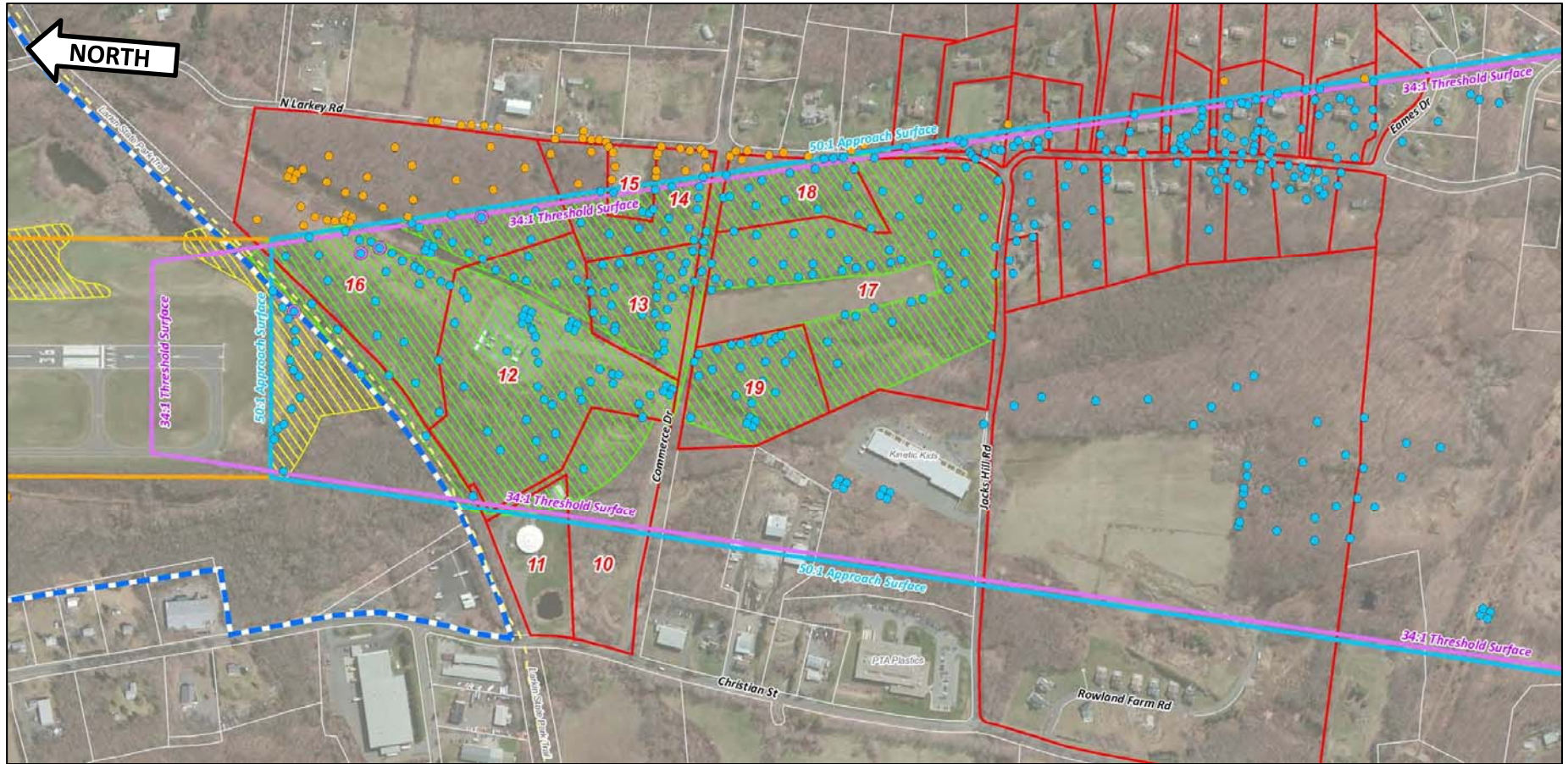
On-Airport Removal



Runway 18



Runway 36



Recommended Alternative

Modified Obstruction Removal Alternative

- The CAA and FAA have identified this alternative as the most practical solution.
- Balances airport safety with environmental considerations, minimizing cost, and private property disturbance.

Affected Environment & Environmental Consequences

Consistent with the FAA guidelines, the following impact categories addressed:

- Air Quality
- Compatible Land Use
- Construction Impacts
- Parks and Recreational Facilities (Section 4(f))
- Farmland
- Fish, Wildlife, and Plants
- Floodplains
- Hazardous Materials and Solid Waste
- Historical, Archeological and Cultural Resources
- Light Emissions and Visual
- Natural Resources and Energy Supply
- Noise
- Socioeconomic Impacts
- Water Quality
- Wetlands



Affected Environment & Environmental Consequences

- Key Issues:
 - Parks and Recreation Facilities
 - Threatened & Endangered Species
 - Wetlands
 - Private Property
 - Visual Impacts



Parks and Recreation



Threatened and Endangered Species

- Species of Conservation Concern

- American Bittern
- Blue-winged Warbler
- Canada Warbler
- Fox Sparrow
- Least Bittern
- Prairie Warbler
- Rusty Blackbird
- Wood Thrush

Note: Prior to any tree removal activities:

- Biological survey may be required
- Seasonal restrictions on cutting (winter removals)



Fox Sparrow



American Bittern



Least Bittern



Blue-Winged Warbler

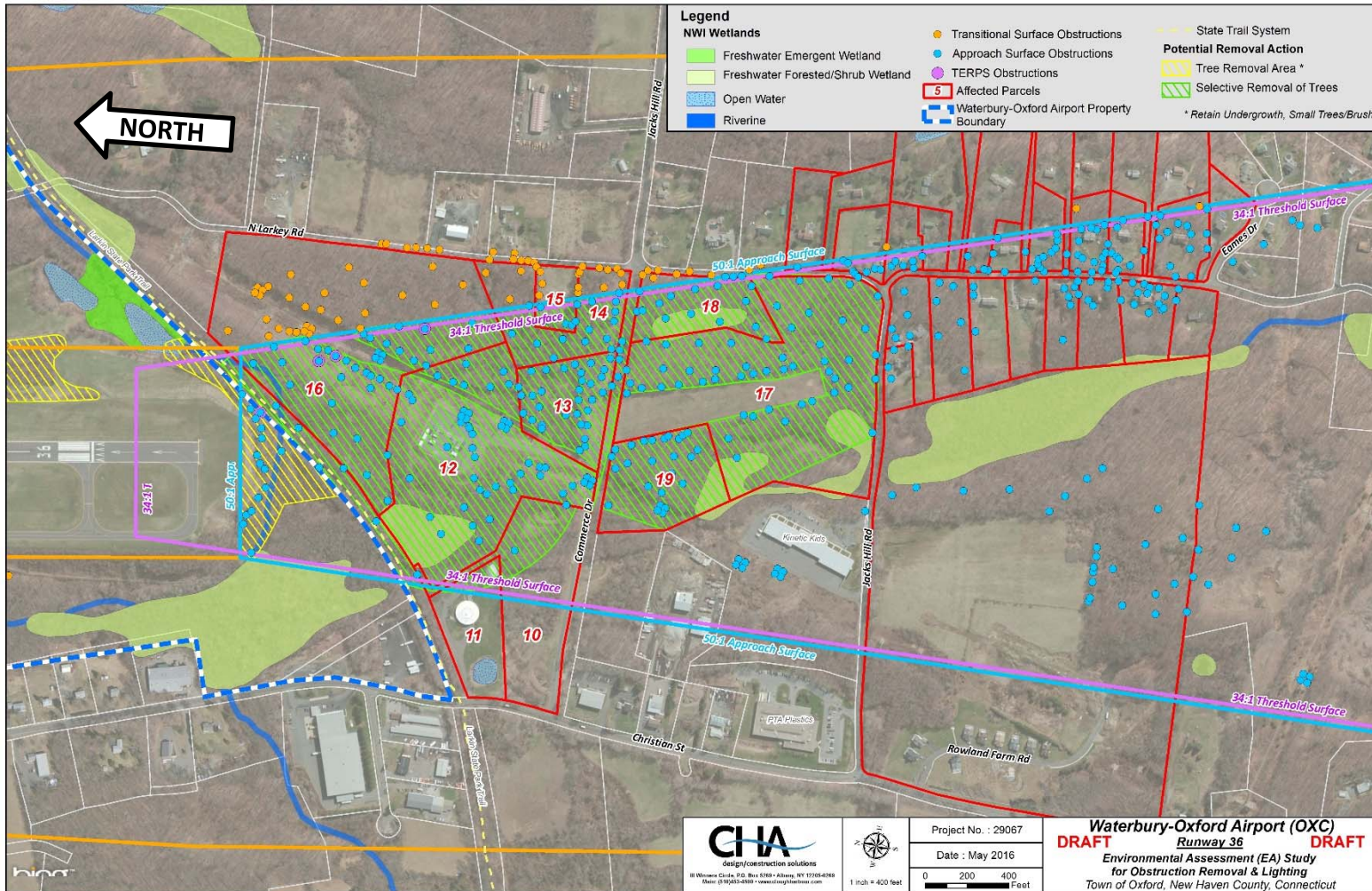


Wood Thrush

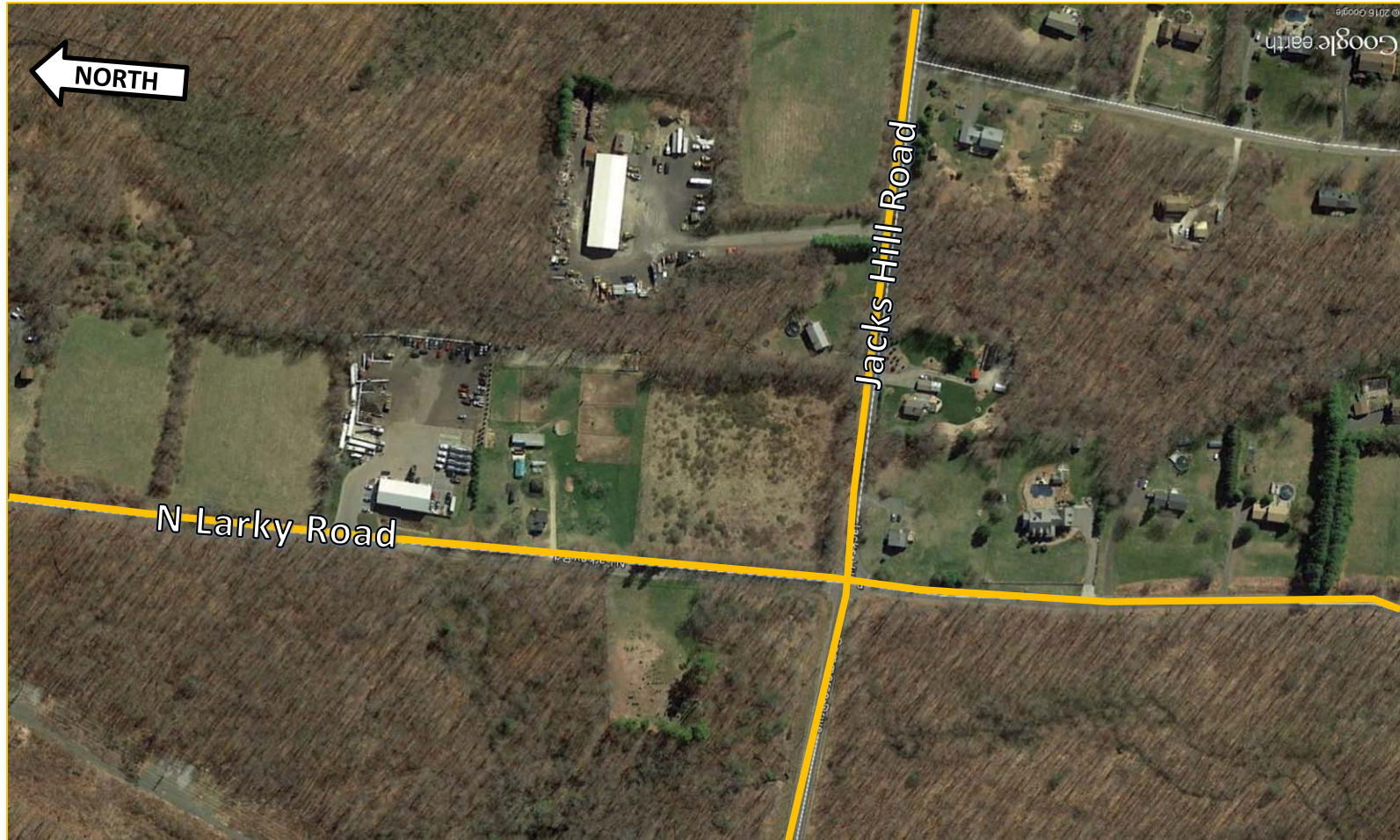


Rusty Blackbird

Wetlands



Private Property



Visual Impacts



Project Outcome & Next Steps

- **Federal Environmental Assessment, under NEPA**
 - Lead Agency: Federal Aviation Administration (FAA)
 - Action: Publish a Finding of No Significant Impact (FONSI)
- **State Environmental Impact Assessment, under CEPA**
 - Lead Agency: Connecticut Office of Policy and Management
 - Action: Publish a Record of Decision (ROD)
- **Next Steps:**
 - Design & permitting of tree removals
 - Acquisition of easements from affected property owners
 - Tree removals

Study Information

*Please visit the
project website at:*

Waterbury-Oxford Airport (OXC)
Environmental Assessment (EA) for Obstruction Removal and Lighting

Home
Project Meetings
Project Documents
Links
Contact
FAQ

Project Information

The Connecticut Airport Authority (CAA) has conducted a detailed study to evaluate existing obstructions that penetrate the federally protected airspace. These obstructions are primarily trees located near runway ends or located on small hills surrounding the Airport. As a follow-up study, the CAA is reviewing the potential impacts of tree removal, and selective clearing and/or thinning in areas the area that contain airspace obstructions. Objects that penetrate these surfaces are classified as airspace obstructions, and should be removed to safely accommodate approaching and departing aircraft.

To accomplish this, the CAA is conducting an Environmental Assessment (EA) under federal and state procedures to identify affected properties and any potential environmental issues of removing trees and/or installing a pole-mounted red obstruction lights. No actual tree removal or construction activities are pending at this time; just the required evaluation.

This study is being performed by Clough Harbor Associates LLP (a subsidiary of CHA Consulting, Inc.). The study is being conducted for the Connecticut Airport Authority (CAA), referred to by the FAA as the "Sponsor." The lead agency for the EAs will be the Federal Aviation Administration (FAA).

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<http://waterburyairport.caa-analysis.com/>



Study Information

**Project EIE Notice posted on CEQ
Environmental Monitor Online
Portal – *October 18, 2016***

<http://www.ct.gov/ceq/site/default.asp>



ENVIRONMENTAL MONITOR

The official site for project information under
the Connecticut Environmental Policy Act

September 30, 2016

EIE Notices

The following Environmental Impact Evaluation (EIE) notice is submitted for review and comment in this edition.

1. Notice of EIE for the Connecticut Airport Authority (CAA) – Off-Airport Tree Obstruction Removal at the Waterbury-Oxford Airport

Municipality where project is proposed: The Airport is located in the Town of Oxford approximately 7 miles southwest of Waterbury, CT. The very northern portion of the Airport is within the Town of Middlebury.

Address of Possible Project Location: The airport office is located at 300 Christian Street, off of State Route 188.

Project Description: Preparation of National Environmental Policy Act (NEPA) and Connecticut Environmental Policy Act (CEPA) environmental document as required to evaluate the potential impacts associated with tree obstruction removal in areas on,

Questions and Comments?

Please provide comments by December 2 to:

Colin Goegel

Connecticut Airport Authority

334 Ella Grasso Turnpike, Suite 160

Windsor Locks, CT 06096

CGoegel@ctairports.org

<http://waterburyairport.caa-analysis.com/>



APPENDIX E

COMMENTS/ RESPONSES

The following agencies provided comments on the Draft EA for the above referenced project at the Waterbury-Oxford Airport:

- Connecticut DEEP December 2, 2016
- Connecticut Office of Policy and Management December 2, 2016

Each of these comments letters is included in its entirety in Appendix B of this document.

CHA has prepared the responses below to address the subject comments. The responses include several clarifications, as well as concurrence to adhere to environmental best practices. Please note, many of the responses are related to activities that will occur in the future, during the design and permitting process.

For the convenience of the reader, both the comment and response are provided below.

Connecticut DEEP correspondence December 2nd, 2016.

Comment (3rd paragraph): The document is titled an Environmental Impact Evaluation and was noticed in the Environmental Monitor as a Connecticut Environmental Policy Act (CEPA) document. However, section 15-120bb of the Connecticut General Statutes (CGS), states that the CAA “shall not be construed to be a department, institution or agency of the state.” Since CEPA applies to state departments, institutions or agencies, it appears that CAA is exempt from its requirements.

***Response:** CAA concurs that it may be exempt from CEPA and associated requirements. However, CAA is current seeking separate legal determination on this issue for our general aviation airports such as Waterbury-Oxford, and has decided to continue following both NEPA and CEPA procedures for this document.*

Comment (4th paragraph): In describing the preferred Modified Obstruction Removal Alternative the document notes that FAA has recognized that full off-airport clearing of Part 77 surfaces is often impractical due to environmental impact, among other considerations, and has defined different approach surfaces to address the most critical obstructions, while maintaining an acceptable margin of safety. For Runway 36, only a few trees are obstructions using the more lenient Threshold Surface criteria. However, CAA proposes to remove trees that are obstructions using the stricter Approach Surface criteria to improve visibility of the electric transmission line and substation within approach surface zone.

***Response:** Correct. The Modified Alternative for the Runway 36 end (south end) does recommend removal of trees in areas that don't penetrate the Threshold Surface for this unique circumstance. Ideally the transmission lines would be relocated or buried to improve airport safety; however, if that is not practical in the foreseeable future, tree removal in the along the electric transmission lines will improve visibility. As discussed in the text, this area has been subject to aircraft incidents in the past.*

Comment (5th paragraph):

As we noted in our scoping comments, it would be instructive for reviewers if maps could be generated by using GIS data for ground elevation and threshold or approach surface elevation that would depict the height of obstructions that would penetrate the threshold or approach surface at various locations. It would also be helpful if some rough numbers of trees to be eliminated could be estimated.

Response: Available GIS data was used during the preparation of this document. However, such information is also quickly dated with respect to vegetation. Furthermore, there is no defined accuracy of the GIS mapping for tree top elevations, thus it cannot be relied on as the only data for obstruction analysis. The photogrammetry employed for most GIS mapping may be intentionally obtained during leaf-off conditions so that the ground and objects are more clearly visible. Unfortunately, leaf-off condition data is unreliable for identifying deciduous tree top elevations. As such, GIS data was used in presentations to property owners and the public, but not for study recommendation.

CAA intends to measure (survey) the clearing areas, where necessary, during the permitting process in order to employ the most up to date information. Tree top data may become dated with every year of growth, which is also why removal areas identified in the EA include some buffer. The CT ECO, GIS data that may be available this year (2017) can certainly be considered for use in the next stage in the process, as well as additional site survey activities as needed.

Comment (Paragraph 6th – 8th):

The Larkin State Park Trail traverses the approach zone between the runway and the transmission right-of-way. The trail elevation generally lies approximately 20' below the transmission corridor and over 40' below the runway. The transmission towers are 80' to 100' high. Very few trees along the trail would be at an elevation similar to the power line. Also, when viewed from above, it would seem that a clearly demarcated right-of-way would more easily denote the potential for transmission lines than if the right-of-way were made less distinct as a result of removal of nearby trees.

Page 3-6 states that during design, individual trees can be identified for removal to minimize clearing activities and that activities will be coordinated with DEEP. The Department recommends that, in the area proximate to the trail, only trees that are critical obstructions or that truly mask the presence of the power line be removed.

In addition, we note that the September 2007 *Airport Master Plan Update* states the ConnDOT is working with Northeast Utilities to potentially lower or bury the power line. It concludes that although the safety benefit of line burial is clear, funding availability is a significant challenge to be addressed by the FAA and ConnDOT. The likelihood of this safety improvement being achieved should also be considered in assessing the need for clearing near the trail.

Response: Agreed, as the project advances into the permitting phase, more detail regarding which specific trees are to be removed and the methodology used for their removal will be thoroughly coordinated with the CT DEEP and other regulatory agencies. The goal is remove those obstructions necessary to provide adequate safety and to minimize impacts to trail users.

Comment (9th paragraph):

As also discussed during scoping, clearing on DEEP property would entail a need for property rights from the Department. Requests for temporary or permanent property rights from DEEP should be requested using DEEP's Land Management Request Application (copy attached). All such requests are reviewed by a multidisciplinary panel of DEEP staff that comprise the DEEP Property Management Review Team. After the CAA has developed a plan that avoids and minimizes adverse impact, this review process can identify more specific mitigation measures for any project elements on DEEP property.

Response: *Agreed, after the CAA has developed the above referenced plan that avoids and minimizes adverse impact, the request for temporary or permanent property rights as appropriate will be initiated to identify more specific mitigation measures for any project elements on CT DEEP property.*

Comment (10th paragraph):

Normally during NEPA/CEPA review, the Department would identify issues to be resolved and additional information required during subsequent permitting. However, the application for the Inland Wetlands and Watercourses Permit has already been submitted. A preliminary review by the Land & Water Resources Division (LWRD) has revealed a number of discrepancies between the application and the Environmental Assessment. For example, the application proposes use of swamp matting and removal of trees from the wetlands, in contradiction to the discussion on page 5-14. As the permit review progresses, the LWRD will contact the CAA for any clarifications or additional information required for permitting.

Response: *Agreed. The permit application for on airport activities indicated that “swamp” matting may be used. At the time the draft EA was prepared the use of timber mats was not anticipated and is still not anticipated in off-airport clearing areas. The following statement has been added to the Final EA Section 5.17:*

“As the off-airport tree removal project advances into the permitting phase, more detail regarding which specific trees are to be removed and the methodology used for their removal will be thoroughly coordinated with the CT DEEP and other regulatory agencies. Tree removal methodologies to be used in upland areas, within critical habitat areas, and within forested wetland areas will differ and will proceed as directed in the approved project permits.”

CAA advanced the removal of tree obstructions on-airport property, and associated permits in an effort to be proactive for safety. As the off-airport removals required easements and property rights (and associated negotiations and costs), the time required for implementation may be substantially longer. As such, then off-airport removal begin, the previous activities, impacts, and finding will be considered and incorporated as appropriate.

Comment (11th paragraph):

Although not discussed in the document, you explained that the permit application is limited to on-airport activities, which are exempt from NEPA review. Off-airport tree removal will be a separate project following NEPA review. The protocols and mitigation measures that are incorporated into the on-airport project permit can be used as templates in developing the subsequent off-airport obstruction removal application.

Response: *Agreed. The following statement is part of the Final EA Section 5.17:*

As the project advances into the permitting phase, more detail regarding which specific trees are to be removed and the methodology used for their removal will be thoroughly coordinated with the CT DEEP and other regulatory agencies. Tree removal methodologies to be used in upland areas, within critical habitat areas, and within forested wetland areas will differ and will proceed as directed in the approved project permits.

To clarify on-airport tree removal activities are not exempt from NEPA, but rather they are addressed by a federal Categorical Exclusion under NEPA, with concurrence required by the FAA

(i.e., the lead agency). The FAA does not require an Environmental Assessment for on-airport tree removal.

Comment (12th paragraph):

The Natural Diversity Data Base (NDDDB) would like to take this opportunity to clarify our concerns with regard to eastern box turtles. Concurrence with the plan initially proposed was based on Phase 1 starting early enough to have turtle exclusionary fencing installed to prevent entry into work zones, including upland areas slated for tree removal ... Tree removal work performed by hand cutting will greatly reduce possible impacts to hibernating eastern box turtles. Avoidance of stumping or grubbing until after the turtles hibernate will also minimize potential impacts. Alternately, a herpetologist can be onsite during any stump removal activity or an updated plan developed to address issues that might arise if a hibernating turtle is discovered. Jenny Dickson, a wildlife biologist specializing in box turtles, can provide technical assistance in revisions or adjustments to your turtle management plan (jenny.dickson@ct.gov).

Response: *Comment noted, coordination with the appropriate agencies will occur as this project progresses through the permitting.*

Comment (13th paragraph):

NDDDB would also like to clarify that three tree-roosting bat species were identified from this area: red, hoary, and silver-haired bats. The red bat was listed by its scientific name in the NDDDB response materials, but has not been included in subsequent discussion of mitigation. This species has very similar life-history requirements to the other two tree-roosting bats and will be adequately addressed by similar mitigation practices. While June and July are peak pup birthing and rearing periods, it is also important to avoid possible roost tree removal in May when pregnant female bats are seeking maternity roosts and have very limited flight capabilities. Weather conditions in the late winter and early spring can also influence the date pups are born, so ideally tree removal work should be completed in advance of May 1st not June 1st.

Response: *Comment noted. As the CT DEEP has requested in its review of the other CAA general aviation airports, tree removals will not occur during the period of April 1 to September 30.*

Comment (14th paragraph):

For both bats and box turtles, tree removal in wetland areas **does not** need to be completed in spring. The revised recommendations for both species in this regard are not in conflict with one another as stated in the Inland Wetlands and Watercourses Permit. Provided there are no specific wetland protection related concerns, tree removal should preferably occur during the winter, when the tree-roosting bats have migrated out of the area and when box turtles are wintering in well-drained, protected upland areas. Review of the initial guidance provided on this issue identified that there were unclear and inaccurate recommendations made as part of the initial review. Installation of bat houses is not a mitigation recommendation appropriate for tree-roosting bats. As a result, they are not required in this application. They may certainly benefit the cave bats impacted severely by white-nose syndrome and would still provide benefits to those species should you wish to retain them in the proposed plan. If you have additional questions on coordinating mitigation efforts for both bats and box turtles, please feel free to contact Jenny Dickson as indicated above.

Response: *Comment noted. As the CT DEEP has requested in its review of the other CAA general aviation airports, tree removals will not occur during the period of April 1 to September 30; this request is reflected in Section 5.7 of the Final EA. Coordination with the appropriate agency and personnel will occur as this project progresses through the permitting.*

Comment (15th paragraph):

Over the years, the Department and ConnDOT had worked together to complete various projects and conduct operations at the airport in a manner that protected the biological diversity at Waterbury-Oxford Airport. DEEP anticipates that CAA, as the successor entity, will honor all legal commitments pursuant to statutory requirements made by their predecessor. We look forward to continuing collaboration with CAA toward that goal.

Response: Agreed.

Comment (16th paragraph):

Page 5-14 explains the importance of maintaining streambank vegetation. In accordance with the Inland Fisheries Division Riparian Corridor policy, the Department recommends that every effort be made to maintain a 100 ft. wide natural undisturbed riparian buffer adjacent to the Little River. See link for a copy of the policy: [Riparian Corridor Policy](#). A significant riparian buffer adjacent to the river that regulates water temperatures and minimizes sedimentation into the river.

Response: As stated above the EA recognizes the importance of maintaining streambank vegetation along the Little River. Every effort will be made to meet the guidelines of the [Riparian Corridor Policy](#). As noted previously, as the project advances into the permitting phase, more detail regarding which specific trees are to be removed and the methodology used for their removal will be thoroughly coordinated with the CT DEEP and other regulatory agencies. Locations where the Threshold Surface is penetrated within the 100' buffer, will be discussed and addressed as necessary.

Comment (17th paragraph):

Stormwater discharges from construction sites where one or more acres are to be disturbed, regardless of project phasing, require an NPDES permit from the Permitting & Enforcement Division. The *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEEP-WPED-GP-015) will cover these discharges. The construction stormwater general permit dictates separate compliance procedures for Locally Approvable projects and Locally Exempt projects (as defined in the permit). Locally Exempt construction projects, such as those undertaken by CAA, disturbing over 1 acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to the Department. The SWPCP must include measures such as erosion and sediment controls and post construction stormwater management. The construction stormwater general permit registrations can now be filed electronically through DEEP's e-Filing system known as ezFile. Additional information can be found on-line at: [Construction Stormwater GP](#).

Response: Response: Agreed, the CAA will submit a SWPCP during the design and permitting phase.

Connecticut Office of Policy and Management correspondence December 2, 2016

Comment (First Bullet):

The EIE does not identify alternatives to tree removal, such as tree trimming, that might reasonably accomplish the project goal with less of an impact on neighbors and on the environment. Furthermore, a pro-active airport-funded trimming program might be the means to reduce or avoid the need for future removals and perhaps reduce the number or complexity of avigation easements necessary to conduct such removals.

Response: Tree trimming (often referred to as tree topping), is not the preferred obstruction

removal approach by the FAA or CAA, but will be considered if and where necessary. Trimming/topping is generally less effective and more difficult and costly than selective removal of tall (obstructing) trees.

The general practice for airport tree obstruction removal is to selectively remove trees that are within 10' of the defined surface for the area of interest. The primary advantage to this approach is that the removal may be effective for 10 or more years, while trimming (if feasible) may require re-trimming every 1-3 years, with the disturbance to property owners and the natural community. If the tree obstructions are within sensitive areas (i.e., wetlands), it may be impractical to obtain permits for continuing activity. Nevertheless, if necessary for environmental reasons or required by the property owner, trimming/topping has and will be employed as part of an FAA-funded tree obstruction removal project.

Airport obstruction projects often cite trimming as generally not an effective method to remove and manage obstructions based on information from the International Society of Arborists (ISA). ISA indicates that topping can remove 50 to 100 percent of a tree's leaf-bearing crown. This can cause significant stress to a tree as it rushes to produce new leaves. If the tree does not have adequate stored energy reserves it will be seriously weakened and may die. The ISA also identifies increased risk of insect infestation, decay, and sunburn" of tissues below the bark. In addition, altering a trees natural shape generally leaves behind trees that are "ugly". We understand that the Department would not likely request trimming if such conditions were anticipated.

Regarding avigation easements, if trimming is necessary in order to obtain property owner approvals, it would certainly be considered. In fact, if during the acquisition and permitting process, a property owner, the Department, or other regulatory agency requires tree trimming/topping, the CAA will take that approach. However, FAA and CAA prefer selective tree removal as the recommend approach.

Comment (Second Bullet):

Appendix B contains correspondence letters to affected parties, including a generic letter addressed to "Property Owner". How did FAA/CAA determine who would and would not receive such notification related to the project? What is the process for negotiating access and easements with property owners and what method will be used when conducting appraisals?

Response: *All property owners with potential obstructions or adjacent to properties with potential obstructions were notified of this project by mail in June 2015 prior to any fieldwork or site visits.*

In regards to acquiring avigation easements the FAA is required to follow federal guidelines in Advisory Circular 150/5100-17: "Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects", November 7, 2005.

Prior to any tree removal, at least two appraisals are required to determine the effect of the easement on the market value of the property. As a federal project, the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 must be followed.

Comment (Third Bullet):

The EIE is unclear about the full scope of the proposed removals. OPM finds the EIE's descriptions to be confusing, such as the following statement from section 3.1.3 regarding potential removals near Runway 36:

For Runway 36, only a few Threshold Surface obstructions exist (magenta dots); however, in this unique case a portion of the tree obstructions to the Approach Surface (blue dots) are being recommended for removal.

That explanation suggests that a number of approach surface obstructions (blue dots) are being targeted for removal. The accompanying map in appendix A, however, indicates an even broader area is designated for selective tree removal (green hatching). Depending on the number of obstructions (blue dots) and the degree of tree removal in the additional area, this could amount to a large number of tree removals, some of which would directly impact a section of the adjacent Larkin State Park Trail.

Response: *Correct. The Modified Alternative for the Runway 36 end (south end) does recommend removal of trees in areas that don't penetrate the Threshold Surface for this unique circumstance. Ideally the transmission lines would be relocated or buried to improve airport safety; however, if that is not practical in the foreseeable future, tree removal in the along the electric transmission lines will improve visibility. As discussed in the text, this area has been subject to aircraft incidents in the past.*

Comment (Fourth Bullet):

As expressed in OPM's comments for Bradley Airport, OPM had expected a level of mapping that would better enable property owners and others to understand the impacts they should expect now and in the future.

Response: *The text of the EA has been expanded to include the following:*

Section 3.1.2: "In other words, the colored dots (blue and orange) indicate locations of obstructions to the Part 77 surfaces, which would be removed under the Full Obstruction Removal Alternative."

Section 3.1.3: "In other words, the hatching areas (green and yellow) indicate locations of obstructions to the threshold surfaces, which would be removed under the Modified Obstruction Removal Alternative. In some locations for preventative purposes, this alternative also recommends removals to some Part 77 surface penetrations as well."

As stated above, the CAA also intends to measure (survey) the clearing areas, where necessary, during the permitting process in order to employ the most up to date information. Tree top data may become dated with every year of growth, which is also why removal areas identified in the EA include some buffer.

Available GIS data was used during the preparation of this document. However, such information is also quickly dated with respect to vegetation. Furthermore, there is no defined accuracy of the GIS mapping for tree top elevations, thus it cannot be relied on as the only data for obstruction analysis. The photogrammetry employed for most GIS mapping may be intentionally obtained during leaf-off conditions so that the ground and objects are more clearly visible. Unfortunately, leaf-off condition data is unreliable for identifying deciduous tree top elevations. As such, GIS data was used in presentations to property owners and the public, but not for study recommendation.

The CT ECO, GIS data that may be available this year (2017) can certainly be considered for use in the next stage in the process, as well as additional site survey activities as needed.