



Civil Engineering | Land Surveying | Environmental Sciences

Environmental Review Record  
and  
Statutory Checklist

Residence of Breamand Gamberdella  
14 Brazos Road  
East Haven, CT

NEPA Compliance Document  
Prepared Pursuant to 24 CFR Part 58

May 29, 2014

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and  
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## 1.0 Project Description and Location

The State of Connecticut Action Plan for Community Development Block Grant Program Disaster Recovery submitted a Plan to the U.S. Department of Housing and Urban Development (“HUD”) as part of a receipt of \$71,820,000 of federal funding under the Community Development Block Grant - Disaster Recovery (CDBG-DR) Program.

The funding was authorized under The Disaster Relief Appropriations Act of January 29, 2013. The allocation of the Funding to the State is intended to address immediate unmet housing and economic revitalization needs in those counties and jurisdictions that were most severely impacted by Hurricane Sandy.

Pursuant to the National Environmental Policy Act (NEPA), Freeman Companies, LLC has prepared the following environmental documentation for rehabilitation of the property located at 14 Brazos Road in East Haven, Connecticut. We are preparing the environmental documentation in accordance with the HUD regulations 24 CFR Part 58. This project is within Connecticut Department of Housing’s (DOH) Owner Occupied Rehabilitation and Rebuilding (OORR) Program.

The property is a single family residence located at approximately 41.2438 Latitude and -72.8818 Longitude. The building, constructed in 1929, is located on the west side of Brazos Road just north of the intersection with Caroline Road. The property is located within an AE flood plain.

The project will entail the following:

- Raising of the residence 2 feet above base flood elevation (BFE)
- Caulking and painting of joints in bead boards
- Replacement of shed door
- Repairs to enclosed porch
- Repair to front porch
- Reroute and secure cable TV wires

## 2.0 Explanation of Categorical Exclusion

A Categorical Exclusion in accordance with 24 CFR Part 58.35 refers to a category of activities for which no environmental impact statement or environmental assessment and finding of no significant impact under NEPA is required, except in extraordinary circumstances. Because the project involves building rehabilitation and improvements and that the unit density and land use will not change, the project is categorically excluded under 24 CFR 58.35(a)(3)(i).

## 3.0 Statutory Checklist

This project is determined to be Categorically Excluded according to 24 CFR 58.35(a)(3)(i). Projects may be additionally subject to review under related federal laws and authorities as determined by completing a statutory checklist. The following checklist and documentation of the findings of the checklist are incorporated into this Environmental Review Record in compliance with 24 CFR 58.

Tier 1 of a 2-step Tiered Environmental Review has already been conducted by DOH, and this Statutory Checklist shall be considered Tier 2.

The Statutory Checklist indicates whether the activity does or does not affect the resources under consideration. Status "A" indicates that the project does not require formal consultation with an outside agency and does not affect the resource in question. Status "B" indicates that the activity requires formal compliance consultation with the oversight agency or affects the resource. The documents and/or information sources used in making the determination are listed in the checklist. A compliance determination is provided following the checklist.

The checklist is included as Appendix A.

#### 4.0 Agency Consultation and Mitigation Measures Required

Based on the completion of the checklist, the following Agencies were consulted and inspections performed.

##### 4.1 Department of Economic and Community Development - State Historic Preservation Office

The State Historic Preservation Office (SHPO) is responsible for overseeing the governmental program of historic preservation for Connecticut's citizens. SHPO administers a range of federal and state programs that identify, register and protect the buildings, sites, structures, districts and objects that comprise Connecticut's cultural heritage.

In accordance with 24 CFR 58.5(a) Historic Properties, since the property, due to its age, may be eligible for listing on the National Register of Historical Places, a request for a review of the status of the site relative to historic or cultural resources will be submitted directly by the Connecticut Department of Housing.

##### 4.2 Town of East Haven - Engineering Department

The Town of East Haven's Engineering Department was consulted in regards to inland wetlands, coastal zone management and local zoning approvals. According to Mr. Jerry Tramontaro, a coastal area management review would be required for the project. In addition approvals from inland wetlands as well as local planning and zoning may also be required.

##### 4.3 Lead

A lead inspection was performed at the property by Fuss & O'Neill on April 18, 2014. Based on the inspection the following building components were determined to contain concentrations of lead greater than 1.0 milligrams of lead per square centimeter of paint:

- Wood ceiling - enclosed porch - room 1
- Wood wall, siding - enclosed porch - room 1
- Wood window components - enclosed porch - room 1
- Wood door outer trim - enclosed porch - room 1
- Wood crown molding - enclosed porch - room 1
- Wood walls - bathroom - room 6
- Wood crown molding - bathroom - room 6
- Window sill/window trim - bathroom - room 6
- Wood door components - bathroom - room 6
- Wood walls - kitchen - room 7
- Window sill/window trim - kitchen - room 7
- Wood cabinet components - kitchen - room 7, d side

- Wood door trim/jamb - kitchen - room 7
- Wood window trim/sash - rear entry vestibule - room 8
- Wood door trim/jamb - rear entry vestibule - room 8
- Exterior wood siding
- Exterior metal window trim
- Wood walls - shed
- Wood door - shed Sheetrock ceilings - side porch - room 1

Rehabilitation/renovation/repair activities that disturb any of these areas will be subject to the requirements of 40 CFR 745.80 through 745.92 (EPA's Lead Renovation, Repair and Painting Rule). If these components are to be disposed during rehabilitation then a Toxicity Characteristic Leaching Procedure (TCLP) sample of the demolition waste stream should be collected in order to determine disposal requirements.

#### 4.4 Asbestos

An asbestos inspection was performed at the property by Fuss & O'Neill on April 18, 2014. Based on this limited inspection targeting building components to be impacted by renovation activities, no visible accessible suspect asbestos-containing materials were identified and no bulk sampling was performed.

Any suspect material encountered during renovation/demolition that is not identified in this report as being non-asbestos containing material, should be assumed to be asbestos containing material unless sample results prove otherwise.

#### 4.5 Radon

From April 18, 2014 through April 21, 2014, Fuss & O'Neill conducted radon testing at the residence utilizing passive radon detection canisters for at least 48 hours but no longer than 96 hours. During the course of the assessment, four samples, including one duplicate and one blank, were placed within the residence. The sample collected in the livable space on the first floor (kitchen) contained a radon concentration of 0.1 pCi/L; which was below the EPA recommended action guideline of 4.0 pCi/L.

#### 4.6 Mold

On April 18, 2014, Fuss & O'Neill performed a visual assessment for the presence of suspect mold and water intrusion. Based on the findings of the assessment, no visible signs of mold or water intrusion were observed.

#### 5.0 Determination

For Categorically Excluded actions pursuant to §58.35(a), the project cannot convert to "Exempt" since one or more authority requires compliance, including but not limited to consultation with or approval from an oversight agency, performance of a study or analysis, completion of remediation or mitigation measure, or obtaining of license or permit.

## 6.0 References

Environmental Justice Maps, CTDEEP, accessed at

[http://www.ct.gov/deep/lib/deep/environmental\\_justice/maps/east\\_haven.pdf](http://www.ct.gov/deep/lib/deep/environmental_justice/maps/east_haven.pdf)

Endangered Species Maps, CTDEEP, accessed at

<http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp?nddbsel=44>

Environmental Data Resource Report, *EDR Radius Map with GeoCheck*, March 25, 2014

Environmental Data Resource Report, *NEPACheck*, March 25, 2014

Flood Insurance Rate Map, Map Number 09009C0576J

Google Earth, accessed on April 1, 2014

Sole Source Aquifer Map, EPA, accessed at EPA Region 1

[http://www.epa.gov/region1/eco/drinkwater/pc\\_solesource\\_aquifer.html](http://www.epa.gov/region1/eco/drinkwater/pc_solesource_aquifer.html)

Town of East Haven Assessor Card, accessed at <http://www.equalitycama.com>

Town of East Haven Building Department

Town of East Haven Coastal Area Management Program

Zoning Regulations of the Town of East Haven

## 7.0 Summary of Preparer Qualifications

Mr. Charles D. Brink possesses over 20 years of experience performing and leading environmental assessment and investigation projects. He has overseen numerous hazardous material investigations and performed dozens of Phase I Environmental Site Assessments. To further his knowledge base, he has also been trained in the investigation of mold, PCBs in building materials as well as possessing experience with the management of an asbestos laboratory analyzing both bulk and air monitoring samples for asbestos.

**Appendix A**  
**Statutory Checklist**

## Statutory Checklist for Compliance with 24 CFR §58.5 – NEPA Related Federal Laws and Authorities

(Must be completed for each individual addressed included under overall project description)

Use this worksheet for projects that are Categorically Excluded Subject to 24 CFR §58.5 listed at 24 CFR §58.35(a) and for projects that require an Environmental Assessment.

Project Name: Property of Breamand Gamberdella – 14 Brazos Road, East Haven

ERR FILE # Application Number 1665

**Definitions:** **A:** The project is in compliance.

**B:** The project requires an additional compliance step or action.

Statute, Authority, Executive Order Cited at 24 CFR §58.5	A	B	COMPLIANCE FINDING	SOURCE DOCUMENTATION
1. 58.5(a) Historic Properties [36 CFR 800]	A		No adverse effect on state cultural resources	September 11, 2014 review letter from SHPO
2. 58.5(b)(1) Floodplain Management [24 CFR 55, Executive Order 11988]		B	DOH has conducted 8-step analysis. Site in AE flood plain. Mitigation will include rising of existing building 2-feet above BFE. Mitigation activities to be included in construction scope of work.	NFIP FIRM Map 09009C0557J  A copy of the map with project location depicted is attached.
3. 58.5(b)(2) Wetland Protection [24 CFR 55, Executive Order 11990]		B	DOH has conducted 8-step analysis. Site in AE flood plain, but not within wetland. Mitigation will include rising of existing building 2-feet above BFE. Mitigation activities to be included in construction scope of work. Obtaining local wetland approvals, if necessary, will be included within construction Scope of Work.	Site is not located within a wetland. USGS Wetland map, EDR NEPA Check report and EDR Radius Map
4. 58.5(c) Coastal Zone Management [Coastal Zone Management Act sections 307(c) & (d)]		B	Project is located within Coastal Management Zone. Coastal Area Management review will be required. Review to be conducted as part of construction scope of work. No construction will be conducted until local approval is obtained.	Town of East Haven Coastal Area Management Program.  <a href="http://cteco.uconn.edu/map_catalog/maps/town/Coastal_Boundary/cstlbnd_EAST_HAVEN.pdf">http://cteco.uconn.edu/map_catalog/maps/town/Coastal_Boundary/cstlbnd_EAST_HAVEN.pdf</a>  A copy of the map depicting the location of the property is attached.

5. 58.5(d) Sole Source Aquifers [40 CFR 149]	A		The property is not located within a sole source aquifer area. Site utilizes municipal sewer and water.	EPA Region 1 <a href="http://www.epa.gov/region1/co/drinkwater/pc_solesource_aquifer.html">http://www.epa.gov/region1/co/drinkwater/pc_solesource_aquifer.html</a>  A copy of the GNHWPCA service area map with project location depicted is attached
6. 58.5(e) Endangered Species [50 CFR 402]	A		Although the project location is located within a Natural Diversity area, the project location does not contain waterfront property with a sandy beach.	<a href="http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp?nddbssel=44">http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp?nddbssel=44</a> A copy of the map with project location depicted is attached.
7. 58.5(f) Wild and Scenic Rivers [36 CFR 297]	A		Project location is not within one mile of Eight Mile River (only designated wild and scenic river within program area)	Mapping obtained from <a href="http://www.rivers.gov/maps/conus.php">http://www.rivers.gov/maps/conus.php</a>
8. 58.5(g) Air Quality [40 CFR parts 6, 51,61, 93]	A		Project on existing developed site and should not substantially affect the CT SIP due to the implementation of standard BMPs. Project consists of residential rehabilitation with no anticipated quantifiable increase in air pollution.	<a href="http://www.epa.gov/region1/topics/air/sips/sips_ct.html">http://www.epa.gov/region1/topics/air/sips/sips_ct.html</a>
9. 58.5(h) Farmland Protection [7 CFR 658]	A		Project does not include land conversion, new construction or site clearance. Property does not include prime or unique farmland.	<a href="http://websoilsurvey.sc.egov.usda.gov">http://websoilsurvey.sc.egov.usda.gov</a>
10. 58.5(i)(1) Noise Control and Abatement [24 CFR 51B]	A		Project is not new construction or conversion and existing usage of the building will not change. Project is not located within the 65 decibel zone of Tweed Airport.	Tweed New Haven Airport Master Plan
11. 58.5 (i) (1) Explosive and Flammable Operations [24 CFR 51C]	A		Mitigation efforts will not result in an increase to residential density of the property	Rehabilitation work that does not alter the number dwelling units or a change of land use is not subject to Acceptable Separation Distance (ASD) requirements for HUD
12. 58.5(i)(1) Airport Hazards (Runway Clear Zones and Clear Zones/Accident Potential Zones) [24 CFR 51D]	A		Repairs to the building will not result in an increase to residential density of the property nor is the property located within an airport clear zone.	Tweed-New Haven Airport Runway Protection Zone maps are attached
13. 58.5(i)(2)(i-iv) Contamination and Toxic Substances [24 CFR 58.5(i)(2)]	A		The identified potential sources do not pose a hazard that will restrict the intended use of the property	Opinion of preparer who is a qualified environmental professional. Source documentation used as part of the determination is attached.

14. 58.5(j) Environmental Justice [Executive Order 12898]	A		The project is not located in predominantly minority and low income census block area according to EJ Mapping. The project will not create high and adverse human health and environmental effects.	<a href="http://www.ct.gov/deep/lib/deep/environmental_justice/map/east_haven.pdf">http://www.ct.gov/deep/lib/deep/environmental_justice/map/east_haven.pdf</a> A copy of the map depicting the site location is attached
15 A. Flood Insurance [58.6(a) & (b)]		B	Per federal regulations and OORR program guidelines the homeowner will need to provide proof of flood insurance policy prior to construction. Homeowners are required to maintain flood insurance for not less than 5 years from the date of assistance.	Community Development Block Grant – Disaster Recovery (CDBG-DR) Owner Occupied Rehabilitation and Rebuilding Program guideline requirements
15 B. Coastal Barriers [58.6(c)]	A		Town of East Haven does not contain any coastal barrier resources	Connecticut Map of Coastal Barrier Resources System. A copy of the map depicting the site location is attached.
16. A Solid Waste Disposal [42 U.S.C. S3251 et seq.] and [42 U.S.C. 6901-6987 eq seq.]	A		Activities are limited to pre storm building footprint. Town of East Haven provides weekly curbside pickup of refuse for all 1 to 3 family homes	<a href="http://www.townofeasthavenct.org/public_refuse.shtml">http://www.townofeasthavenct.org/public_refuse.shtml</a>
16 B. Fish and Wildlife [U.S.C. 661-666c]	A		Project will not involve the impounding, diverting, channelizing or modification of any stream or body of water	Mitigation information obtained from Initial property Inspection report
16 C. Lead-Based Paint [24 CFR Part 35] and [40 CFR 745.80 Subpart E]		B	Lead based pain was identified at the property. renovation activates that disturb any of these areas will be subject to the requirements of 40 CFR 745.80 through 745.92	Limited Hazardous Materials Inspection Report. A copy of the report is attached.
16 D. Asbestos	A		Asbestos containing material was not identified at the property	Limited Hazardous Materials Inspection Report. A copy of the report is attached.
16 E. Radon [50.3 (i) 1]	A		Radon was not identified within living spaces at concentration exceeding EPA recommended guidelines	Limited Hazardous Materials Inspection Report. A copy of the report is attached.
16 F. Mold	A		No signs of water damage or mold was identified during the inspection	Limited Hazardous Materials Inspection Report. A copy of the report is attached.
Other: State or Local 17 A. Flood Management Certification [CGS 25-68]	A		General Permitting for program in development with DEEP	General Permit for CDBG-DR Program activities with CTDEEP in development
17 B. Structures, Dredging & Fill Act [CGS 22a-359 through 22a-363f]	A		Project is not located waterward of coastal jurisdiction line	Office of Long Island Sound Programs Coastal Jurisdiction Line Elevations

17 C. Tidal Wetlands Act [CGS 22a-28 through 22a-35]		B	Project is not located within a tidal wetland. Obtaining local wetland approvals, if necessary, will be included within construction Scope of Work.	USGS Wetland map, EDR NEPA Check report and EDR Radius Map
17 D. Local inland wetlands/watercourses [CGS 22a-42]		B	Project is not located within an inland wetland. Obtaining local wetland approvals, if necessary, will be included within construction Scope of Work.	Town of East Haven inland wetlands areas do not differ from DEEP identified wetlands
17 E. Various Municipal Zoning Approvals		B	Obtaining any local zoning approvals to conduct mitigation efforts will be included within the construction scope of work	Zoning Regulations of the town of east haven

**DETERMINATION:**

- Box "A" has been checked for all authorities.** For Categorically Excluded actions pursuant to §58.35(a) [Does not apply to EA or EIS level of review which can never convert to Exempt], the project can convert to Exempt, per §58.34(a) (12), since the project does not require any compliance measures (e.g., consultation, mitigation, permit or approval) with respect to any law or authority cited at §58.5. The project is now made Exempt and **funds may be drawn down**; OR
- Box "B" has been checked for one or more authority.** For Categorically Excluded actions pursuant to §58.35(a), the project cannot convert to Exempt since one or more authority requires compliance, including but not limited to consultation with or approval from an oversight agency, performance of a study or analysis, completion of remediation or mitigation measure, or obtaining of license or permit. **Complete pertinent compliance requirement(s), publish NOI/RROF, request release of funds (HUD-7105.15), and obtain HUD's Authority to Use Grant Funds (HUD-7015.16) per §58.70 and §58.71 before committing funds; OR**
- This project is not a Categorically Excluded action pursuant to §58.35(a), or may result in a significant environmental impact to the environment, and requires preparation of an Environmental Assessment (EA). Prepare the EA according to 24 CFR Part 58 Subpart E.

**MITIGATION MEASURES AND CONDITIONS FOR PROJECT APPROVAL:** *(If Box B is checked, provide details regarding further consultation, mitigation, permit requirements or approvals required to be incorporated into public notices and project requirements such as contracts, grants, loan conditions, etc. as described in the Statutory Worksheet). Ensure required measures are included in 7015.15 Project Description Section.*

PREPARER:



\_\_\_\_\_  
Preparer's Signature

Charles D. Brink  
Preparer's Name (printed)

5/29/2014 (revised)

\_\_\_\_\_  
Date

Manager Environmental Services  
Title (printed)

AUTHORIZED RESPONSIBLE ENTITY OFFICIAL:

\_\_\_\_\_  
Authorized Responsible Entity Signature

Hermia Delaire  
Authorized Responsible Entity Name (printed)

\_\_\_\_\_  
Date

CDBG-DR Program Manager  
Title (printed)

# Worksheet for Preparing 24 CFR §58.5 Statutory Checklist

[Attach to Statutory Checklist]

## 1. §58.5(a) Historical Properties [36 CFR Part 800]

### Historic Properties

- a. Does the project include the type of activity that would have the potential to affect historic properties such as acquisition, demolition, disposition, ground disturbance, new construction or rehabilitation?  
 Yes  No

**If Yes**, continue.

**If No**, the project is not the type of activity that has the potential to affect historic properties. Compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- b. Do the RE and State Historic Preservation Office (SHPO) have a Programmatic Agreement (PA) that does not require consultation for this type of activity?  
 Yes  No

**If Yes**, document compliance with the PA. Compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

**If No**, continue.

- c. Is the project located within or directly adjacent to a historic district?  
 Yes  No

- d. Is the structure or surrounding structures listed on or eligible for listing on the National Register of Historic Places (e.g. greater than 45 years old)?  
 Yes  No

- e. Were any properties of historical, architectural, religious or cultural significance identified in the project's Area of Potential Effect (APE)?  
 Yes  No

**If Yes to any of the questions above**, continue.

**If No to all of the questions above**, the project will not affect historic properties. A concurrence from the SHPO that "no historic properties will be affected" is required. Compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- f. Have you consulted with the SHPO to determine whether the project will have "No Adverse Effect on Historic Properties?"  
 Yes  No

**If Yes**, continue.

**If No**, consultation with the SHPO is required.

- g.** Does the SHPO concurrence letter received for this project require mitigation or have conditions?  
 Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- h.** Have the SHPO and RE agreed on required mitigation or conditions?  
 Yes  No

**If Yes**, include mitigation requirements and/or conditions from the SHPO in the mitigation section of the Statutory Checklist. Mark box “B” on the Statutory Checklist for this authority.

**If No**, continue with consultation until resolved.

**Historic properties of religious and cultural significance to tribes and Native Hawaiian organizations**

- i.** Does the project include the types of activities such as those listed below that have the potential to affect historic properties of religious and cultural significance to tribes?
- Ground disturbance (digging);
  - New construction in undeveloped natural areas;
  - Incongruent visual changes – impairment of the vista or viewshed from an observation point in the natural landscape;
  - Incongruent audible changes – increase in noise levels above an acceptable standard in areas known for their quiet, contemplative experience;
  - Incongruent atmospheric changes – introduction of lights that create skyglow in an area with a dark night sky;
  - Work on a building with significant tribal association;
  - Transfer, lease or sale of a historic property of religious and cultural significance.
- Yes  No

**If Yes**, continue.

**If No**, tribal consultation is not required.

- j.** Does HUD’s Tribal Directory Assessment Tool indicate that tribes have an interest in the location where the project is sited?  
(<http://egis.hud.gov/tdat/Tribal.aspx>)

Yes  No

**If Yes**, contact federally recognized tribe(s) and invite consultation. Continue.

**If No**, document the result in the ERR. Tribal consultation is not required.

**k.** Did the tribe(s) respond that they want to be a consulting party?

Yes  No

**If Yes,** continue.

**If No,** (no response within 30 days or responded that they do not wish to consult), document response or lack of response in ERR. Further consultation is not required.

**l.** After consulting with the tribe(s) and discussing the project, were any properties of religious or cultural significance to the tribe(s) identified in the project's APE?

Yes  No

**If Yes,** continue.

**If No,** notify tribe(s) and other consulting parties of your finding of "No Historic Properties Affected." Tribe(s) has 30 days to object to a finding.

**m.** After consulting with the tribe(s), will the project have an adverse effect on properties of religious or cultural significance to the tribe(s)?

Yes  No

**If Yes,** consult with tribe(s) and other consulting parties to resolve adverse effects, including considering alternatives and mitigation measures that would avoid or minimize adverse effects.

**If No,** notify tribe(s) and other consulting parties of your finding of "No Adverse Effects." Tribe(s) has 30 days to object to a finding.

**n.** Were any objections to a finding received from a consulting tribe?

Yes  No

**If Yes,** continue with consultation until resolved.

**If No,** consultation is complete.

Comments:

Cite and attach source documentation: (Correspondence with SHPO/THPO. How determination of "no potential to cause effects" to historic properties was made.)

Information Resources:

National Register of Historic Places:

<http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>

National Conference of State Historic Preservation Officers:

<http://ncshpo.org/>

Map of Currently Recognized THPO's:

<http://www.nathpo.org/map.html>

Section 106 Agreements Database:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/section106](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/section106)

**2. §58.5(b) (1) Floodplain Management [24 CFR Part 55]**

- a.** Does the project involved minor repairs or improvements on one to four family properties that do not meet the threshold for “substantial improvement” of §55.2(b)(8), i.e., the cost does not equal or exceed 50% of the market value of the structure before improvement or repair started, before damage occurred.

Yes  No

**If Yes**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

**If No**, continue.

- b.** Is the project located within (or have an impact on) a 100 year floodplain (Zone A) or Coastal High Hazard (Zone V) identified by FEMA maps?

Yes  No

- c.** Does the project involve a “critical action,” per §55.2(b) (2) (i), located within a 500 year floodplain (Zone B) identified by FEMA maps?

Yes  No

**If Yes to (b) or (c)**, follow HUD’s Floodplain Management Regulations 8-Step decision-making process of §55.20 to comply with 24 CFR Part 55. The 8-Step decision-making process must show that there are no practicable alternatives to locating the project in the floodplain, and if there are no alternatives, define measures to mitigate impacts to floodplains and location of the project in the floodplain. Completion of the 8-Step decision-making process must be completed before the completion of an EA per §55.10(a). See Attachment 2 for an example of the 8-Step decision-making process. The 8-step decision-making process must be included in the ERR and summarized in Part 55 and Part 58 public notices, as well as NOI/RROF and FONSI notices. Mark box “B” on the Statutory Checklist for this authority.

**If No to (b) and (c)**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- d.** Does the project involve a critical action in a coastal high hazard area or a floodway?

Yes  No

If, Yes, HUD assistance may not be used for this project.

- e.** Does the project involve a non-critical action which is not a functionally dependent use that is located in a floodway?

Yes  No

If Yes, HUD assistance may not be used for this project

- f.** Does the project involve a non-critical action which is not a functionally dependent use that is located in a coastal high hazard area?

Yes  No

If Yes, project is allowed **only** if it is designed for a location in a coastal high hazard area **and** is processed under Section 55.20. Design requirements must be noted in Statutory Checklist and 8-Step decision-making process.

Comments:

Cite and attach source documentation: (FEMA flood map used to make this finding with the project location marked on the map. Include the community name, map panel number and date of map. As applicable, §55.20 8-Step decision-making process analysis. If FEMA has not published the appropriate flood map, the RE must make a finding based on best available data.)

For more information see:

FEMA Map Service Center:

<http://www.store.msc.fema.gov>

### 3. §58.5(b) (2) Wetlands Protection (E.O. 11990)

- a. Does the project involve new construction, land use conversion, major rehabilitation, or substantial improvements?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b. Is the project within or adjacent to or will it affect wetlands, marshes, wet meadows, mud flats or natural ponds per field observation and maps issued by the US Fish & Wildlife Service (USFWS) or U.S. Army Corps of Engineers (Corps)?

Yes  No

- c. Are there drainage ways, streams, rivers, or coastlines on or near the site?

Yes  No

- d. Are there ponds, marshes, bogs, swamps or other wetlands on or near the site?

Yes  No

- e. Does the project involve new construction and/or filling located within a wetland designated on a USFWS National Wetlands Inventory map?

Yes  No

**If Yes to any of b – e above**, comply with wetlands decision-making process of 24 CFR §55.20. (Use proposed Part 55 published in the Federal Register January 2012 for wetland procedures). Continue.

**If No to all of b - e above**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- f. Will the project require a permit from the Corps under Section 404 of the Clean Water Act and/or will USFWS require wetland mitigation?

Yes  No

**If Yes**, ensure this is noted in Part 55 and Part 58 public notices. Include all mitigation measures and permit requirements in the mitigation section of the Statutory Checklist. Compliance with this section is complete. Mark box “B” on the Statutory Checklist for this authority.

**If No**, compliance with this section is complete. Mark box “B” on the Statutory Checklist for this authority.

Comments:

Cite and attach source documentation: (NWI Map with project location noted in reference to wetlands. §55.20 8/5-Step decision-making process analysis for new construction and/or filling, and any permits received.)

For more information see:

USFWS National Wetlands Inventory – Geospatial Wetlands Digital Data:

<http://www.FWS.gov/wetlands/data/index.html>

Recognizing wetlands:

[http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/techbio/rw\\_bro.pdf](http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/techbio/rw_bro.pdf)

#### 4. §58.5(c) Coastal Zone Management [Coastal Zone Management Act of 1972, Sections 307(c) & (d)]

- a. Does the project involve new construction, land use conversion, major rehabilitation, or substantial improvements?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b. Is the project located within a Coastal Zone as defined in your state Coastal Zone Management (CZM) Plan?

Yes  No

**If Yes**, the State CZM Agency must make a finding that the project is consistent with the approved State CZM Plan. Mark box “B” on the Statutory Checklist for this authority.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

Comments:

Cite and attach source documentation: (Map showing project in relation to the nearest Coastal Zone Management area. If applicable, State’s findings.)

For additional information see:

States and Territories Working with NOAA on Ocean and Coastal Zone Management:

<http://coastalmanagement.noaa.gov/mystate/welcome.html>

Texas Coastal Zone Management Program:

<http://www.glo.texas.gov/what-we-do/caring-for-the-coast/grants-funding/cmp/index.html>

Texas Coastal Zone Boundary:

[http://www.glo.texas.gov/what-we-do/caring-for-the-coast/\\_documents/landing-page-folder/CoastalBoundaryMap.pdf](http://www.glo.texas.gov/what-we-do/caring-for-the-coast/_documents/landing-page-folder/CoastalBoundaryMap.pdf)

Louisiana Office of Coastal Management:

<http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=85&ngid=5>

Louisiana Coastal Zone Boundary:

<http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=88>

## 5. §58.5(d). Sole Source Aquifers [40 CFR Part 149]

- a. Does the project involve new construction or land use conversion?  
 Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b. Is the project located within a U.S. Environmental Protection Agency (EPA)-designated sole source aquifer watershed area per EPA Ground Water Office?  
 Yes  No

**If Yes**, consult with the Water Management Division of EPA to design mitigation measures to avoid contaminating the aquifer and implement appropriate mitigation measures. Include mitigation measures in mitigation section of Statutory Checklist. Mark box “B” on the Statutory Checklist for this authority.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

Comments:

Cite and attach source documentation: (Map showing project in relation to the nearest Sole Source Aquifer.)

For more information see:

Region 6 Sole Source Aquifers: <http://www.epa.gov/region6/water/swp/ssa/maps.htm>

## 6. §58.5(e) Endangered Species [50 CFR Part 402]

- a. Does the project involve the type of activities that are likely to have “no effect on endangered species, such as:
- Demolition and construction or placement of a single family residence within a developed lot, and/or any loans or mortgages affiliated with such construction, demolition or placement provided they are not within 750 feet of habitat for federally-listed species or 300 feet of mapped wetlands, wildlife refuges, fish hatcheries, wildlife management areas, or related significant fish and wildlife resources?

Yes  No

• Rehabilitation or renovation activities associated with existing structures (e.g., houses, buildings), including additional structures attached to or associated with the primary structure, and/or any loans or mortgages affiliated with such rehabilitation or renovation?

Yes  No

• Acquisition of existing structures (e.g., houses, buildings), including additional structures attached to or associated with the primary structure, and/or any loans or mortgages affiliated with such acquisition.

Yes  No

• Purchase and placement of playground equipment within existing parks?

Yes  No

• Resurfacing, repairing, or maintaining existing streets, sidewalks, curbs, trails, parking lots and/or any other existing paved surfaces where additional ground disturbance, outside of the existing surface is not necessary?

Yes  No

**If Yes to any of the above**, the project is likely to have “No Effect” on federally protected species and critical habitat. Informal consultation with the US Fish and Wildlife Service or the National Marine Fisheries Service (Services) is not necessary. The RE is required to make this finding and include a memorandum to the file supporting the finding (note that this finding should be made by the RE, and not by third party contractors and non-RE grant recipients). Compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

**If No to all of the above**, continue.

**b.** Has the US Fish and Wildlife Service or the National Marine Fisheries Services identified listed species or designated critical habitat in the county where the project is located?

Yes  No

**If Yes**, continue.

**If No**, the project is likely to have “No Effect” on federally protected species and critical habitat. Informal consultation with the Services is not necessary. The RE is required to make this finding and include a memorandum to the file supporting the finding (note that this finding should be made by the RE, and not by third party contractors). Compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

**c.** Is the project located within 750 feet of habitat for federally-listed species or 300 feet of mapped wetlands, wildlife refuges, fish hatcheries, wildlife management areas, or related significant fish and wildlife resources?

Yes  No

If Yes, conduct special studies by a qualified professional to determine whether the project may affect the species or habitat to support a May Effect finding.

If No, continue below

- d.** Does the project constitute a major construction activity (a major Federal action that modifies the physical environment and would normally require the preparation of an EIS)?

Yes  No

**If Yes,** formal consultation with the Services is required in accordance with procedural regulations contained in 50 CFR Part 402. Mark box “B” on the Statutory Checklist for this authority.

**If No,** continue.

- e.** If federally protected species or critical habitat have been identified within the project area, has a special study been conducted by a qualified professional to determine the effects of the project on each species and critical habitat?

Yes  No

**If Yes,** continue.

**If No,** a special study should be conducted to determine the effects of the project on federally protected species and critical habitat. Continue.

- f.** Has the RE made a determination based on professional findings that the project is “Not Likely to Adversely Affect” any federally protected (listed or proposed) threatened or endangered species (i.e., plants or animals, fish, or invertebrates), nor adversely modify critical habitats?

Yes  No

**If Yes,** Service’s concurrence with findings is required. Mark box “B” on the Statutory Checklist for this authority.

**If No,** continue.

- g.** Has the RE determined based on professional findings that the project “May Affect” federally protected (listed or proposed) threatened or endangered species (i.e., plants or animals, fish, or invertebrates), or adversely modify critical habitats?

Yes  No

**If Yes,** formal consultation is required with the Services, in accordance with procedural regulations contained in 50 CFR Part 402, which mandates formal consultation in order to preserve the species. Mark box “B” on the Statutory Checklist for this authority.

**If No,** contact your FEO for assistance in determining impacts to federally protected species and critical habitat.

Comments:

Cite and attach source documentation: (Memorandum to the file by the RE supporting the finding of “No Effect.” Concurrence memo from one or both of the Services for a finding of

“Not Likely to Adversely Affect.” Biological Opinion from one or both of the Services for a finding of “May Affect.”)

For additional information see: (The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.* as amended: particularly Section 7 (b) and (c). 50 CFR 402).

USFWS ESA Species Search:

<http://www.FWS.gov/endangered/species/index.html>

NMFS ESA Species Search:

<http://www.nmfs.noaa.gov/pr/species/esa/>

USFWS Critical Habitat Maps:

<http://crithab.FWS.gov/>

NMFS Critical Habitat Maps:

<http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>

Endangered Species Consultation Handbook:

[http://www.nmfs.noaa.gov/pr/pdfs/laws/esa\\_section7\\_handbook.pdf](http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf)

## 7. §58.5(f) Wild and Scenic Rivers [36 CFR Part 297]

- a. Does the project involve new construction, land use conversion, major rehabilitation, or substantial improvements?  
 Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b. Is the project is located within one (1) mile of a designated Wild & Scenic River, or river being studied as a potential component of the Wild & Scenic River system or an inventory river?  
 Yes  No

**If Yes**, determination from the National Park Service (NPS) must be obtained, with a finding that the project will not have a direct and adverse effect on the river nor invade or diminish values associated with such rivers. For NRI Rivers, consultation with NPS is recommended to identify and eliminate direct and adverse effects. Mark box “B” on the Statutory Checklist for this authority.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

Comments:

Cite and attach source documentation: (Maps noting project location and showing proximity to protected rivers. Relevant determinations or results of consultation)

For further information see:

National Park Service:

Designated Rivers <http://www.rivers.gov/rivers/map.php>

Study Rivers <http://www.rivers.gov/rivers/study.php>

National River Inventory (NRI) listed rivers: <http://www.nps.gov/ncrc/programs/rtca/nri/>

**8. §58.5(g) Air Quality [40 CFR Parts 6, 51, 61 and 93]**

- a. Does the project involve demolition or renovation of buildings likely to contain asbestos containing materials?

Yes  No

**If Yes**, ensure the project is in compliance with EPA's Asbestos regulations found at 40 CFR Part 61 (NESHAP) and all State and local regulations. Continue below.

**If No**, continue.

- b. Does the project require an environmental assessment or environmental impact statement?

Yes  No

If Yes, continue.

If No, compliance with CAA State Implementation Plan factor is complete. Mark Box A on the Statutory checklist.

- c. Does the project involve five or more dwelling units, acquisition of undeveloped land, a change of land use, demolition, major rehabilitation, or new construction?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- d. Is the project located in a Non-Attainment area?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- e. Is the project consistent with the air quality State Implementation Plan (SIP)?

Yes  No

If **Yes**, obtain letter of consistency showing that the project is consistent with the SIP. Compliance is complete. Mark box "B" on the Statutory Checklist for this authority.

**If No**, continue.

- f. Has EPA determined that the proposed activity is one that requires a permit under the SIP?

Yes  No

**If Yes**, continue.

**If No**, compliance is complete. Mark box "B" on the Statutory Checklist for this authority.

- g.** Will project exceed any of the *de minimis* emissions levels of all non-attainment and maintenance level pollutants or exceed the screening level established by the state or air quality management district?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box "B" on the Statutory Checklist for this authority. Attach all documents used to make your determination (See Conformity determination thresholds at 40 CFR 93.153(b) Include engineering/construction assessments of emissions during construction and operating phases).

- h.** Can project be brought into compliance through mitigation?

Yes  No

**If Yes**, list mitigation measures required to achieve conformance with SIP in the mitigation section of the Statutory Checklist. Mark box "B" on the Statutory Checklist for this authority.

**If No**, Federal assistance may not be used at this location.

Comments:

Cite and attach source documentation: (Letter of consistency with SIP, assessment of emissions, air permits received, mitigation measures taken, etc.)

For further information see:

The Green Book Nonattainment Areas for Criteria Pollutants:

<http://www.epa.gov/oar/oaqps/greenbk/>

Region 6 Air State Implementation Plans:

<http://www.epa.gov/region6/6pd/air/pd-l/sip.htm>

## **9. §58.5(h) Farmlands Protection [7 CFR Part 658]**

- a.** Does the project involve acquisition of undeveloped land, conversion of undeveloped land, new construction or site clearance?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- b.** Is project located in an area committed (zoned) to urban uses?

Yes  No

**If Yes**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

**If No**, continue.

- c. Does the project site include prime or unique farmland, or other farmland of statewide or local importance as identified by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) (formerly the Soil Conservation Service)?

Yes  No

**If Yes**, request evaluation of land type from the NRCS using Form AD-1006, and consider the resulting rating in deciding whether to approve the proposal, as well as mitigation measures (including measures to prevent adverse effects on adjacent farmlands). Mark box “B” on the Statutory Checklist for this authority. Include mitigation measures in the mitigation section of the Statutory Checklist.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

Comments:

Cite and attach source documentation: (Zoning map with project location noted. Form AD-1006 from NRCS.)

For additional information see:

NRCS Soil Maps:

<http://websoilsurvey.nrcs.usda.gov/app/>

Form AD-1006 and instructions:

[http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1045394.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf)

Farmland Protection Policy Act

[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/alphabetical/fppa/?&cid=nrcs143\\_008275](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/alphabetical/fppa/?&cid=nrcs143_008275)

#### 10. §58.5(i) (1) Noise Abatement and Control [24 CFR Part 51B]

- a. Does the project involve a noise sensitive use such as a residential structure, school, hospital, nursing home, library, etc.?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b. Is the project located within:

- 15 miles of a civilian or military airfield with more than 9,000 carrier operations annually;

Yes  No

- 1000 feet of a major highway or busy road;

Yes  No

- within 3000 feet of a railroad.

Yes  No

**If Yes to any the above**, complete a noise calculation assessment. Use adopted DNL contours if the noise source is an airport. Continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- c. Do noise calculations or airport noise contour maps indicate noise levels above 65dB (outside)?

Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- d. Do noise calculations or airport noise contour maps indicate noise levels above 75dB (outside)?

Yes  No

**If No**, for projects in the normally unacceptable zone (65dB – 75dB), noise attenuation measures are strongly encouraged for rehabilitation and required for new construction to reduce noise levels to below 65dB (outside). Mark box “B” on the Statutory Checklist for this authority. List all attenuation measures in the mitigation section of the Statutory Checklist.

**If Yes**, HUD assistance for the construction of new noise sensitive uses is generally prohibited for projects with unacceptable noise exposure (>75dB). Noise attenuation measures are strongly encouraged for rehabilitation projects with unacceptable noise exposure to reduce noise levels to below 65dB (outside). Mark box “B” on the Statutory Checklist for this authority. List all attenuation measures in the mitigation section of the Statutory Checklist.

Comments:

Cite and attach source documentation: (Maps with project location indicating distance from noise sources. DNL calculations and/or NAG worksheets.)

For more information see:

HUD noise guidebook:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/trainin/g/guidebooks/noise](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/trainin/g/guidebooks/noise)

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/review/noise](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/review/noise)

<http://www.hud.gov/offices/cpd/environment/dnlcalculator.cfm>

<http://www.hud.gov/offices/cpd/environment/mitigation.cfm>

<http://portal.hud.gov/hudstracat/noiseCalcEntry.jsp>

FAA:

[http://www.faa.gov/airports/planning\\_capacity/npas/reports/](http://www.faa.gov/airports/planning_capacity/npas/reports/)

**11. §58.5(i) (1) Explosive and Flammable Operations [24 CFR 51C]**

- a.** Does the project involve development, construction, rehabilitation, modernization or land use conversion of a property intended for residential, institutional, recreational, commercial, or industrial use?  
 Yes  No

**If Yes,** continue.

**If No,** compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b.** Was a field observation performed by a qualified professional which documents there are above ground storage tanks within line of site of the project?  
 Yes  No

- c.** Is the project site within 1 mile of current or planned stationary aboveground storage tanks of more than 100 gallon capacity, containing common liquid industrial fuels OR of any capacity, containing hazardous liquids or gases, that are not liquid industrial fuels?  
 Yes  No

- d.** Are industrial facilities handling explosive or fire-prone materials such as liquid propane, gasoline or other storage tanks adjacent to or visible from the project site?  
 Yes  No

**If Yes to any of b – d above,** use HUD Hazards Guide to calculate an Acceptable Separation Distance to comply with 24 CFR Part 51, Subpart C. Continue.

**If No to all of b – d above,** compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- e.** Is the project located at an Acceptable Separation Distance from any above-ground explosive or flammable fuels or chemicals containers as calculated above?  
 Yes  No

**If Yes,** compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

**If No,** continue.

- f.** Can mitigation measures, such as construction of a barrier of adequate size and strength, reduce the blast overpressure or thermal radiation hazard to protect the project (per 24 CFR §51.205)?  
 Yes  No

**If Yes,** Mark box “B” on the Statutory Checklist for this authority. List all mitigation measures in the mitigation section of the Statutory Checklist.

**If No**, HUD assistance cannot be used for this project.

Comments:

Cite and attach source documentation: (Maps with project location noted showing distance from explosives and flammable operations. ASD calculations/worksheet.)

For additional information see:

HUD Guidance on Siting Projects near Explosive and Flammable Facilities:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/review/explosive](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/review/explosive)

Acceptable Separation Distance Guidebook :

<http://portal.hud.gov/hudportal/documents/huddoc?id=HUD-Guidebook.pdf>

Barrier Design Guidance for HUD Assisted Project Near Hazardous Facilities:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/training/guidebooks/hazfacilities](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/training/guidebooks/hazfacilities)

## **12. §58.5(i) (1) Airport Hazards [24 CFR 51D]**

- a.** Will the project use HUD assistance, subsidy or insurance for construction; land development; community development or redevelopment; substantial modernization and rehabilitation which prolongs the physical or economic life of existing facilities; provide facilities and services which make land available for construction; change the use of a facility; increase the unit density or number of people at the site?  
 Yes  No

If **Yes**, continue.

If **No**, compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- b.** Is the property within 2,500 feet of a civilian airport, the Runway Clear Zone (RCZ)?  
 Yes  No

- c.** Is the project is within 15,000 feet of a military airfield, the Clear Zone (CZ) or Accident Potential Zone (APZ)?  
 Yes  No

If **Yes** to either of the above questions, request a written finding from the airport operator stating whether or not the project is located in a RCZ, CZ or APZ. Continue.

If **No** to both of the above questions, compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- d.** If the project is within 15,000 feet of a military airfield or within 2,500 feet of a civilian airport, did your written confirmation from the airport operator confirm that the project is located in a RCZ, CZ or APZ?  
 Yes  No

If **Yes**, continue.

If **No**, compliance with this section is complete. Mark box "A" on the Statutory Checklist for this authority.

- e.** If the project is located in a military airfield APZ, is the project consistent with the Land Use Compatibility Guidelines for Accident Potential Zones (32 CFR Part 256, DOD Instruction 4165.57).  
 Yes  No

If **Yes**, attach copy of written assurance from airport operator. Mark box "B" on the Statutory Checklist for this authority.

If **No**, HUD funds may not be used for this project.

- f.** If the project is in a RCZ/CZ will the project be frequently used or occupied by people?  
 Yes  No

If **Yes**, HUD funds may not be used for this project.

If **No**, continue.

- g.** If the project will not frequently be used by people, has the airport operator provided a written statement that there are no plans to purchase the land involved with such facilities as part of an RCZ/CZ acquisition program?  
 Yes  No

If **Yes**, attach copy of written assurance from airport operator. Mark box "B" on the Statutory Checklist for this authority.

If **No**, HUD funds may not be used for this project.

Comments:

Cite and attach source documentation: (Map with project location noted showing the distance from civilian airports and/or military airfields. Written confirmation from airport operating stating whether or not project is located in a RCZ, CZ or APZ. Written assurance from airport operator on purchase of property.)

For further information see:

Airport Information: <http://www.airnav.com/airports/>

HUD Airport Hazards Q&A:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/review/qa/airport](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/review/qa/airport)

### 13. §58.5(i) (2) Contamination and Toxic Substances

- a. Is the property located within the search distances of any of the types of environmental contamination sources?

<b>Standard Environmental Record Sources</b>	<b>Approximate Minimum Search Distance (mi)</b>	<b>Yes</b>	<b>No</b>
Federal National Priorities List (NPL)	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal Delisted NPL Site List	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) List	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal CERCLIS No Further Remedial Action Planned (NFRAP) Site List	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal RCRA Correction Action (CORRACTS) Facilities List	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal RCRA Non-CORRACTS Treatment, Storage and Disposal (TSD) Facilities List	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal RCRA Generators List	Property/Adjoining Properties	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal Institutional Control/Engineering Control Registries	Property Only	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federal Emergency Response and Notification System (ERNS) List	Property Only	<input type="checkbox"/>	<input checked="" type="checkbox"/>

State- and Tribal-Equivalent NPL	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State- and Tribal-Equivalent CERCLIS	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State and Tribal Landfill and/or Solid Waste Disposal Site Lists	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State and Tribal Leaking Storage Tank Lists	0.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
State and Tribal Registered Storage Tank Lists	Property/Adjoining Properties	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State and Tribal Institutional Control/Engineering Control Registries	Property Only	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State and Tribal Voluntary Cleanup Sites	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State and Tribal Brownfield Sites	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b. Did a visual inspection of the site show the following?

	Yes	No
Distressed vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vent or Fill Pipes	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Storage Oil Tanks or Questionable Containers	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pits, Ponds or Lagoons	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Stained Soil or Pavement (other than water stains)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pungent, Foul or Noxious Odors	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dumped Material or Soil, Mounds of Dirt, Rubble, Fill, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c. Has the property ever been used for any of the following types of uses?

	Yes	No		Yes	No
Gas Station	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Vehicle Repair Shop	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Car Dealership	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Auto Garage	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Depot	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Commercial Printing Facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Industrial or commercial warehouses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Dry Cleaners	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Photo Developing Laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Hospital	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Junkyard or landfill	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Agricultural/Farming Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tannery	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Livestock Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>

d. Does the project have an underground storage tank other than a residential fuel tank, or known or suspected to be contaminated by toxic chemicals or radioactive materials?

Yes  No

e. Is the project site near an industry disposing of chemicals or hazardous wastes?

Yes  No

**If Yes to any of the above,** a qualified environmental professional must undertake investigations necessary to ensure that the project is free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances such that there is no hazard which could affect the health and safety of occupants or conflict with the intended utilization of the property. Continue.

**If No to all of the above**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- f. Could nearby toxic, hazardous or radioactive substances affect the health and safety of project occupants or conflict with the intended use of the property?  
 Yes or  No

- g. Are there unresolved concerns that could lead to the RE being determined to be a Potentially Responsible Party (PRP)?  
 Yes  No

**If Yes**, continue.

**If No**, provide written documentation from a qualified environmental professional which documents that identified potential sources of contamination does not pose a hazard which would restrict the intended uses of the property or to the occupants.

- h. Was an ASTM Phase I Environmental Site Assessment (ESA) report completed for this project? (Note: HUD regulations do not require an ASTM Phase I ESA report for single family homes of 1-4 units. HUD requires an ASTM Phase I ESA for multifamily (5 or more units) and/or Non-residential properties for environmental review prepared under Part 50.)  
 Yes  No

- i. Did the ASTM Phase I ESA or other documentation uncover any Recognized Environmental Conditions (RECs) or recommend a Phase II, special/specific Phase II, or recommend Phase III environmental site assessments?  
 Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- j. Do ESAs or other documentation conclude that nearby toxic, hazardous or radioactive substances could affect the health and safety of project occupants or conflict with the intended use of the property?  
 Yes or  No

**If Yes**, continue below.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- k. Did any of the ESA reports or other documentation identify the need to mitigate the environmental condition by removing, stabilizing or encapsulating the toxic substances in accordance with the requirements of the appropriate Federal, state or local oversight agency?  
 Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- I. Can all adverse environmental conditions identified in any of the ESAs or other documentation be mitigated?  
 Yes  No

**If Yes**, compliance with this section is complete. List specific remedial actions or mitigations in the mitigation section of the Statutory Checklist, according to the requirements of the appropriate Federal, state, or local oversight agency. Mark box “B” on the Statutory Checklist for this authority.

**If No**, HUD cannot provide assistance for the project at this site.

Comments:

Cite and attach source documentation: (Maps showing project distance to contaminated sites. Phase I (ASTM) Report. All ESAs and mitigation plans performed for this project.)

For additional information see:

HUD Information on Hazardous, Toxic or Radioactive Substances

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/environment/review/hazardous](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/review/hazardous)

NEPAssist: <http://134.67.99.123/nepassist/entry.aspx>

EPA Envirofacts Data:

<http://www.epa.gov/enviro/>

EPA Toxic Release Inventory (TRI):

[http://www.epa.gov/enviro/html/toxic\\_releases.html](http://www.epa.gov/enviro/html/toxic_releases.html)

EPA Maps:

<http://www.epa.gov/emefdata/em4ef.home>

EPA CERCLIS/NPL – Superfund database:

<http://www.epa.gov/superfund/sites/query/basic.htm>

ATSDR “ToxFAQs” summaries about hazardous substances:

<http://www.atsdr.cdc.gov/toxfaqs/index.asp>

Right-To-Know Network: <http://www.rtknet.org/>

#### 14. §58.5(j) Environmental Justice (E.O. 12898)

- a. Is the project located in or designed to serve a predominantly minority and low-income neighborhood?  
 Yes  No

**If Yes**, continue.

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

- b.** Would there be an adverse environmental impact caused by the proposed action, or would the proposed action be subject to an existing adverse environmental impact?  
 Yes  No

**If No**, compliance with this section is complete. Mark box “A” on the Statutory Checklist for this authority.

**If Yes**, perform an Environmental Justice (EJ) analysis using census, geographic and other data to determine if a low-income/minority population is disproportionately impacted. Continue.

- c.** Will the adverse environmental impact of the proposed action disproportionately impact minority and low-income populations relative to the community-at-large?  
 Yes  No

**If Yes**, Mitigation or avoidance of adverse impacts must be considered to the extent practicable; and, public participation processes must involve the affected population(s) in the decision-making process. Continue.

**If No**, compliance with this section is complete. Document the determination of no disproportionate impacts. Mark box “A” on the Statutory Checklist for this authority.

- d.** Has the mitigation plan been approved by the RE and the impacted community?  
 Yes  No

**If Yes**, compliance with this section is complete. Include mitigation plan in the mitigation section of the Statutory Checklist. Mark box “B” on the Statutory Checklist for this authority.

**If No**, Project cannot move forward until EJ issue is mitigated to the satisfactory of the RE and impacted community.

Comments:

Cite and attach source documentation: (Mapping of low-income and minority populations in the vicinity of the project site. EJ analysis. Mitigation Plan.)

For additional information see:

EJ maps & analysis, by location:

<http://www.scorecard.org/community/ej-index.tcl>

EPA’s “EJ View” Tool provides information relevant to EJ assessments:

<http://epamap14.epa.gov/ejmap/entry.html>

Census data and maps also avail-able at:

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

Tract-level data on race & income:

<http://www.ffiec.gov/geocode>

## Appendix B

### Project Location and Vicinity Maps



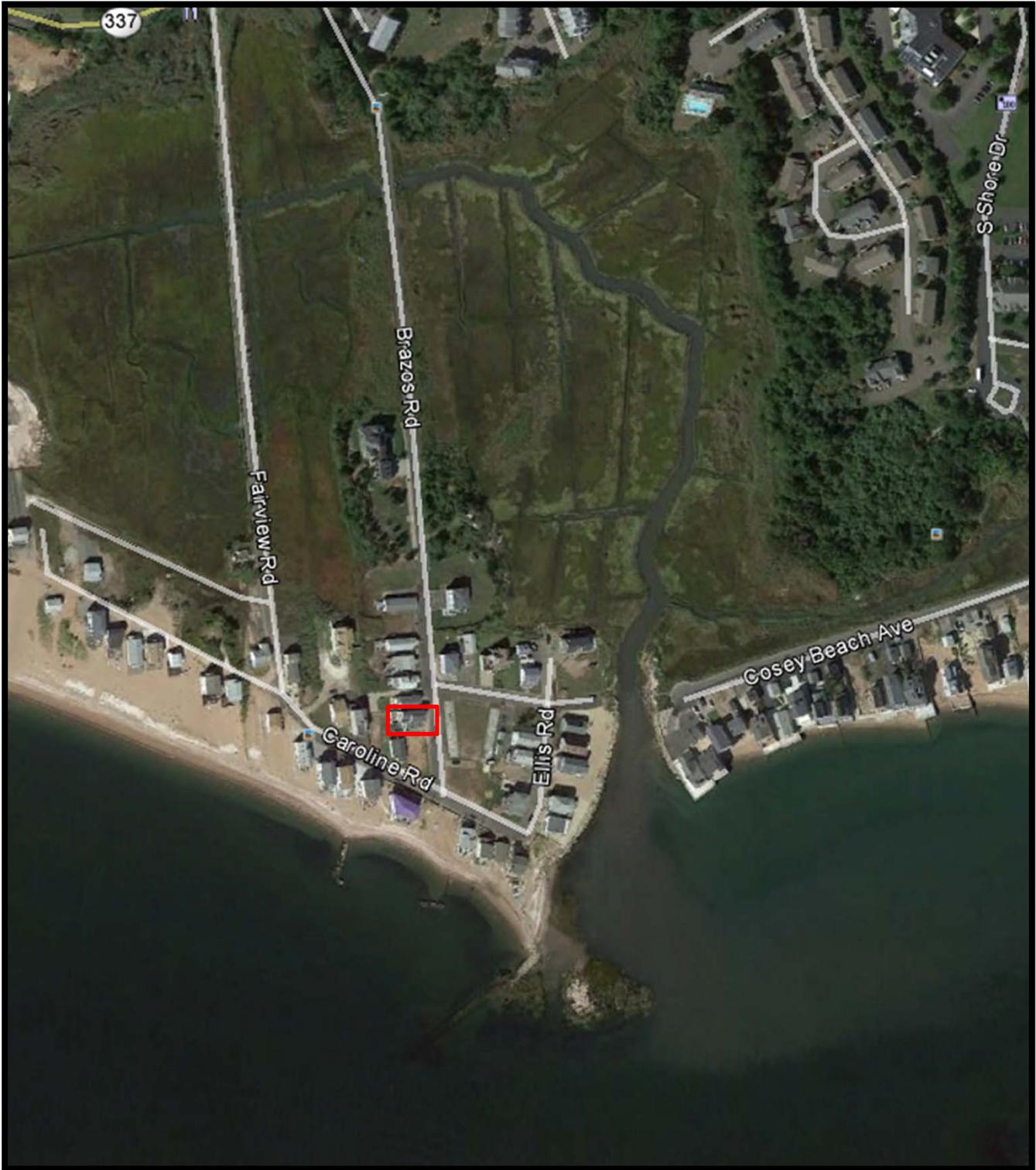
**Prepared For:**  
Residence of Breamand Gamberdella  
14 Brazos Road  
East Haven, CT



Not to Scale

**Figure 1**

**Site Location Plan**



**Prepared For:**  
Residence of Breamand Gamberdella  
14 Brazos Road  
East Haven, CT



Not to Scale

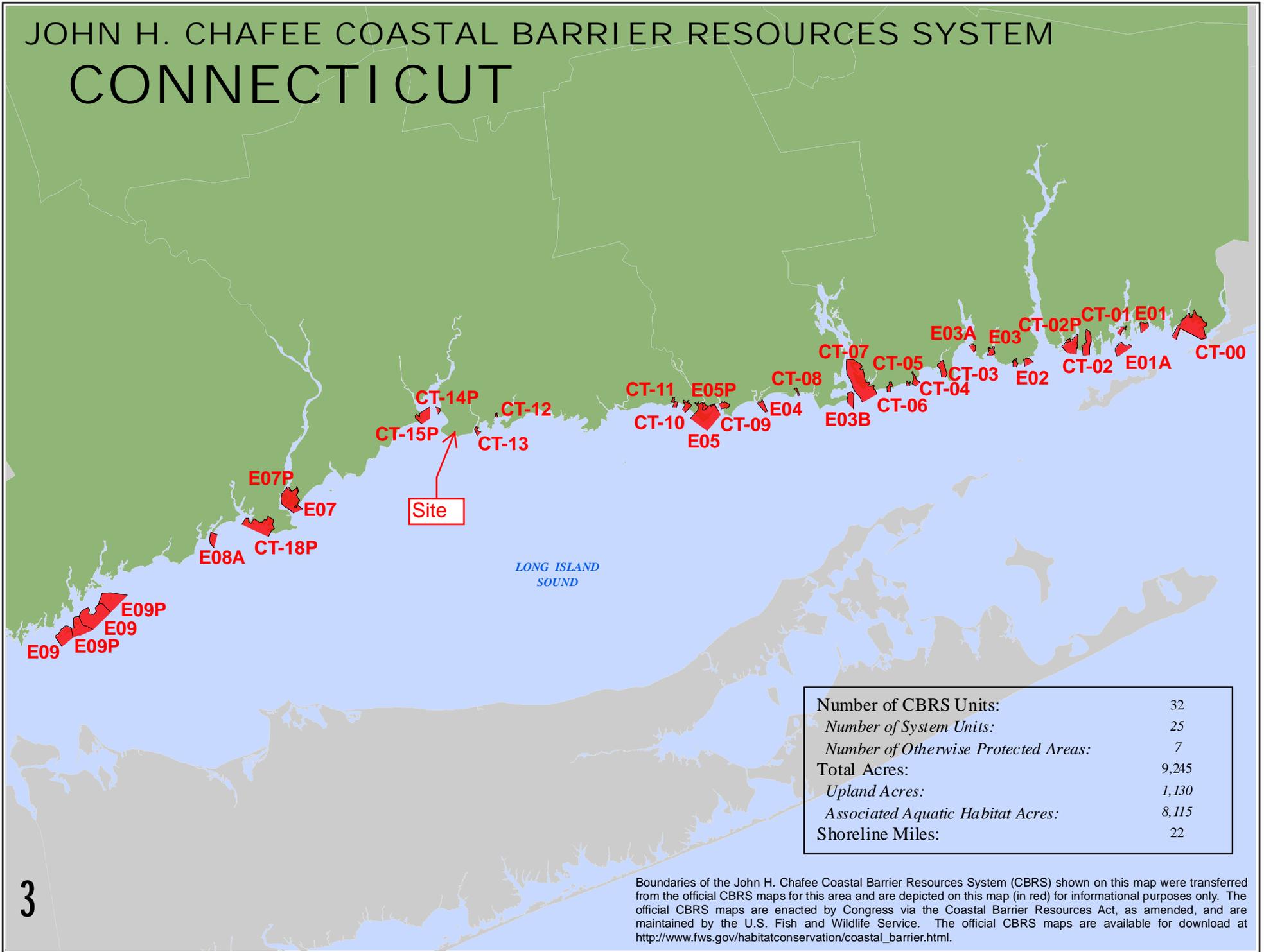
**Figure 2**

**Site Vicinity Map**  
14 Brazos Road  
East Haven, CT

## Appendix C

### Resource Maps and Supporting Documents

# JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM CONNECTICUT



Number of CBRS Units:	32
Number of System Units:	25
Number of Otherwise Protected Areas:	7
Total Acres:	9,245
Upland Acres:	1,130
Associated Aquatic Habitat Acres:	8,115
Shoreline Miles:	22

Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official CBRS maps are available for download at [http://www.fws.gov/habitatconservation/coastal\\_barrier.html](http://www.fws.gov/habitatconservation/coastal_barrier.html).

# COASTAL BOUNDARY EAST HAVEN, CONNECTICUT

## LEGEND

 Coastal Boundary

## EXPLANATION

The coastal boundary map shows the extent of lands and coastal waters as defined by Connecticut General Statute within Connecticut's coastal area. The coastal boundary is a continuous line delineated on the landward side by the interior contour elevation of the one hundred year frequency coastal flood zone, as defined and determined by the National Flood Insurance Act, or a one thousand foot linear setback measured from the mean high water mark in coastal waters, or a one thousand foot linear setback measured from the inland boundary of tidal wetlands, whichever is farthest inland; and shall be delineated on the seaward side by the seaward extent of the jurisdiction of the state.

Any regulated activity conducted within the coastal boundary by a municipal agency (i.e., plans of development, zoning regulations, municipal coastal programs and coastal site plan review (i.e., site plans submitted to zoning commission, subdivision or subdivision plans submitted to planning commission, application for special permit or exception to the zoning or planning commissions or zoning board of appeals, variance submitted to

zoning board of appeals and a referral of a municipal project)) must be conducted in a manner consistent with the requirements of the Connecticut Coastal Management Act (CMA). As the Coastal Boundary is a hybrid of the Coastal Area, all state and federal agency activities must be consistent with the requirements of the CMA. The coastal boundary is a hybrid of the original 1:24,000 version maps prepared by DEP and the revised boundary mapping undertaken by twenty-two coastal towns. This layer therefore does not replace the legal maps and may not be used for legal determinations.

The following twenty-two towns have adopted municipal coastal boundaries: Chester, Clinton, Darien, Deep River, East Haven, Essex, Fairfield, Greenwich, Groton, Guilford, Hamden, Ledyard, Madison, Milford, New Haven, New London, North Haven, Norwalk, Old Lyme, Old Saybrook, Stamford and Waterford. The coastal boundary maps for these towns may be at different scales than the original DEP draft maps and may contain minor adjustments to the boundary.

## DATA SOURCES

**COASTAL BOUNDARY DATA** - The original boundary maps were created in 1979 on stable mylar overlay using the 1:24,000-scale US Geological Survey topographic quadrangle maps (mylar film format). The source for tidal wetland maps were the legal 1:24,000 maps (mylar format) adopted by the Commissioner of DEP and transformed to 1:24,000 mylar-scale maps by the Office of Policy and Management (OPM) using an accurate pantograph. OPM similarly converted FEMA's flood insurance maps (various scales) to a 1:24,000 mylar overlay. The inland extent of coastal waters was plotted on 1:24,000 USGS topographic maps following the procedures and sources described in The Boundary Between Saltwater and Freshwater in Connecticut, December 1978 prepared by the State of Connecticut, Department of Environmental Protection, Coastal Area Management Program.

**BASE MAP DATA** - Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

### RELATED INFORMATION

This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).

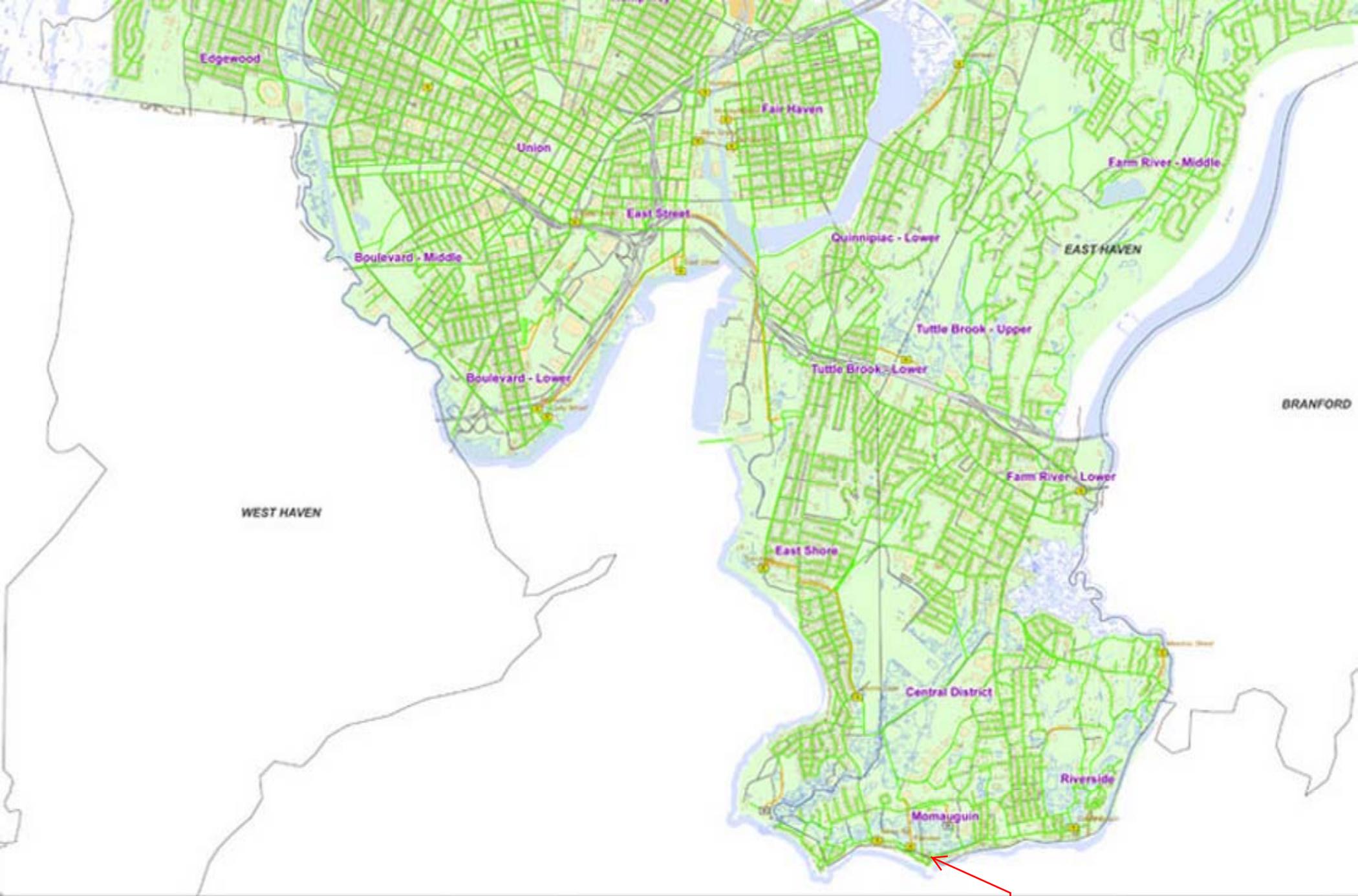
**MAPS AND DIGITAL DATA** - Go to the CT ECO website for this map and a variety of others. Go to the DEEP website for the digital spatial data shown on this map.

### MAP LOCATION



SCALE 1:24,000 (1 inch = 2000 feet) when map is printed at original size





**Legend**

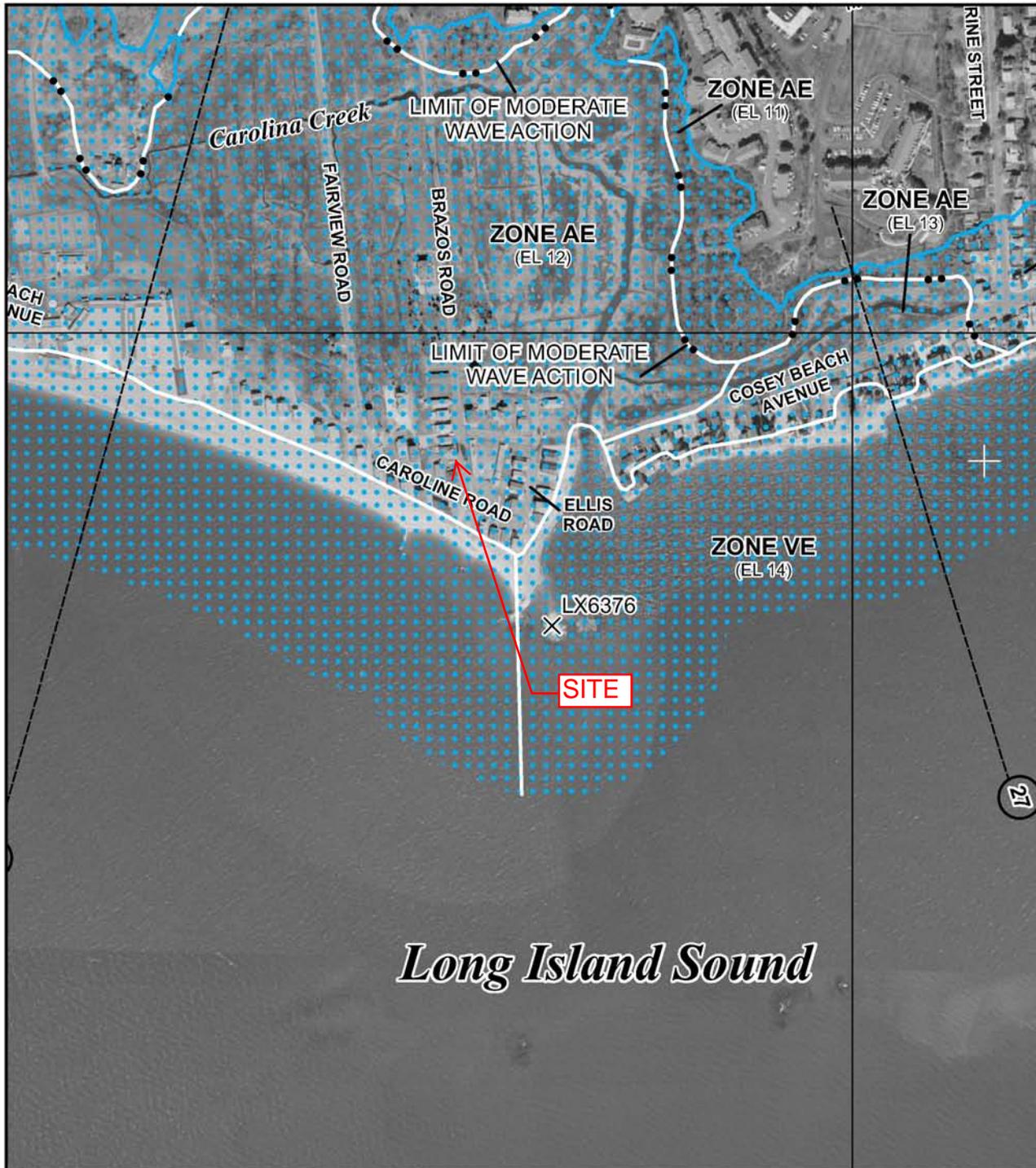
- GNHWPCA Sanitary Sewer Area
- \*Existing Preserved Open Space

**GNHWPCA Sewer Service Area Map**

**SITE**

**Disclaimer:**  
 Sewer mapping data is for planning purposes only. Although compiled from recent plans, there is no guarantee that this data is free from errors and omissions.

\*GNHWPCA Sanitary Sewer Area to be developed consistent with the Connecticut Office of Policy and Management Conservation and Development Plan Locational Guide Map designated as an Existing Preserved Open Space.



MAP SCALE 1" = 500'



PANEL 0557J

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**NEW HAVEN COUNTY,**  
**CONNECTICUT**  
 (ALL JURISDICTIONS)

**PANEL 557 OF 635**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EAST HAVEN, TOWN OF	090076	0557	J
NEW HAVEN, CITY OF	090084	0557	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER**  
 09009C0557J  
**MAP REVISED**  
 JULY 8, 2013

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

# Natural Diversity Data Base Areas

## EAST HAVEN, CT

December 2013

-  State and Federal Listed Species & Significant Natural Communities
-  Town Boundary

NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

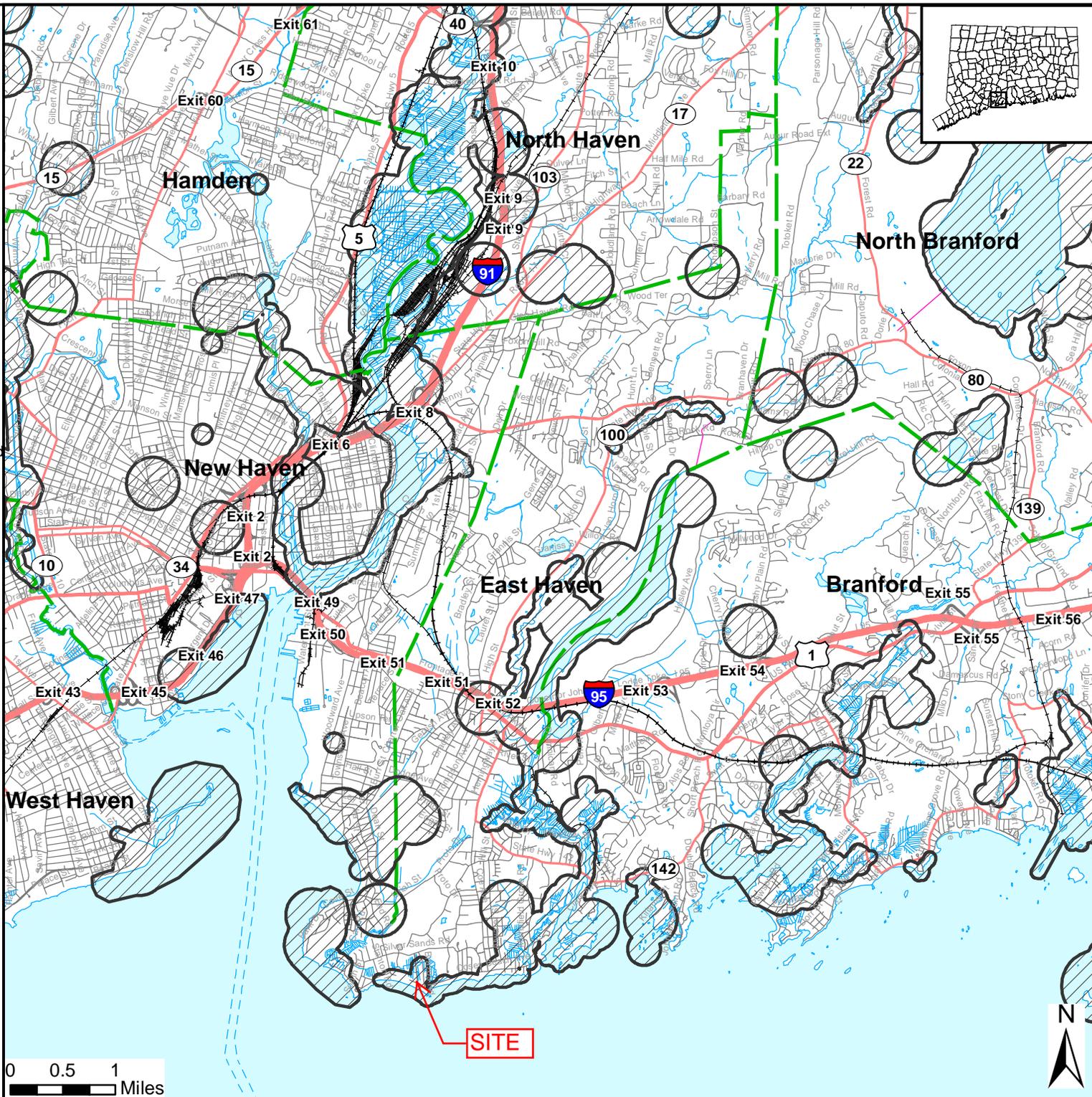
[www.ct.gov/deep/nddbrequest](http://www.ct.gov/deep/nddbrequest)

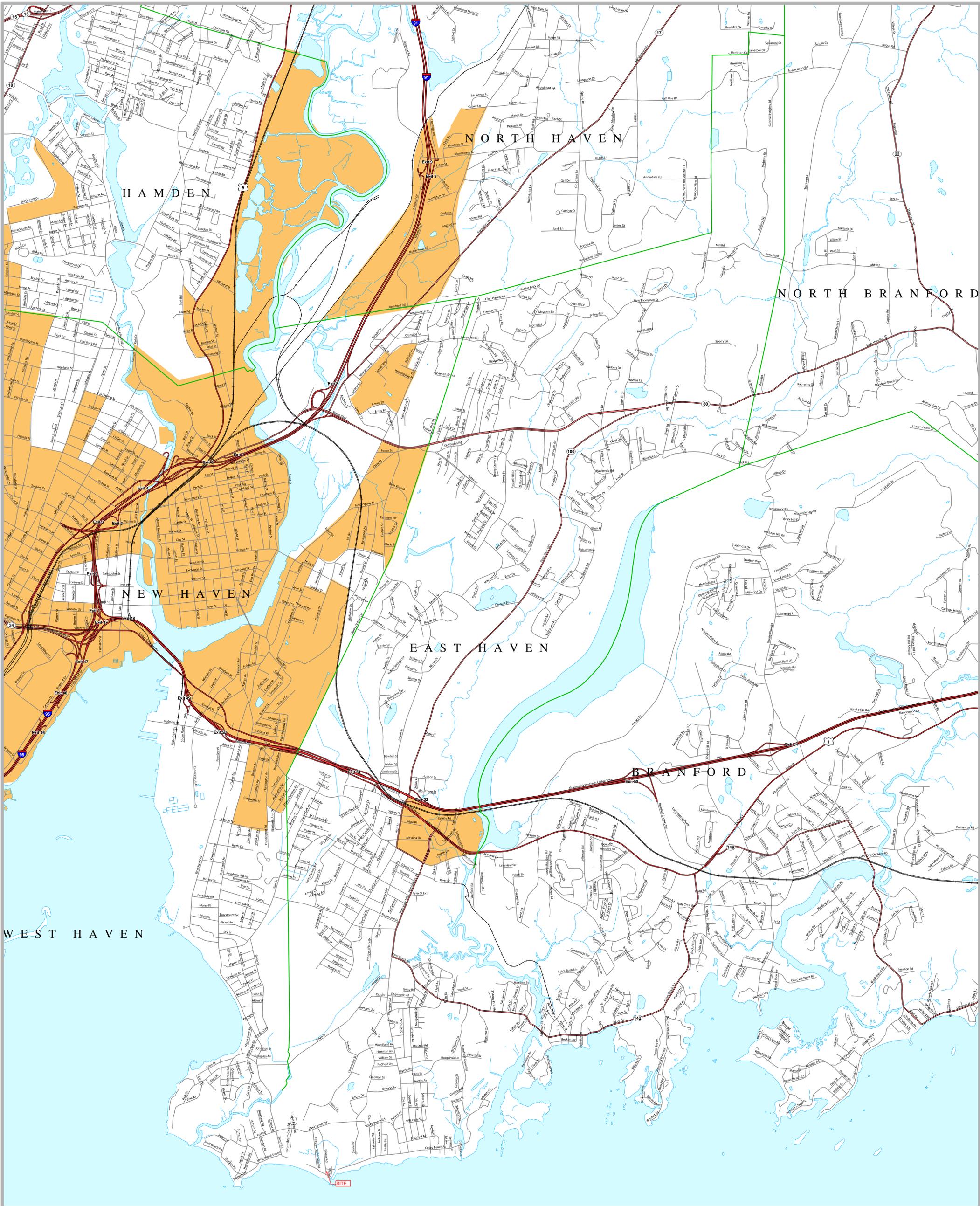
This file has PDF Layers. Look for the Layers tab on the left. Expand the layers and use the "eye" icons to change visibility.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)  
79 Elm St., Hartford CT 06106  
Phone (860) 424-3011



Connecticut Department of Energy & Environmental Protection  
Bureau of Natural Resources  
Wildlife Division





# Environmental Justice Communities

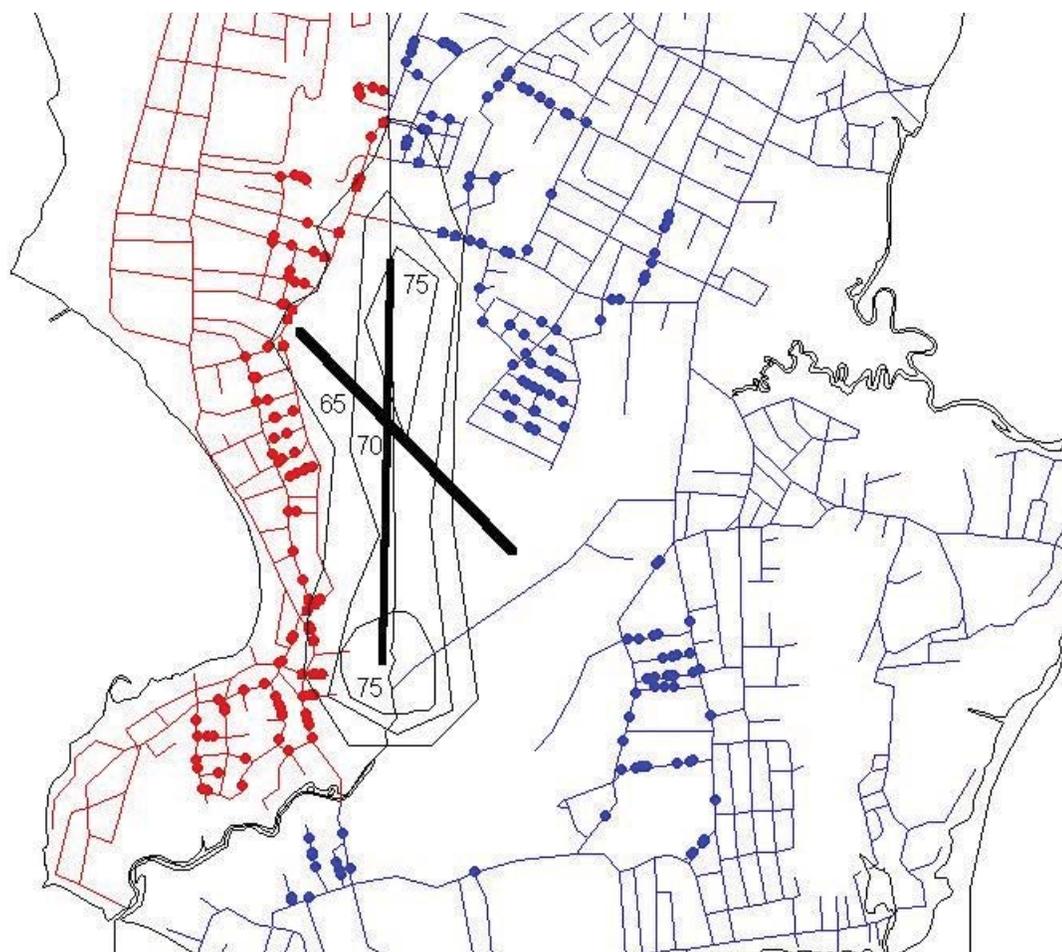
## EAST HAVEN, CT

Low Income Communities  
 Town Boundary

This map shows a municipality having U.S. census block groups with 30% of their population living below 200% of the federal poverty level.

Note: The applicable facilities must be located directly in the defined census block or in a municipality on the CT Department of Economic and Community Development list of distressed municipalities to be considered under Public Act 08-94 and the Environmental Justice Policy.





Note: Red dots denote New Haven properties and blue dots indicate East Haven properties; squares are properties within the 65db contour.

Due to the limited number of properties inside the 65db noise contour, a statistical test based on the means of those properties inside and outside the contour as above is not reliable. We use Ordinary Least Squares to estimate the impact of property location, that is inside and outside of the 65db noise contour, on the properties’ sales price growth rate. We find no significant impact of housing location on the sales price growth rate. The model is a simple linear regression model written as:

$$P = \beta_0 + \beta_1\text{zone} + \beta_2\text{67next} + \beta_3\text{67twice} + \beta_4\text{80same} + \beta_5\text{80next} + \beta_6\text{90same} + \epsilon,$$

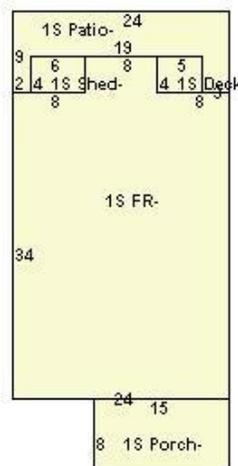
where P stands for housing price growth rate. The zone variable has value of 1 if the property is inside the 65db contour and 0 otherwise. Each categorical variable controls for the different sales scenarios described in Appendix 7. For example, “67next” has the value of 1 if the property was first sold in the period 1967-1979 and resold again in the period 1980-1989, and 0 otherwise. “67twice” means that the property was first sold in the period 1967-1979 and resold in 1990 or later. “80same” indicates whether the property was first sold and resold



**Town of EastHaven**

**Last Updated: 04/03/2014**

Internet Map



**Summary**

<b>Address</b>	14 BRAZOS RD	<b>Map/Block/Lot</b>	020 0110 004
<b>Primary Use</b>	Residential	<b>Acres</b>	0.11
<b>Unique ID</b>	T0188200	<b>Zone</b>	R-3
<b>Volume</b>	2278	<b>Page</b>	280

**Ownership Information**

<b>Current Owner</b>	GAMBARDELLA BREAMAND 2007 REV TRUST W QC	<b>Appraised Value</b>	<b>70% Assessment</b>
	14 BRAZOS RD EAST HAVEN CT 06512		
	<b>Land</b>	136710	95700
	<b>Buildings</b>	70734	49510
	<b>Outbuildings</b>	0	0
	<b>Total</b>	<b>207444</b>	<b>145210</b>

**Sales History**

<b>Previous Owner</b>	GAMBARDELLA BREAMAND W QUIT CLAIM COV	<b>Sale Date</b>	10/17/2012
-----------------------	---------------------------------------	------------------	------------

<b>Sale Price</b>	0	<b>Deed Type</b>	
<b>Volume/Page</b>	2278 / 280	<b>Valid Sale</b>	No
<b>Previous Owner</b>	THE BREMAND	<b>Sale Date</b>	10/17/2012
<b>Sale Price</b>	0	<b>Deed Type</b>	
<b>Volume/Page</b>	2278 / 261	<b>Valid Sale</b>	No
<b>Previous Owner</b>	GAMBARDELLA BREMAND	<b>Sale Date</b>	6/28/2007
<b>Sale Price</b>	0	<b>Deed Type</b>	
<b>Volume/Page</b>	1951 / 083	<b>Valid Sale</b>	No
<b>Previous Owner</b>	GAMBARDELLA BREMAND	<b>Sale Date</b>	8/8/2002
<b>Sale Price</b>	185000	<b>Deed Type</b>	
<b>Volume/Page</b>	1293 / 045	<b>Valid Sale</b>	Yes
<b>Previous Owner</b>		<b>Sale Date</b>	8/8/2002
<b>Sale Price</b>	185000	<b>Deed Type</b>	
<b>Volume/Page</b>	1293 / 045	<b>Valid Sale</b>	Yes

<b>Building #1</b>					
Style	Bungalow	Rooms	5	Bsmt Area	0
Building SF	848	Bedrooms	3	Bsmt Finish	0
Stories	1.00	Baths	1 Full, 0 Half	Bsmt Garage	0 bays
Construction	Wood Frame	Fireplaces	1	Roof	
Overall Condition	Good	Heating	Gas / Forced Hot Air	Siding	Vinyl ,
Year Built	1929	Cooling %	100	Units	1
Special Features	, ,				
Components	Concrete/Masonry Patio , Frame Shed , Open Porch , Frame Shed , Wood Deck				

Disclaimer: This information is provided for your use. No claim that the file is complete or that the file is 100% accurate is made. It is a copy of the Property Record File of the town and as such is a constant work in progress. You may also view and copy data in the Town Hall.

Click [here](#) to go back.



# Federal Aviation Administration

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## Memorandum

Date: **SEP 27 2012**

To: Regional Airports Division Managers  
610 Branch Managers  
620 Branch Managers  
ADO Managers

From: *Benito De Leon*  
Benito De Leon, Director  
Office of Airport Planning and Programming (APP-1)  
*Michael J. O'Donnell*  
Michael J. O'Donnell, Director  
Office of Airport Safety and Standards (AAS-1)

Subject: Interim Guidance on Land Uses Within a Runway Protection Zone

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### Background

The FAA Office of Airports (ARP) has identified the need to clarify our policy on land uses within the Runway Protection Zone (RPZ). This memorandum presents interim policy guidance on compatible land uses within Runway Protection Zones (RPZ) to address recurrent questions about what constitutes a compatible land use and how to evaluate proposed land uses that would reside in an RPZ. While Advisory Circular 150/5300-Change 17(Airport Design) notes that "it is desirable to clear all objects from the RPZ," it also acknowledges that "some uses are permitted" with conditions and other "land uses are prohibited."

RPZ land use compatibility also is often complicated by ownership considerations. Airport owner control over the RPZ land is emphasized to achieve the desired protection of people and property on the ground. Although the FAA recognizes that in certain situations the airport sponsor may not fully control land within the RPZ, the FAA expects airport sponsors to take all possible measures to protect against and remove or mitigate incompatible land uses.

ARP is developing a new guidance document for the Regional Office (RO) and Airport District Office (ADO) staff that clarifies our policy regarding land uses in the RPZ. This new guidance document will outline a comprehensive review process for existing and proposed land uses within an RPZ and is slated for publication in 2013. We also intend to incorporate RPZ land use considerations into the ongoing update to the Land Use Compatibility Advisory Circular (AC) which is slated for publication in 2014.

This memorandum outlines interim guidance for ARP RO and ADO staff to follow until the comprehensive RPZ land use guidance is published.

## **Interim Guidance**

### **New or Modified Land Uses in the RPZ**

Regional and ADO staff must consult with the National Airport Planning and Environmental Division, APP-400 (who will coordinate with the Airport Engineering Division, AAS-100), when any of the land uses described in **Table 1** would enter the limits of the RPZ as the result of:

1. An airfield project (e.g., runway extension, runway shift)
2. A change in the critical design aircraft that increases the RPZ dimensions
3. A new or revised instrument approach procedure that increases the RPZ dimensions
4. A local development proposal in the RPZ (either new or reconfigured)

**Table 1: Land Uses Requiring Coordination with APP-400**

- Buildings and structures (Examples include, but are not limited to: residences, schools, churches, hospitals or other medical care facilities, commercial/industrial buildings, etc.)
- Recreational land use (Examples include, but are not limited to: golf courses, sports fields, amusement parks, other places of public assembly, etc.)
- Transportation facilities. Examples include, but are not limited to:
  - Rail facilities – light or heavy, passenger or freight
  - Public roads/highways
  - Vehicular parking facilities
- Fuel storage facilities (above and below ground)
- Hazardous material storage (above and below ground)
- Wastewater treatment facilities
- Above-ground utility infrastructure (i.e. electrical substations), including any type of solar panel installations.

Land uses that may create a safety hazard to air transportation resulting from wildlife hazard attractants such as retention ponds or municipal landfills are not subject to RPZ standards since these types of land uses do not create a hazard to people and property on the ground. Rather, these land uses are controlled by other FAA policies and standards. In accordance with the relevant Advisory Circulars, the Region/ADO must coordinate land use proposals that create wildlife hazards with AAS-300, regardless of whether the proposed land use occurs within the limits of an RPZ.

### **Alternatives Analysis**

Prior to contacting APP-400, the RO and ADO staff must work with the airport sponsor to identify and document the full range of alternatives that could:

1. Avoid introducing the land use issue within the RPZ
2. Minimize the impact of the land use in the RPZ (i.e., routing a new roadway through the controlled activity area, move farther away from the runway end, etc.)

3. Mitigate risk to people and property on the ground (i.e., tunneling, depressing and/or protecting a roadway through the RPZ, implement operational measures to mitigate any risks, etc.)

Documentation of the alternatives should include:

- A description of each alternative including a narrative discussion and exhibits or figures depicting the alternative
- Full cost estimates associated with each alternative regardless of potential funding sources.
- A practicability assessment based on the feasibility of the alternative in terms of cost, constructability and other factors.
- Identification of the preferred alternative that would meet the project purpose and need while minimizing risk associated with the location within the RPZ.
- Identification of all Federal, State and local transportation agencies involved or interested in the issue.
- Analysis of the specific portion(s) and percentages of the RPZ affected, drawing a clear distinction between the Central Portion of the RPZ versus the Controlled Activity Area, and clearly delineating the distance from the runway end and runway landing threshold.
- Analysis of (and issues affecting) sponsor control of the land within the RPZ.
- Any other relevant factors for HQ consideration.

APP-400 will consult with AAS-100 when reviewing the project documents provided by the RO/ADO. APP-400 and AAS-100 will work with the Region/ADO to make a joint determination regarding Airport Layout Plan (ALP) approval after considering the proposed land use, location within the RPZ and documentation of the alternatives analysis.

In addition, APP-400 and AAS-100 will work with the Region/ADO to craft language for inclusion in the airspace determination letter regarding any violations to ensure that all stakeholders (including tenants, operators, and insurers) are fully apprised of the issues and potential risks and liabilities associated with permitting such facilities within the RPZ.

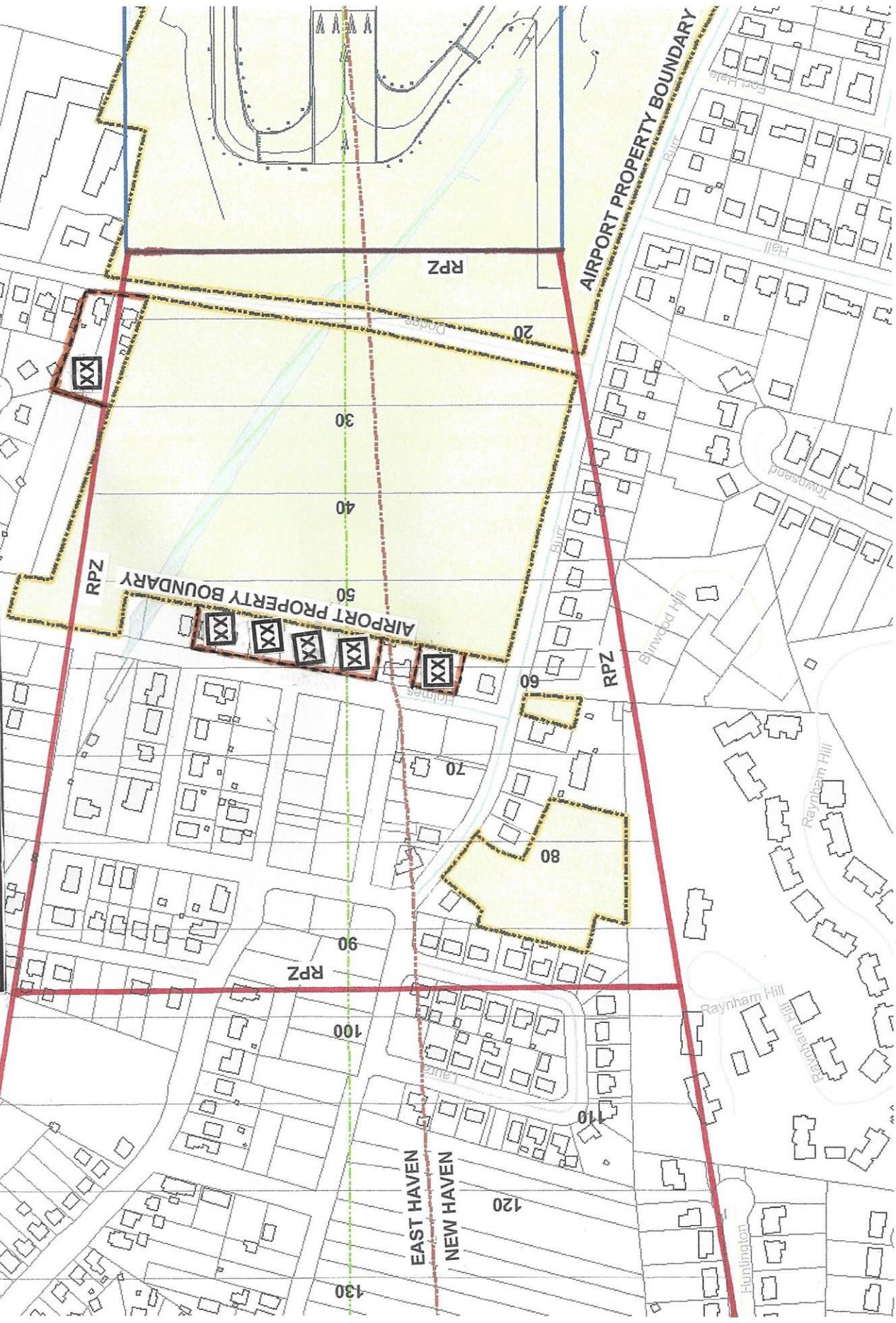
### **Existing Land Uses in the RPZ**

This interim policy only addresses the introduction of new or modified land uses to an RPZ and proposed changes to the RPZ size or location. Therefore, at this time, the RO and ADO staff shall continue to work with sponsors to remove or mitigate the risk of any existing incompatible land uses in the RPZ as practical.

For additional information or questions regarding this interim guidance, please contact either Ralph Thompson, APP-400, at [ralph.thompson@faa.gov](mailto:ralph.thompson@faa.gov) or (202) 267-8772 or Danielle Rinsler, APP-401, at [danielle.rinsler@faa.gov](mailto:danielle.rinsler@faa.gov) or (202) 267-8784.



**TWEED-NEW HAVEN REGIONAL AIRPORT**  
**RUNWAY 20 RUNWAY PROTECTION ZONE (RPZ)**  
**10, 20, ETC. = ELEVATIONS (ASL) NOT TO BE EXCEEDED (20:1)**  
**SCALE 1 IN = 300 FT (2007 AERONAUTICAL STUDY MAPPING)**  
**XX = PROPERTY ANNEXED BY AIRPORT SINCE 2007**







Environmental Review Record and Statutory Checklist  
14 Brazos Road  
East Haven, CT



## Appendix D

### Limited Hazardous Materials Inspection Report

# Limited Hazardous Materials Inspection Report

14 Brazos Road  
East Haven, CT  
Connecticut Department of Housing Application No. 1665  
Lothrop Associates Project No. 1524-16

**Lothrop Associates LLP**  
Hartford, CT

April 2014



Fuss & O'Neill EnviroScience, LLC  
56 Quarry Road  
Trumbull, CT 06611



**FUSS & O'NEILL**  
EnviroScience, LLC

April 25, 2014

Mr. Thomas Streicher  
Project Architect  
Lothrop Associates LLP  
100 Pearl Street, 14<sup>th</sup> Floor  
Hartford, CT 06103  
[tstreicher@lothropassociates.com](mailto:tstreicher@lothropassociates.com)

**RE: Limited Hazardous Materials Inspection**  
14 Brazos Road, East Haven, Connecticut  
Fuss & O'Neill EnviroScience Project No. 20140370.A5E  
Lothrop Associates Project No. 1524-16

Dear Mr. Streicher:

Enclosed is the report for the limited hazardous materials inspection performed at 14 Brazos Road located in East Haven, Connecticut.

The inspection was performed from April 18, 2014, through April 21, 2014, by Fuss & O'Neill EnviroScience, LLC licensed inspector and included an asbestos inspection, testing for lead-based paint, a mold visual assessment, and an airborne radon assessment.

The information summarized in this document is for the above-mentioned materials only. It does not include information on other hazardous materials that may exist in the property (such as underground storage tanks, PCB containing building materials, etc.).

If you have any questions regarding the contents of this report, please do not hesitate to contact us at 203) 374-3748. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Kevin McCarthy  
Project Manager

Robert L. May, Jr.  
President  
NEHA NRPP # 105366 RT

56 Quarry Road  
Trumbull, CT  
06611  
t 203.374.3748  
800.286.2469  
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[www.fando.com](http://www.fando.com)

Connecticut  
Massachusetts  
Rhode Island  
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Enclosure

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## Limited Hazardous Materials Inspection Report Lothrop Associates LLP

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APPENDIX B	- LOTHROP ASSOCIATES LLP INITIAL PROPERTY INSPECTION REPORT
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# 1 Introduction

On April 18, 2014, through April 21, 2014, Fuss & O'Neill EnviroScience, LLC (EnviroScience) Environmental Analyst, Eduardo Miguel Marques, a State of Connecticut Licensed Asbestos and Certified Lead Paint Inspector, performed a limited hazardous materials inspection at 14 Brazos Road located in East Haven, Connecticut. Refer to *Appendix A* for EnviroScience certifications and licenses.

This inspection was performed in response to the Connecticut Department of Housing Community Development Block Grant Disaster Recovery (CDBG-DR) "Hurricane Sandy". The inspection included the following:

- Inspection for asbestos containing materials (ACM)
- Lead based-paint inspection
- Mold visual assessment
- Airborne radon assessment

The asbestos inspection was limited and addressed specific materials to be impacted by renovation activities as detailed in the Lothrop Associates LLP initial property inspection report. Refer to *Appendix B* for report.

## 2 Asbestos Inspection

A Property Owner must ensure that performance of a thorough inspection for asbestos-containing materials (ACM), prior to possible disturbance of materials containing asbestos during renovation or demolition, is conducted. This is a requirement of the U.S. Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation 40 CFR Part 61, Sub-Part M.

This includes Friable, Non-Friable Category I, and Non-Friable Category II ACM.

- A Friable Material is defined as material that contains greater than one percent (>1%) asbestos, that when dry **can** be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category I Non-Friable Material refers to material that contains greater than one percent (>1%) asbestos (e.g. packings, gaskets, resilient floor coverings, asphalt roofing products, etc.) that when dry **cannot** be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category II Non-Friable Material refers to any non-friable material (excluding Category I materials) that contains greater than one percent (>1%) asbestos that when dry **cannot** be crumbled, pulverized, or reduced to powder by hand pressure.

During this inspection, suspect ACM were separated into three EPA categories. These categories are: thermal system insulation (TSI), surfacing ACM, and miscellaneous ACM. TSI includes all materials used to prevent heat loss or gain or water condensation on mechanical systems. Examples of TSI are pipe insulation, boiler insulation, duct insulation, and mudded insulation on pipe fittings. Surfacing ACM includes all ACM that is sprayed, troweled, or otherwise applied to an existing surface. Surfacing ACM is

commonly used for fireproofing, decorative, and acoustical applications. Miscellaneous materials include all ACM not listed in thermal or surfacing, such as linoleum, vinyl asbestos flooring, and ceiling tiles.

Samples are recommended to be collected in a manner sufficient to determine asbestos content and include homogenous building materials. The EPA NESHAP regulation does not specifically identify a minimum number of samples to be collected, but recommends the use of sampling protocols included in 40 CFR Part 763, Sub-Part E - Asbestos Containing Materials in Schools.

Samples of suspect asbestos-containing materials were collected in accordance with EPA recommendations and Asbestos Hazard Emergency Response Act (AHERA) protocols. The protocols included the following:

1. Surfacing Materials (SURF) (e.g. plaster, spray-on fireproofing, etc.) were collected in a randomly distributed manner representing each homogenous area based on the overall quantity represented by the sampling as follows:
  - a. Three samples collected from each homogenous area that is less than or equal to ( $\leq$ ) 1,000 square feet.
  - b. Five samples collected from each homogenous area that is greater than ( $>$ ) 1,000 square feet, but less than or equal to 5,000 square feet.
  - c. Seven samples collected from each homogenous area that is greater than ( $>$ ) 5,000 square feet.
2. Thermal System Insulation (TSI) (e.g. pipe insulation, tank insulation, etc.) was collected in a randomly distributed manner representing each homogenous area. Three bulk samples were collected as representative of each homogeneous material type, and sent to laboratory for asbestos analysis. Also, a minimum of one sample of any patching material (less than 6 linear of square feet) applied to TSI was collected.

Miscellaneous Materials (MISC) (e.g. floor tile, gaskets, construction mastics, etc.) had a minimum of two samples collected as representative of each homogenous material type. Sampling was conducted in a manner sufficient to determine asbestos content of the homogenous material as determined by the Asbestos Inspector. If materials identified were of (significant) minimal quantity, only a single sample was collected.

---

## 2.1 Conclusion

Based on this limited inspection targeting building components to be impacted by renovation activities, no visible accessible suspect asbestos-containing materials were identified and no bulk sampling was performed.

Any suspect material that may be encountered during renovation/demolition should be assumed to be ACM unless sample results prove otherwise.

### 3 Lead-Based Paint Testing

Comprehensive testing for lead paint was performed at 14 Brazos Road in East Haven, Connecticut, by EnviroScience's Environmental Analyst Eduardo Miguel Marques on April 18, 2014, for the purpose of compliance with EPA's Renovation, Repair and Painting Rule (RRP) (40 CFR 745.80 through 92). A direct reading X-ray fluorescence (XRF) analyzer was used to perform the testing. The testing was conducted in accordance with the protocol outlined in the attached document: Testing Procedures and Equipment (*Appendix C*).

For the purpose of this testing, interior and exterior components representing the initial painting history of the buildings and any building-wide repainting by the owners/managers of these building components were tested.

The one-story residential building was constructed with wood. Window and door systems are composed of wood and metal. Walls and ceilings are composed of wood paneling. There were no children under the age of six present in the house at the time of the inspection.

#### 3.1 Results

The testing indicated consistent painting trends throughout the building interior and exterior. No painted components were determined to contain toxic levels of lead (greater than 1.0 milligrams of lead per square centimeter of paint) with the exception of the following:

**Table 1**  
**Lead Painted Building Components**

Item	Location	Reading (mg/cm <sup>2</sup> )	Defective?
Wood ceiling	Enclosed porch – room 1	2.8	Yes
Wood wall – siding	Enclosed porch – room 1	>9.9	No
Wood window trim	Enclosed porch – room 1	>9.9	No
Wood window sash	Enclosed porch – room 1	3.2	Yes
Wood window well	Enclosed porch – room 1	>9.9	No
Wood door trim – outer trim	Enclosed porch – room 1	>9.9	No
Wood crown molding	Enclosed porch – room 1	4.6	No
Wood walls (A-D)	Bathroom – room 6	5.8, 4.4, 2.9, 3.7	Yes
Wood crown molding	Bathroom – room 6	2.9	No
Wood window trim	Bathroom – room 6	4.6	No
Wood window sill	Bathroom – room 6	5.4	No
Wood door	Bathroom – room 6	3.7	No
Wood door trim	Bathroom – room 6	2.6	No
Wood door jamb	Bathroom – room 6	2.5	No
Wood walls (A-D)	Kitchen – room 7	3.1, 3.4, 3.1, 2.9	Yes
Wood window trim	Kitchen – room 7	2.6	No
Wood window sill	Kitchen – room 7	1.3	No

Item	Location	Reading (mg/cm <sup>2</sup> )	Defective?
Wood cabinet	Kitchen – room 7, D side	3.3	No
Wood cabinet shelf	Kitchen – room 7, D side	3.1	No
Wood cabinet wall	Kitchen – room 7, D side	2.9	No
Wood door trim	Kitchen – room 7	2.9	Yes
Wood door jamb	Kitchen – room 7	2.8	Yes
Wood window trim	Rear entry vestibule – room 8	7.9	No
Wood window sash	Rear entry vestibule – room 8	9.1	No
Wood door trim	Rear entry vestibule – room 8	3.1	No
Wood door jamb	Rear entry vestibule – room 8	2.9	No
Exterior wood siding	Exterior	>9.9	No
Exterior metal window trim	Exterior windows	>9.9	No
Wood walls	Shed, B and C sides	3.3, 8.0	Yes – Side B No – Side C
Wood door	Shed	1.6	Yes

## 3.2 Conclusion

The following building components were determined to contain toxic levels of lead (greater than 1.0 milligrams of lead per square centimeter of paint):

- Wood ceiling – enclosed porch – room 1
- Wood wall, siding – enclosed porch – room 1
- Wood window components – enclosed porch - room 1
- Wood door outer trim – enclosed porch – room 1
- Wood crown molding – enclosed porch – room 1
- Wood walls – bathroom – room 6
- Wood crown molding – bathroom – room 6
- Window sill/window trim – bathroom – room 6
- Wood door components – bathroom – room 6
- Wood walls – kitchen – room 7
- Window sill/window trim – kitchen – room 7
- Wood cabinet components – kitchen – room 7, d side
- Wood door trim/jamb - kitchen – room 7
- Wood window trim/sash – rear entry vestibule – room 8
- Wood door trim/jamb - - rear entry vestibule – room 8
- Exterior wood siding
- Exterior metal window trim
- Wood walls – shed
- Wood door – shed

If these components are to be demolished during renovations, a Toxicity Characteristic Leaching Procedure (TCLP) of the demolition waste stream needs to be collected to determine disposal requirements.

The field testing sheets are provided as *Appendix D* in this report.

**Disclaimer:** The information contained in this report concerning the presence or absence of lead paint does not constitute a comprehensive lead inspection under Connecticut regulations Section 19a-111-1 to 11. The surfaces tested represent only a portion of those surfaces that would be tested to determine whether the premises are in compliance with Connecticut regulations.

The Contractor shall be aware that OSHA has not established a level of lead in a material below which 29 CFR 1926.62 does not apply. The Contractor shall comply with exposure assessment criteria, interim worker protection, and other requirements of the regulation as necessary to protect workers and building occupants.

For purposes of complying with the U.S. Environmental Protection Agency's Renovation, Repair and Painting Rule (RRP) (40 CFR 745.80 through 92) a Comprehensive Lead Inspection of the entire structure or targeted areas scheduled for renovation is necessary to determine if the RRP rule is applicable. A Comprehensive Lead Inspection includes testing representative coated surfaces of each building component in each room or room equivalent for Lead-Based paint content. All similar components to the surface tested on a per room basis shall be considered as having the same paint (e.g. If more than one window or door in a room typically only one is tested but remaining must be assumed to be the same as the one tested). **This inspection was performed as a comprehensive inspection of all representative surfaces within the residence that are scheduled to be disturbed and can be utilized to determine applicability requirements for the RRP rule on surfaces tested.**

Those surfaces which contain lead paint are subject to RRP work practice and training requirements if more than de-minimus amounts are disturbed in renovation or for projects involving window replacement. Those surfaces which do not contain lead paint are not subject to the RRP requirements. If a specific component or surface is not identified as having been tested it should be presumed to contain lead paint unless tested. Contractor's should be aware that the threshold limit of 1.0 mg/cm<sup>2</sup> for purposes of RRP requirements is not recognized by the Occupational Safety and Health Administration (OSHA) and workers' exposures are still subject to lead in construction regulation 29 CFR 1926.62 regardless of paint testing results.

## 4 Mold Visual Assessment

On April 18, 2014, EnviroScience representative Eduardo Miguel Marques performed a visual assessment for the presence of suspect mold and water intrusion.

---

### 4.1 Observations

No signs of water damage or mold were identified during this inspection.

## 5 Airborne Radon Information, Sampling and Procedure

---

### 5.1 Radon Facts and Health Effects

Radon is a naturally-occurring radioactive gas produced by the natural breakdown (decay) of uranium which is found in soil and rock throughout the United States. Radon travels through soil and enters buildings through cracks and other penetrations in building foundations. Eventually the gas itself decays into radioactive particles (decay products) that can become trapped in the lungs during human respiration. As these particles in turn decay they release small bursts of radiation which can damage lung tissue and lead to lung cancer over the course of a person's lifespan.

EPA studies have found that radon concentrations in outdoor air average approximately 0.4 picoCuries per liter of air (pCi/L). However, radon and its decay products can accumulate to much higher concentrations inside a building. The EPA has adopted an action level of 4.0 pCi/L; equal to or above which the EPA recommends that building owners take action to reduce the level of airborne radon with the building.

Radon is a colorless, odorless and tasteless gas and thus the only way to know whether or not an elevated level of radon is present in a building is to test. Each frequently occupied room that is in contact with the ground should be measured as even adjacent rooms can have significantly different levels of radon.

Again, radon is a known human carcinogen. Prolonged exposure to elevated radon concentrations causes an increased risk of lung cancer. Like other environmental pollutants, there is some uncertainty about the magnitude of radon health risks. However, scientists are more certain about radon risks than risks from most other cancer-causing environmental pollutants as estimates of radon risk are based on studies of cancer in humans (underground miners). Additional studies on more typical, non-occupationally exposed, populations are underway.

EPA estimates that radon may cause about 14,000 lung cancer deaths in the U.S. each year, with a range of 7,000 to 30,000. The U.S. Surgeon General has warned that radon is the second-leading cause of lung cancer deaths after smoking, and is the leading cause among non-smokers.

### 5.2 Airborne Radon Sampling

On April 18, 2014 through April 21, 2014, EnviroScience representative Eduardo Miguel Marques set up passive radon detection canisters in the residence and then retrieved the same canisters at least 48 hours but not later than 96 hours later. The canisters were supplied by Radon Testing Corporation of America (RTCA). It is recommended that such canisters be placed at least 20 inches from the floor and 12 inches away from exterior walls. Also, it is recommended that the canisters not be placed near drafts resulting from HVAC intakes and returns, doors, and at least 36 inches from windows. Canisters should also not be exposed to direct sunlight, be covered up, or otherwise disturbed during the testing period. A closed building condition is also utilized for 12 hours prior to testing being conducted.

Sample analysis is performed by RTCA and results are included in *Appendix E*.

### 5.3 Airborne Radon Quality Assurance Procedure

EPA strongly recommends that quality assurance measurements are included in radon measurement studies. Quality assurance measurements include side-by-side canisters (duplicates), and unexposed control canisters (blanks).

**Duplicates** are pairs of canisters deployed in the same location, side by side, for the same measurement period. Duplicates are placed in at least ten percent of all sampling locations. These duplicate canisters are stored, deployed, removed, and shipped to the laboratory for analysis in the same manner as the other canisters. If either or both of the analyses in a duplicate pairing is above the EPA standard of 4.0 pCi/L the relative percent difference (RPD) between the two tests must be determined. If the allowable difference is exceeded, the test is determined to be invalid and a new duplicate test must be run. If both canister results are below the EPA standard then the RPD is not calculated since, despite any disparity, both results are below the EPA standard.

**Blanks** are utilized to determine whether the manufacturing, shipping, storage, and processing of the canisters has affected the accuracy of airborne radon sampling procedures. Blanks are unopened, unexposed canisters which are set out with and shipped with the exposed canisters so that the processing laboratory treats them equally. The number of blanks is at least five percent of the number of canisters deployed up to a maximum of 25 canisters.

### 5.4 Airborne Radon Analytical Results

Four canisters, including one duplicate and one blank, were placed inside the residence during the sampling period that occurred between April 18, 2014 through April 21, 2014. The concentration of radon in the sample and associated duplicate sample were 0.1 pCi/L. The EPA threshold for radon is 4.0 pCi/L.

In *Table 2*, the location and result of the quality control duplicate test is listed below.

**Table 2**  
**Duplicate Sample Result**

Location	Canister Numbers	Radon Concentration (pCi/Liter)			Relative Percent Difference (RPD, %)
		Sample	Sample Duplicate	Sample Average	
Living room	2314039 2313967	0.1	0.1	0.1	Percent Difference Not Needed (No Concentrations Above 4.0 pCi/Liter)

**Note** Duplicate testing result was satisfactory.

In *Table 3*, the location and result of the quality control blank test is listed below.

**Table 3**  
**Blank Sample Result**

Location	Canister Numbers	Radon Concentration (pCi/Liter)
Bedroom 5	2313982	0.1

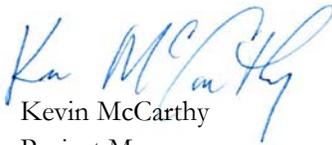
**Note** Blank testing result was satisfactory.

## 5.5 Conclusion

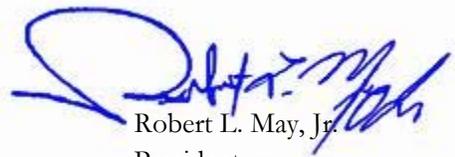
During the course of the airborne radon measurement assessment, four sampling canisters, including one duplicate and one blank, were placed in the residence. The samples were below EPA recommended action guideline of 4.0 pCi/L.

Report prepared by Environmental Analyst Eduardo Miguel Marques.

Reviewed by:



Kevin McCarthy  
Project Manager



Robert L. May, Jr.  
President  
NEHA NRPP # 105366 RT

## Appendix A

---

### Fuss & O' Neill EnviroScience Certifications

0001729 FP \*\*PRSR T7 0 0664 06040

EDUARDO M. MARQUES  
FUSS & ONEILL ENVIRO SCIENCE LLC  
146 HARTFORD ROAD  
MANCHESTER CT 06040

Dear Licensed/Certified Professional,  
Attached you will find your validated license/certification for the coming year. Should you have any questions about your license/certificate renewal, please do not hesitate to write or call:

Department of Public Health (860) 509-7603  
P.O. Box 340308  
M.S.#12MQA <http://www.dph.state.ct.us>  
Hartford, CT 06134-0308

Sincerely,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER  
DEPARTMENT OF PUBLIC HEALTH

**INSTRUCTIONS:**

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.

4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT  
THE INDIVIDUAL NAMED BELOW IS LICENSED  
BY THIS DEPARTMENT AS A

**ASBESTOS CONSULTANT-INSP/MGMT PLANNER**

LICENSE NO.  
000201  
CURRENT THROUGH  
02/28/15  
VALIDATION NO.  
03-720789

EDUARDO M. MARQUES

SIGNATURE

COMMISSIONER

EMPLOYER'S COPY

**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

NAME  
**EDUARDO M. MARQUES**

VALIDATION NO. 03-720789      LICENSE NO. 000201      CURRENT THROUGH 02/28/15

PROFESSION  
**ASBESTOS CONSULTANT-INSP/MGMT PLANNER**

SIGNATURE

COMMISSIONER

WALLET CARD

**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

NAME  
**EDUARDO M. MARQUES**

VALIDATION NO. 03-720789      LICENSE NO. 000201      CURRENT THROUGH 02/28/15

PROFESSION  
**ASBESTOS CONSULTANT-INSP/MGMT PLANNER**

SIGNATURE

COMMISSIONER

# Fuss & O'Neill EnviroScience, LLC

146 Hartford Road, Manchester, CT 06040 - (860) 646-2469

This is to certify that

**Eduardo Miguel Marques**

XXX-XX-8045

has successfully completed the

**4 Hr. Asbestos Inspector Refresher**

**Asbestos Accreditation under TSCA Title II  
40 CFR Part 763**

*John Rowinski*  
John Rowinski, Principal Instructor

September 4, 2013

Date of Course

*Robert L. May, Jr.*  
Robert L. May, Jr., Training Manager

AI-R-09/13-9

Certificate Number

September 4, 2013; A

Examination Date & Grade

September 4, 2014

Expiration Date

0001728 FP \*\*PRSRT T7 0 0684 06040

EDUARDO M. MARQUES  
FUSS & ONEILL ENVIRO SCIENCE LLC  
146 HARTFORD ROAD  
MANCHESTER CT 06040

Dear Licensed/Certified Professional,  
Attached you will find your validated license/certification for the coming year. Should you have any questions about your license/certificate renewal, please do not hesitate to write or call:

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P.O. Box 340308  
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Hartford, CT 06134-0308

Sincerely,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER  
DEPARTMENT OF PUBLIC HEALTH

**INSTRUCTIONS:**

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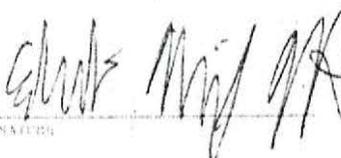
**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT  
THE INDIVIDUAL NAMED BELOW IS CERTIFIED  
BY THIS DEPARTMENT AS A

**LEAD INSPECTOR**

**EDUARDO M. MARQUES**

CERTIFICATION NO.  
002132  
CURRENT THROUGH  
02/28/15  
VALIDATION NO.  
03-720788

SIGNATURE COMMISSIONER

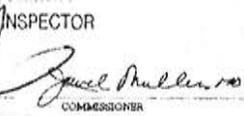
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**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

NAME  
**EDUARDO M. MARQUES**

VALIDATION NO. **03-720788** CERTIFICATION NO. **002132** CURRENT THROUGH **02/28/15**

PROFESSION  
**LEAD INSPECTOR**

SIGNATURE COMMISSIONER

WALLET CARD

**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

NAME  
**EDUARDO M. MARQUES**

VALIDATION NO. **03-720788** CERTIFICATION NO. **002132** CURRENT THROUGH **02/28/15**

PROFESSION  
**LEAD INSPECTOR**

SIGNATURE COMMISSIONER

# Fuss & O'Neill EnviroScience, LLC

146 Hartford Road, Manchester, CT 06040 – (860) 646-2469

This is to certify that

**Eduardo Miguel Marques**

XXX-XX-8045

has successfully completed the  
**8 Hour Lead Inspector Refresher Course**  
(Approved per Sec. 20-477, CT General Statutes)

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (U.S.C. 1001 and 15 U.S.C. 2615), I certify that this training complies with all applicable requirements of Title IV of TSCA, 40 CFR part 745 and any other applicable Federal, State, or local requirements.



Brian Santos, Principal Instructor

February 20 & 24, 2014

*Date of Course*

February 24, 2014

*Examination Date*



Robert L. May, Jr., Training Manager

LI-R-02/14-1

*Certificate Number*

February 24, 2015

*Expiration Date*

## Appendix B

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### Lothrop Associates LLP Initial Property Inspection Report



**State of Connecticut Department of Housing  
 Community Development Block Grant  
 Disaster Recovery (CDBG-DR) "Hurricane Sandy"**

Application No. **1665**  
 Residence of Breamand Gamberdella  
 14 Brazos Road  
 East Haven CT

LA project No. 1524-16

**Initial Property Inspection Report**

Property Inspected: 27 March 2014  
 Report Date: 31 March 2014  
 Rev. NA



**Present at Inspection:**

Breamand Gamberdella, Homeowner  
 Thomas Streicher, AIA, Lothrop Associates LLP  
 Maurizio Huaylla, Lothrop Associates LLP

Damage compliant by owner	Inspection observation <i>Recommendation</i>	Rehabilitation Cost projection	Mitigation cost projection
<b>The property is in an AE Flood Zone 12' above datum zero:</b> If the dwelling is remediated and raised above the flood zone a new structure with new footings will be designed and constructed to raise the building. The existing foundation walls and footings shall be removed with this new construction included in the cost of this item estimate. Modification of existing and/or construction of new exterior stairs to accommodate the new elevation are included in this item cost.			<b>\$85,000</b>
Owner states the flood surge moved the building off the foundation piers. Owner further states the building had a crawl space formed by framed walls between the foundations piers which were mostly removed by the storm surge. The owner explained she had the foundation piers replaced by her contractor. Owner indicated the building was reset a few inches higher then it was before the storm. Owner indicated she does not want the underside of the house enclosed as it previously was to ease clean-up after future flood events.	The building is set on new cast in place cylindrical foundation piers apparently formed in prefabricated paper tube forms (removed). There may be a few new beams. There is a frame plumbing enclosure and little else below the bottom of the floor joist. It seems the new piers do not elevate the building above the flood plain, and it is doubtful if there was any elevation change at all but this will have to be verified by a surveyor. The existing front precast conc. entry stairs and rear entrance wood stairs where reused and apparently reset. <b>See figure 1 and photo above</b>  <i>Recommendation: Damage already repaired, protect from damage during other repair operations. Consider elevating the building above the flood plain, see item above.</i>	NA	NA

Owner states the flood surge flooded the living area floor with several inches of water. The owner explained she had the water damage on the floors repaired.	The interior floor appeared to be newly finished and no water damage was apparent on the floor or walls.  <i>Recommendation: Damage already repaired, protect from damage during other repair operations.</i>	NA	NA
Owner stated during the storm the bead board interior paneling in the kitchen and bathroom had joints crack between the panels. Owner further states the joints at the cabinets in the kitchen cracked.	There are many cracks in the paint at joints in the bead board and at cabinet wall and ceiling attachments, possibly caused by racking. <b>See figures 2 &amp; 3</b>  <i>Recommendation: After stripping the paint from the bead board and possibly cabinet trim as required getting a smooth finish. Repaint. Provide paintable caulk at any open joints prior to painting. Note: Any racking appears to have been addressed when the new foundation was installed.</i>	\$1,500	\$1,500
Owner states beams on each side of the former porch (now a enclosed living area) have unfinished edges that are now exposed and unsightly	It looks as if the beams in question were previously concealed by the panels between the piers forming the crawl space which are no longer in place. <b>See figure 4</b>  <i>Recommendation: Provide break metal covers with drip edge.</i>	\$750	\$750
Owner states the shed attached to the rear of the building shifted and twisted out of position and the door does not close.	The shed is within a quarter bubble level in all directions. However the plywood door is off the hinges and damaged. <b>See figure 5</b>  <i>Recommendation: Replace the door and hinges.</i>	\$250	\$250
Owner states there is now a gap under the front concrete entry stair that was not present before the storm. The owner stated the stair railings were replaced.	The front stair is a precast concrete unit that appears to be older than the storm. It looks as if it was reset and set on two rows of concrete paver pads; the bottom riser spans the space between the rows of pavers. There is a gap of about an inch between the bottom of the riser and the ground. <b>See figure 6</b>  <i>Recommendation: Fill gap with similar loose masonry, cut if required to fit</i>	\$250	NA
Owner states wires and other objects got knocked loose during the storm and subsequent repairs and are unsightly.	A few cables, notably cable TV, are loose and hanging down below the floor joist.  <i>Recommendation: Reroute the cables and secure in a neat manor. Check all cable terminations and re-secure if and as required.</i>	\$500	\$500
<b>Total Cost Projection</b>		\$3,250	\$88,000

**Additional comments:** It appears this project would be classified as a repair  
See additional sheets for photos



Figure 1



Figure 2



Figure 3



Figure 4 - Similar on other side.



Figure 5



Figure 6

## Appendix C

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### Lead Paint Testing Procedures and Equipment



## **STANDARD OPERATING PROCEDURES HUD AND STATE OF CONNECTICUT LEAD-BASED PAINT INSPECTIONS**

### **TESTING PROCEDURES AND EQUIPMENT**

The U. S. Department of Housing and Urban Development (HUD) "Guidelines for the Evaluation and Control of Lead Hazards in Housing, September 1997" were consulted for this lead evaluation. HUD has been the agency at the federal level with responsibility for the establishment of national lead-based paint standards for testing and abatement. The HUD document will be referenced as the Guidelines in this report. The State of Connecticut Department of Public Health's current lead regulations, Lead Poisoning Prevention and Control (19a-111-1 through 19a-111-11) were also consulted.

This lead evaluation was comprehensive. A comprehensive inspection means that representative painted surfaces were systematically evaluated on a room-by-room basis in accordance with the Guidelines and the State of Connecticut regulations.

Lead-based paint surfaces and components were identified by utilizing on-site x-ray fluorescence (XRF) instruments. Fuss & O'Neill EnviroScience, LLC owns and utilizes Radiation Monitoring Device LPA-1s (RMD) instruments exclusively for lead-based paint testing. Each instrument is operated in accordance with state and federal and manufacturer standards on the use of the instruments. State and federal protocols provide, with the exception of wall surfaces, one reading with the instrument on a representative component in each room, i.e., baseboard, chair rail, etc., as sufficient to establish the lead paint classification of all the representatives of that component type in a room. In the case of walls, because of the large spatial areas involved and the variability in lead content in paint over such large areas, the federal and state governments want a reading on each wall surface in a room. Therefore, representative testing is not permitted for walls.

The federal government has developed Performance Characteristic Sheets (PCS) for the type of instrument cited above. Each instrument must be calibrated in accordance with these PCSs on a 1.0-milligram lead standard. Each of EnviroScience's instruments has one of these standards assigned to it. Some of the standards were purchased directly from the government and the others from the manufacturers of the instruments.

For the RMD in the standard reading mode on metal, a Substrate Equivalent Lead (SEL) concentration has to be determined. To determine the SEL, the paint is removed from the surface of the component to obtain a bare substrate reading. After removing the paint, the surface is wiped with a 5% trisodium phosphate solution (a heavy duty cleaner). All paint residue is collected and properly disposed. Once the paint and surrounding area are cleaned, the XRF is utilized to determine the SEL for each surface. The SEL values are subtracted from the XRF values to determine the Corrected Lead Concentration (CLC). The CLC is the lead content of the paint on the component tested.

The RMD instrument has federal government-determined positive and negative ranges for the definition of lead-based paint. XRF results are classified using either the threshold or the inconclusive range. For the threshold, results are classified as positive if they are greater than or equal to the threshold and negative if they are less than the threshold. There is no inconclusive



classification when using the threshold values associated with an RMD instrument. The ranges for the RMD instrument and their various operating modes are as follows:

**Radiation Monitoring Device LPA Analyzer 1**

<b>30-Second Standard Mode Reading Description</b>	<b>Substrate</b>	<b>Threshold (mg/cm<sup>2</sup>)</b>
Results corrected for substrate bias on metal substrate only.	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	0.9
	Plaster	1.0
	Wood	1.0

<b>Quick Mode Reading Description</b>	<b>Substrate</b>	<b>Threshold (mg/cm<sup>2</sup>)</b>	<b>Inconclusive Range (mg/cm<sup>2</sup>)</b>
Readings not corrected for substrate bias on any substrate.	Brick	1.0	None
	Concrete	1.0	None
	Drywall	1.0	None
	Metal	1.0	None
	Plaster	1.0	None
	Wood	1.0	None

Prior to the start of any testing, a sketch of the building is drawn, and side designations are given to help identify exactly where readings were taken. Drawings depicting the room-numbering scheme are located on the cover page(s) for the building(s) inspected. Each side of the building was labeled A, B, C, or D. The wall "A" side of the unit is generally the side of primary entrance into a dwelling, and this room is always Room 1. Areas in the units include rooms, hallways, and closets. Areas are numbered in a clockwise fashion as building construction allows. This allows the inspector to indicate which substrate surface was tested. The condition of the surface is described by a check mark in the appropriate column, under the heading "condition of surface" on the testing form.

When more than one surface type was present on a side, the component tested was indicated with a number. If two windows were present on a building side, they were numbered left to right. Closet shelves and shelf supports were numbered top to bottom.

It is understood that the room layouts presented in the report are in conformance with the conditions that exist at the time the testing is performed. EnviroScience avoids labeling a room solely by its current functional use (i.e., living room, bedroom, etc.) since this use can change over time. Similarly, room layouts can change dramatically as dwellings are renovated and additions are built, incorporating existing rooms, or existing interior walls are moved or eliminated altogether.

## Appendix D

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### Lead Testing Field Data Sheets





## LEAD INSPECTION COVER SHEET

### Inspector's Information

Inspector's Name: Eduardo Miguel Marques License Number: 002132  
 XRF Model: RMD Serial Number: 324 RI  
 Date of Inspection: 9-15-14 Project Number: 20140370, ASE

### Property Information

Building Address: 17 Brazos Rd. (Street)  
East Haven, CT (City) Age of Property: \_\_\_\_\_ (State)

Describe Structure: one story residential, wood walls/ceilings, wood w/door systems metal

- Are there lead hazards present?  Yes  No
- Were lead dust wipes taken?  Yes  No
- Were soil samples collected?  Yes  No
- Were drinking water samples collected?  Yes  No

Multiple Family Dwelling

Number of units in building: \_\_\_\_\_  
 Number of units tested: \_\_\_\_\_  
 Is there an EBL child present in the building?  
 Yes  No  Unknown  
 If EBL child, which unit(s)? \_\_\_\_\_  
 Is there a child under six years of age in the building?  
 Yes  No  Unknown  
 If child under six, which unit(s)? \_\_\_\_\_

Single Family Dwelling

Is there an EBL child present?  
 Yes  No  Unknown  
 Is there a child under six years of age in the dwelling?  
 Yes  No  Unknown

### XRF Calibration Check

- Calibration Paint Film Used:  NIST 1.02 mg/cm<sup>2</sup>  Manufacturer's Standard 1.0 mg/cm<sup>2</sup>
- Calibration Check Limits Used:  RMD (0.7 to 1.3 mg/cm<sup>2</sup> inclusive)  
 Scitec MAP4 (0.6 to 1.2 mg/cm<sup>2</sup> inclusive)

Hour	First Reading	Second Reading	Third Reading	Average
First Check	11:45pm	1.0	0.8	0.9
Second Check	2:00pm	0.8	0.8	0.83
Third Check				
Fourth Check				



Project Name: Lothrop Assoc.

Project Number: 20140370 ASE

Address: 14 Brazos Rd., East Haven, CT

Project Manager: KM

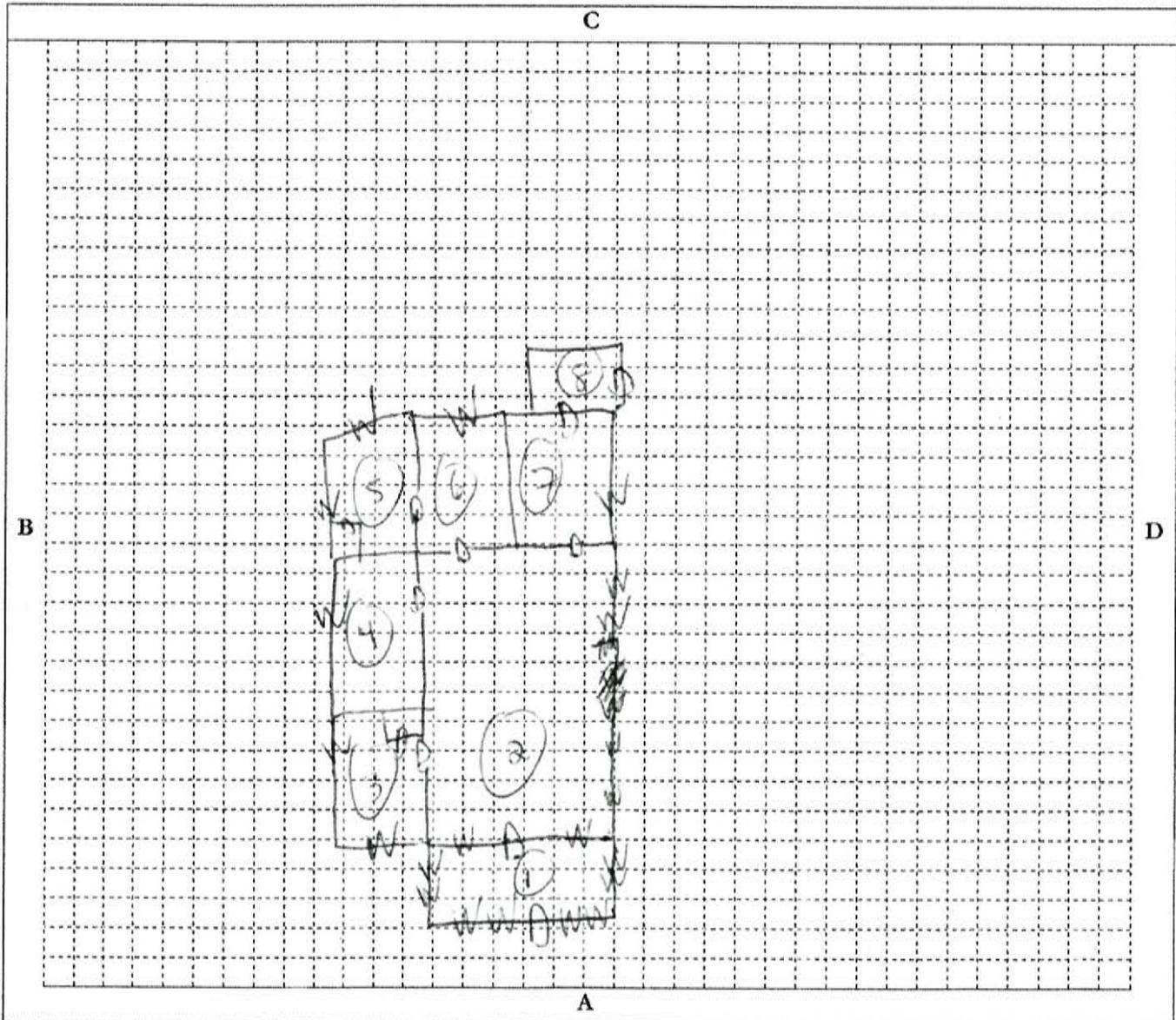
Floor: \_\_\_\_\_ Room: \_\_\_\_\_

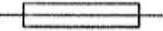
Apt. #/Bldg #: \_\_\_\_\_

Page 1 of 1

Number of Doors: \_\_\_\_\_ No. of Windows: \_\_\_\_\_

Diagram of: Interior



(#) Room Number     Door     Window

Page \_\_\_\_\_ of \_\_\_\_\_



XRF FIELD DATA SHEET

Address: 14 Brazos Rd., East Haven, CT

Apt. #: 1

Floor: \_\_\_\_\_ Room: \_\_\_\_\_

Page 1 of 6

Project Name: Lothrop Assoc.

Project Number: 20140370 ASE

Project Manager: KM (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
	ceiling	2.8	✓	w	yes				Rm 1 - enclosed porch
	floor	-0.2		w					
A	wall	0.2		w					
B	↓	0.2		w					
C	w	>9.9	✓	w	NO				
D	↓	0.3		w					
C	w trim	>9.9	✓	w	NO				
C	w. sash	3.2	✓	w	yes				
C	w wall	>9.9	✓	w	NO				
B	w trim	-0.3		w					
B	w. sash	N/C		vinyl					
C	wall trim	0.0		w					
C	door trim	>9.9	✓	w	NO				
C	↓ inner	0.1		w					
C	door jamb	-0.0		w					
C	door	-0.3		w					
C	corner molding	4.6	✓	w	NO				
A	wall	-0.0		w				Rm 2	
B	↓	-0.1		w					
C	↓	-0.0		w					
D	↓	0.1		w					
	floor	-0.1		w					
C	base trim	-0.0		w					
	ceiling	0.0		w					
	ceiling molding	-0.0		w					
D	w. sash	-0.3		w					
D	w. sill	-0.3		w					
D	w. trim	-0.1		w					
D	w. wall	N/C		vinyl					
B	door	-0.1		w					
B	door trim	-0.0		w					

\* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B

N/A: Not Accessible; N/C: Not Coated; COV: Covered, VR - Vinyl Replacement

Notes:

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XRF FIELD DATA SHEET

Address: 14 Brazos Rd, East Haven, CT

Apt. #: \_\_\_\_\_  
Page 2 of 6

Floor: \_\_\_\_\_ Room: \_\_\_\_\_

Project Name: Lathrop Assoc

Project Number: 20140370.ASE

Project Manager: KM (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
B	door jamb	-0.0		W					Run 2
A	wall	-0.3		W					Run 3
B		-0.0		W					
C		-0.1		W					
D		-0.0		W					
	floor	-0.1		W					
	ceiling	-0.2		W					
C	base trim	-0.0		W					
C	ceiling trim	0.0		W					
D	door	-0.2		W					
D	door trim	-0.0		W					
D	door jamb	-0.0		W					
A	w. trim	-0.2		W					
A	w. sash	-0.0		W					
A	w. sill	-0.0		W					
B	wall - closet	-0.2		W					
C		0.0		W					
D		-0.1		W					
D	shelf support	-0.2		W					
	ceiling	-0.0		W					
	shelf	-0.1		W					
	floor	-0.2		W					
A	closet door	-0.1		W					
A	door trim	-0.0		W					
A	door jamb	-0.1		W					
A	wall	-0.0		W					
B		-0.1		W					
C		0.0		W					
D		0.0		W					
	ceiling	0.1		W					
	floor	-0.0		W					

\* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brck = B

N/A: Not Accessible; N/C: Not Coated; COV: Covered; VR - Vinyl Replacement

Notes:



XRF FIELD DATA SHEET

Address: 14 Brazos Rd., East Haven, CT

Apt. #: \_\_\_\_\_

Floor: \_\_\_\_\_ Room: \_\_\_\_\_

Page 3 of 6

Project Name: Lothrop Assoc.

Project Number: 20140370.ASE

Project Manager: KM (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
B	w. trim	-0.1		W					Rm 4 ↓ Rm 5 ↓
B	w. sash	0.1		W					
B	w. well	N/C		Vinyl					
W	sill	0.2		W					
	ceiling molding	0.1		W					
D	base trim	0.1		W					
D	door	-0.1		W					
D	door trim	0.2		W					
D	door jamb	0.2		W					
A	closet walls	0.2		W					
C	↓	0.0		W					
D	↓	-0.0		W					
	floor	-0.1		W					
	ceiling	-0.2		W					
A	closet door	-0.3		W					
A	closet door trim	-0.0		W					
A	closet door jamb	-0.1		W					
	sill	-0.0		W					
	sill support	-0.1		W					
A	wall	-0.2		W					
D	↓	-0.0		W					
C	↓	-0.1		W					
D	↓	-0.1		W					
	floor	-0.0		W					
	ceiling	0.1		W					
	ceiling molding	-0.2		W					
A	base trim	-0.1		W					
B	w. trim	-0.1		W					
B	w. sash	-0.0		W					
B	w. well	-0.2		W					
B	w. well	N/C		Vinyl					

\* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B

N/A: Not Accessible; N/C: Not Coated; COV: Covered; VR - Vinyl Replacement

Notes: \_\_\_\_\_



XRF FIELD DATA SHEET

Address: 14 Brazos Rd., East Haven, CT

Apt. #: 6

Floor: \_\_\_\_\_ Room: \_\_\_\_\_

Page B of 6

Project Name: Lothrop Assoc.

Project Number: 20140370.ASE

Project Manager: K M (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments	
D	door	0.1		W					Rule 5	
D	door trim	-0.3		W						
D	door jamb	0.2		W						
A	closet-wall	-0.2		W						
B		-0.0		W						
D		0.1		W						
	rustelt	0.0		W						
	Support	-0.1		W						
	closet-entry	-0.2		W						
	floor	-0.0		W						
C	closet door	-0.1		W						
C	closet trim	-0.0		W						
C	trim	-0.2		W						
A	wall	5.8	✓	W	Yes					Rule 6
D		4.4	✓	W						
C		2.9	✓	W						
D		3.7	✓	W						
	ceiling	-0.1		W						
B	crown molding	2.9	✓	W	NO					
C	w. trim	4.6	✓	W	NO					
C	w. sill	5.4	✓	W	NO					
C	w. sash	N/C		Vinyl						
C	w. wdm									
A	door	3.7	✓	W	NO					
A	door trim	2.6	✓	W	NO					
A	door jamb	2.5	✓	W	NO					
A	wall	9.1	✓	W	Yes				Rule 7	
B		3.4	✓	W						
C		3.1	✓	W						
D		2.9	✓	W						
	ceiling	-0.1		W						

\* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brck = B

N/A: Not Accessible; N/C: Not Coated; COV: Covered; VR - Vinyl Replacement

Notes:



**XRF FIELD DATA SHEET**

Address: 14 Brazos Rd. East Haven, CT

Apt. #: \_\_\_\_\_

Floor: \_\_\_\_\_ Room: \_\_\_\_\_

Page 5 of 6

Project Name: Lothrop Assoc.

Project Number: 20140370.ASE

Project Manager: KM (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
D	w. trim	2.6	✓	W	NO				Run 7
D	w. sill	1.3	✓	W	NO				
D	w. sash	0.3		W					
D	w. well	-0.3		M					
B	cabinet	-0.5		W					
D	↓	3.3	✓	W	NO				
D	↓ scribe	3.1	✓	W	NO				
D	↓ wall	2.9	✓	W	NO				
C	door	-0.3		W					
C	door trim	2.9	✓	W	YES				
C	door jamb	2.8	✓	W	YES				
A	wall-siding	3.2	✓	W	NO				Run 8
B	wall	-0.1		S					
C	↓	-0.0		S					
D	↓	0.1		S					
	ceiling	-0.0		S					
C	baseboard	-0.2		W					
A	door threshold	-0.1		W					
A	w. trim	7.9	✓	W	NO				
A	w. sash	9.1	✓	W	NO				
A	door	-0.3		W					
A	door trim	3.1	✓	W	NO				
A	door jamb	2.9	✓	W	NO				
A	door	-0.2		W					Extend ✓
A	door jamb	0.2		W					
A	door trim	-0.1		W					
A	trim	0.2		M					
A	w. trim	>9.9	✓	M	NO				
A	w. trim - vinyl	0.1		vinyl					
A	w. sash	-0.2		↓					
A	siding	-0.2		↓					

\* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B  
 N/A: Not Accessible; N/C: Not Coated; COV: Covered; VR - Vinyl Replacement  
 Notes: \_\_\_\_\_



**XRF FIELD DATA SHEET**

Address: 14 Brazos Rd. East Haven, CT

Apt. #: \_\_\_\_\_  
Page 6 of 6

Floor: \_\_\_\_\_ Room: \_\_\_\_\_

Project Name: Lothrop Assoc.

Project Number: 20140320 ASE

Project Manager: KM (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
A	wood panel	-0.1		W					Exterior
B	w trim	79.9	✓	M	NO				
B	w. Sash	-0.3		Vinyl					
B	w sill	-0.1		M					
C	door	-0.3		W					
C	door jamb	-0.1		W					
C	door trim	-0.0		W					
C	railing	-0.1		W					
C	pbtr trend	-0.4		W					
	s. landing	0.2		W					
A	wall	N/C		W					Exterior shed
B	↓	3.3	✓	W	yes				
C	↓	8.0	✓	W	NO				
D	↓	-0.0		W					
	floor	-0.3		W					
	ceiling	0.0		W					
	↓ joist	0.1		W					
	door	-0.3		W					
	door jamb	-0.1		W					
	door trim	1.6	✓	yes wood	yes				

\* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B

N/A: Not Accessible; N/C: Not Coated; COV: Covered; VR - Vinyl Replacement

Notes: \_\_\_\_\_

\_\_\_\_\_

## Appendix E

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### Airborne Radon Assessment Results and Chain of Custody

## Site Radon Inspection Report

Date : 4/23/2014

Ms. Karron Redfield  
Fuss & O'Neill Envirosience, LLC  
146 Hartford Road  
Manchester, CT 06040-

Client: Lothrop Assoc

Test Location 14 Brazos Road

Project #20140370.A5E  
East Haven, CT 06512-

## Individual Canister Results

Canister ID# : 2313967      Test Start : 04/18/2014 @ 12:08  
Canister Type : Charcoal Canister 3 inch      Test Stop : 04/21/2014 @ 14:20  
Location : Living rm      Received: 04/23/2014 @ 13:24  
Radon Level : **0.1 pCi/L**      Analyzed: 04/23/2014 @ 14:51  
Error for Measurement is:  $\pm$  0.5 pCi/L

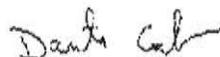
Canister ID# : 2313982      Test Start : 04/18/2014 @ 12:09  
Canister Type : Charcoal Canister 3 inch      Test Stop : 04/21/2014 @ 14:21  
Location : BLANK      Received: 04/23/2014 @ 13:24  
Radon Level : **0.1 pCi/L**      Analyzed: 04/23/2014 @ 14:51  
Error for Measurement is:  $\pm$  0.4 pCi/L

Canister ID# : 2313987      Test Start : 04/18/2014 @ 12:09  
Canister Type : Charcoal Canister 3 inch      Test Stop : 04/21/2014 @ 14:21  
Location : BR 5      Received: 04/23/2014 @ 13:24  
Radon Level : **0.2 pCi/L**      Analyzed: 04/23/2014 @ 14:51  
Error for Measurement is:  $\pm$  0.2 pCi/L

Canister ID# : 2314039      Test Start : 04/18/2014 @ 12:08  
Canister Type : Charcoal Canister 3 inch      Test Stop : 04/21/2014 @ 14:20  
Location : Living rm      Received: 04/23/2014 @ 13:24  
Radon Level : **0.1 pCi/L**      Analyzed: 04/23/2014 @ 14:51  
Error for Measurement is:  $\pm$  0.7 pCi/L




Andreas C. George  
Radon Measurement Specialist  
NJ MES 11089



Dante Galan  
Laboratory Director

NRSB ARL0001  
NYS ELAP ID: 10806  
PADEP ID: 0346  
NJDEP ID: NY933  
NJ MEB 90036  
FL DOH RB1609

## Site Radon Inspection Report

Date : 4/23/2014

The reported results indicate that radon levels in the building tested are below the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends retesting if your living patterns change and you begin occupying a lower level of the building, such as a basement or if major remodeling is done.

General radon information may be obtained by consulting the EPA booklet: A Citizen's Guide to Radon ([www.epa.gov/radon/pubs/ditguide.html](http://www.epa.gov/radon/pubs/ditguide.html)). To request a copy or for further information, please contact your state health department. The EPA maintains a radon information website, including copies of its publications, at [www.epa.gov/iaq/radon](http://www.epa.gov/iaq/radon).

**For New Jersey clients:** Please see the attached guidance document entitled Radon Testing and Mitigation: The Basics for further information.

**For New York clients:** If the radon level of one or more testing devices is equal to or exceeds 20 pCi/L please contact the New York State Department of Health, Bureau of Environmental Radiation Protection, for technical advice and assistance at 518-402-7556 or toll free 1-800-458-1158.

---

**PLEDGE OF ASSURED QUALITY**

All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of radon in air (EPA 402-R-92-004). The analytical results relate only to the samples tested, in the condition received by the lab, and that calculations were based upon the information supplied by client. RTCA and its personnel do not assume responsibility or liability, collectively and individually, for analysis results when detectors have been improperly handled or placed by the consumer, nor does RTCA and its personnel accept responsibility for any financial or health consequences of subsequent action or lack of action, taken by the customer or its consultants based on RTCA-provided results.



Andreas C. George  
Radon Measurement Specialist  
NJ MES 11089

Dante Galan  
Laboratory Director

NRSB ARL0001  
NYS ELAP ID: 10806  
PADEP ID: 0346  
NJDEP ID: NY933  
NJ MEB 90036  
FL DOH RB1609



**FUSS & O'NEILL**  
EnviroScience, LLC

Disciplines to Deliver

4/23/14

ENVIII

\*RTCA: These items must be included on our results pages

**Radon Testing Summary Sheet**

\*Project Number: 20140370.A5E

Placed by: EMM

\*Client Name: Lothrop Assoc.

Retrieved by: EMM

\*Building: 14 Brazos Rd.

Start Date: 4-18-14

\*Site Address: Eas + Haven, CT 06512

Stop Date: 4-21-14

Weather at Placement: Sunny

Contact/Phone #: \_\_\_\_\_

**Instructions:** Tear off center bar coded label from canister and affix to sheet in spaces provided. Please make sure top bar coded label is left on detector. Identify test location for each detector in space provided for that detector (room #, location in room, etc.). Use additional sheets as necessary. Please mark clearly if any detector is missing or damaged at retrieval.

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
2313967

Start Time: 12:08 pm  
Stop Time: 2:20 pm  
Identifier: Living Room

Start Time: \_\_\_\_\_  
Stop Time: \_\_\_\_\_  
Identifier: \_\_\_\_\_

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
2313967

Start Time: 12:08 pm  
Stop Time: 2:20 pm  
Identifier: Living Room (Duplicate)

Start Time: \_\_\_\_\_  
Stop Time: \_\_\_\_\_  
Identifier: \_\_\_\_\_

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
2313987

Start Time: 12:09 pm  
Stop Time: 2:21 pm  
Identifier: BR 5

Start Time: \_\_\_\_\_  
Stop Time: \_\_\_\_\_  
Identifier: \_\_\_\_\_

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM  
2313982

Start Time: 12:09 pm  
Stop Time: 2:21 pm  
Identifier: BR 5 (Blank)

Start Time: \_\_\_\_\_  
Stop Time: \_\_\_\_\_  
Identifier: \_\_\_\_\_

Start Time: \_\_\_\_\_  
Stop Time: \_\_\_\_\_  
Identifier: \_\_\_\_\_

Start Time: \_\_\_\_\_  
Stop Time: \_\_\_\_\_  
Identifier: \_\_\_\_\_