



Civil Engineering | Land Surveying | Environmental Sciences

Environmental Review Record
and
Statutory Checklist

Residence of William and Cynthia Cowles
216 Cosey Beach Avenue
East Haven, CT

NEPA Compliance Document
Prepared Pursuant to 24 CFR Part 58

November 7, 2014

Prepared for:
State of Connecticut
Department of Housing
and
Lothrop Associates
100 Pearl Street, 14th Floor
Hartford, CT 06103

Prepared by:
FREEMAN
Freeman Companies, LLC
36 John Street
Hartford, CT 06106

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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 216 Cosey Beach Avenue 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 41.2455 Latitude and -72.8726 Longitude. The residence, constructed in 1920, is located on the south side of Cosey Beach Avenue between Phillips Street and Coe Avenue. 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)
- Foundation repairs (only if building is not raised)
- Repair of chimney
- Replacement of insulation
- Repair, finish and paint drywall
- Installation of new furnace
- Roof repairs

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 that does not increase the unit density of the building or change land use, 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 10, 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 Window Shash - Exterior - C-Side
- Wood Window Trim - Exterior - C-Side
- Wood Window Well - Rooms 7,9 &10

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 10, 2014. Based on the results of the inspection, none of the tested materials were identified to contain asbestos.

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 10, 2014 through April 14, 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 (living room) contained a radon concentration of 0.2 pCi/L; which was below the EPA recommended action guideline of 4.0 pCi/L.

4.6 Mold

On April 9, 2014, Fuss & O'Neill performed a visual assessment for the presence of suspect mold and water intrusion. Based on the findings of the assessment, the following water damaged material was identified:

- Water damaged sheetrock in rooms 4 and 10
- Textured ceiling paint in Room 8 (2nd floor bathroom)

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

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

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

Environmental Review Record and Statutory Checklist
216 Cosey Beach Avenue
East Haven, CT



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 William & Cynthia Cowels – 216 Cosey Beach Avenue, East Haven

ERR FILE # Application Number 1170

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]		B	Consultation request submitted to SHPO directly by Department of Housing. SHPO determined that the proposed project will have an adverse effect on the state’s cultural resources. MOU is being worked on between DOH and SHPO.	Letter dated November 24, 2014 sent from Mary B. Dunne, Deputy State Historic Preservation Officer of SHPO to Hermia Delaire, Program Manager, Sandy Disaster Recovery Program, DOH. A copy of the letter is attached.
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 09009C0576J 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.	The project location 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. http://cteco.uconn.edu/map_catalog/maps/town/Coastal_Boundary/cstlbnd_EAST_HAVEN.pdf 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 http://www.epa.gov/region1/co/drinkwater/pc_solesource_aquifer.html 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.	http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp?nddbssel=44 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 http://www.rivers.gov/maps/conus.php
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 construction with no anticipated quantifiable increase in air pollution.	http://www.epa.gov/region1/topics/air/sips/sips_ct.html
9. 58.5(h) Farmland Protection [7 CFR 658]	A		Property does not include prime or unique farmland.	http://websoilsurvey.sc.egov.usda.gov
10. 58.5(i)(1) Noise Control and Abatement [24 CFR 51B]	A		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 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		Mitigation 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		No hazards were identified	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.	http://www.ct.gov/deep/lib/deep/environmental_justice/maps/east_haven.pdf 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 existing building footprint. Town of East Haven provides weekly curbside pickup of refuse for all 1 to 3 family homes	http://www.townofeasthavenc t.org/public_refuse.shtml
16 B. Fish and Wildlife [U.S.C. 661-666c]	A		Project will not involve the impounding, diverting, channelizing or modification of any steam 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		B	Water damaged material was identified in Rooms 4, 8 and 10. Renovation activities that disturb these areas should take protective measures to minimize disturbance.	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

11/7/2014

 Date

Charles D. Brink

 Preparer's Name (printed)

Manager Environmental Services

 Title (printed)

AUTHORIZED RESPONSIBLE ENTITY OFFICIAL:



 Authorized Responsible Entity Signature

1/29/2015

 Date

Hermia Delaire

 Authorized Responsible Entity Name (printed)

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

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

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

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

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

Farmland Protection Policy Act

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/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/

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

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

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

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?

Standard Environmental Record Sources	Approximate Minimum Search Distance (mi)	Yes	No
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 type="checkbox"/>	<input checked="" 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

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

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

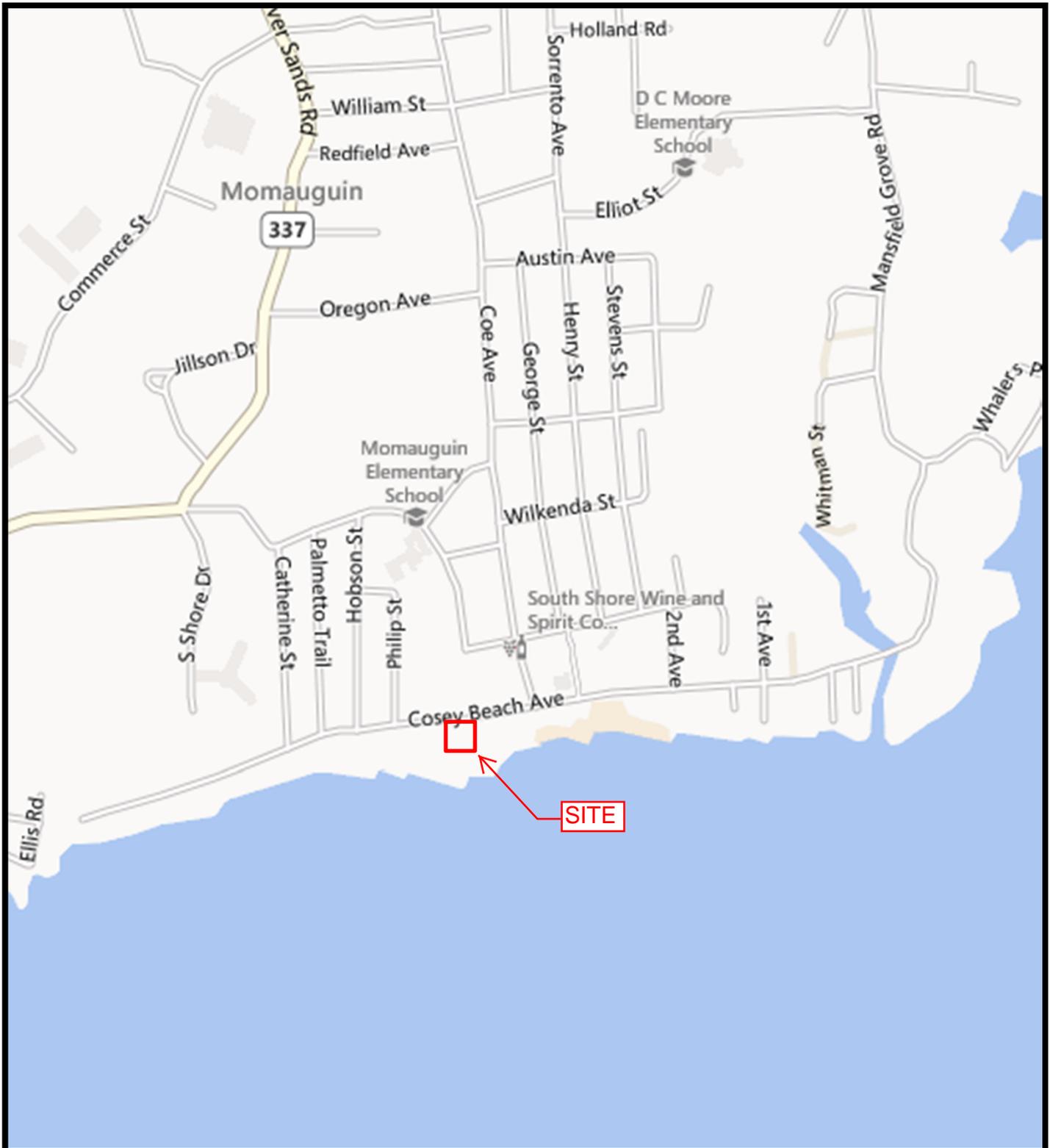


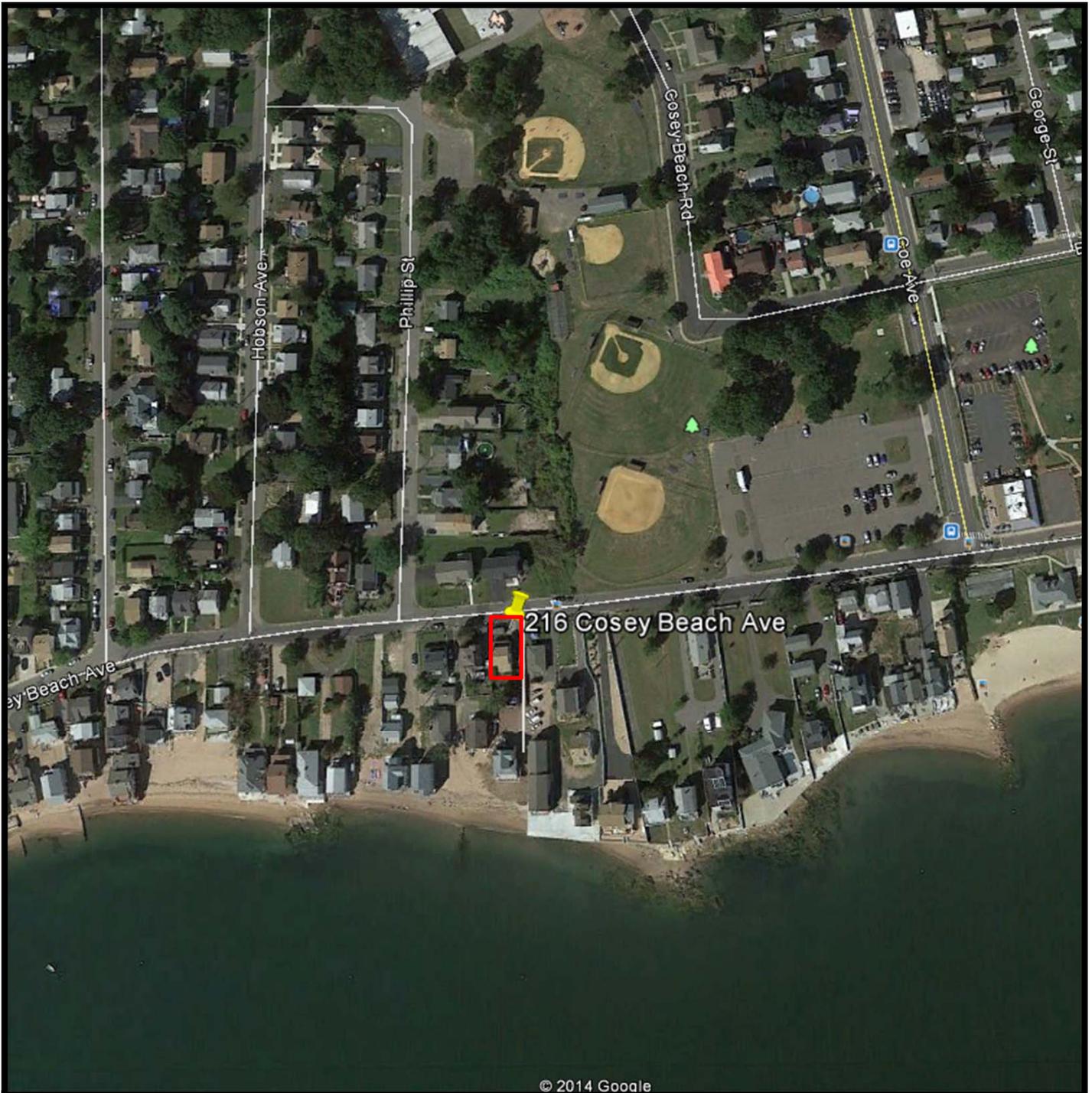
Figure 1

Prepared For:
 Residence of William & Cynthia Cowles
 216 Cosey Beach Avenue
 East Haven, CT



Not to Scale

Site Location Plan



© 2014 Google

Prepared For:
Residence of William & Cynthia Cowles
216 Cosey Beach Avenue
East Haven, CT



Not to Scale

Figure 2

Site Vicinity Map
4/14/2014

Appendix C

Resource Maps and Supporting Documents



Department of Economic and
Community Development

Connecticut
still revolutionary

LR
1170

November 24, 2014

received
11-25-14

Hermia M. Delaire
Program Manager
CDBG - Sandy Disaster Recovery Program
Department of Housing
505 Hudson Street
Hartford, CT 06106

Subject: Department of Housing Superstorm Sandy Reviews
216 Cosey Beach Avenue
East Haven, CT

Dear Ms. Delaire:

The State Historic Preservation Office has reviewed the information submitted for the above-named pursuant to the provisions of Section 106 of the National Historic Preservation Act of 1966.

The property located at 216 Cosey Beach Avenue is eligible for listing on the National Register of Historic Places as a contributing resource to a potential historic district.

Based on the information provided, due to the height and design of the elevation the proposed project will have an adverse effect on the state's cultural resources.

This office appreciates the opportunity to have reviewed and commented upon the project.

For further information please contact Laura L. Mancuso, Environmental Review Coordinator, at (860) 256-2757 or laura.mancuso@ct.gov.

Sincerely,

Mary B. Dunne
Deputy State Historic Preservation Officer

State Historic Preservation Office

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

An Affirmative Action/Equal Opportunity Employer An Equal Opportunity Lender

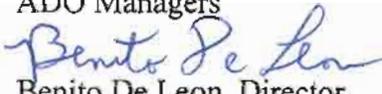


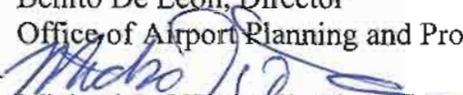
Federal Aviation Administration

Memorandum

Date: SEP 27 2012

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

From: 
Benito De Leon, Director
Office of Airport Planning and Programming (APP-1)


Michael J. O'Donnell, Director
Office of Airport Safety and Standards (AAS-1)

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

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.

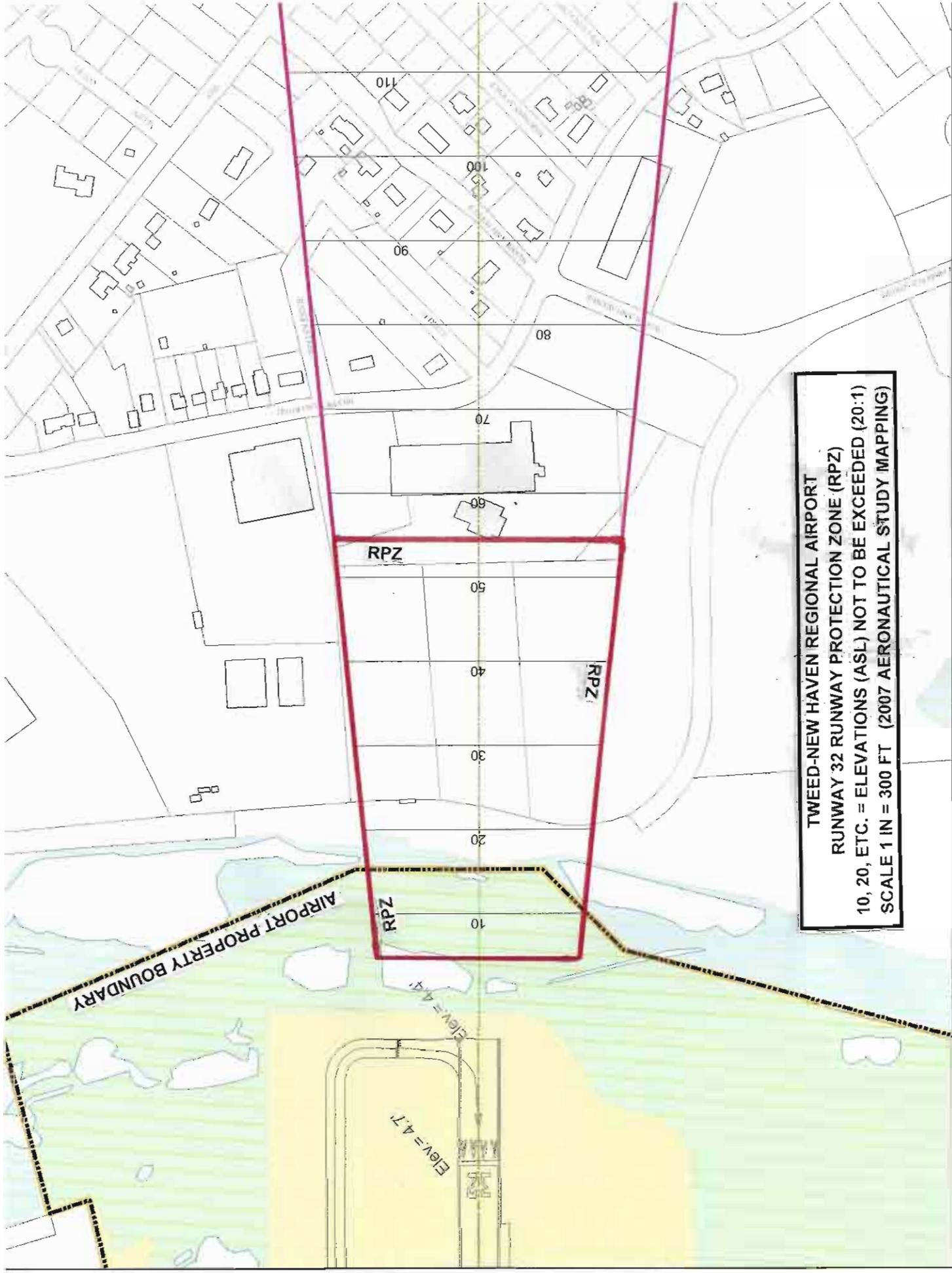
APP-400 will consult with AAS-100 when reviewing the project documents provided by the RO/ADO. APP-400 and AAS-100 will work with the Region/ADO to make a joint determination regarding Airport Layout Plan (ALP) approval after considering the proposed land use, location within the RPZ and documentation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

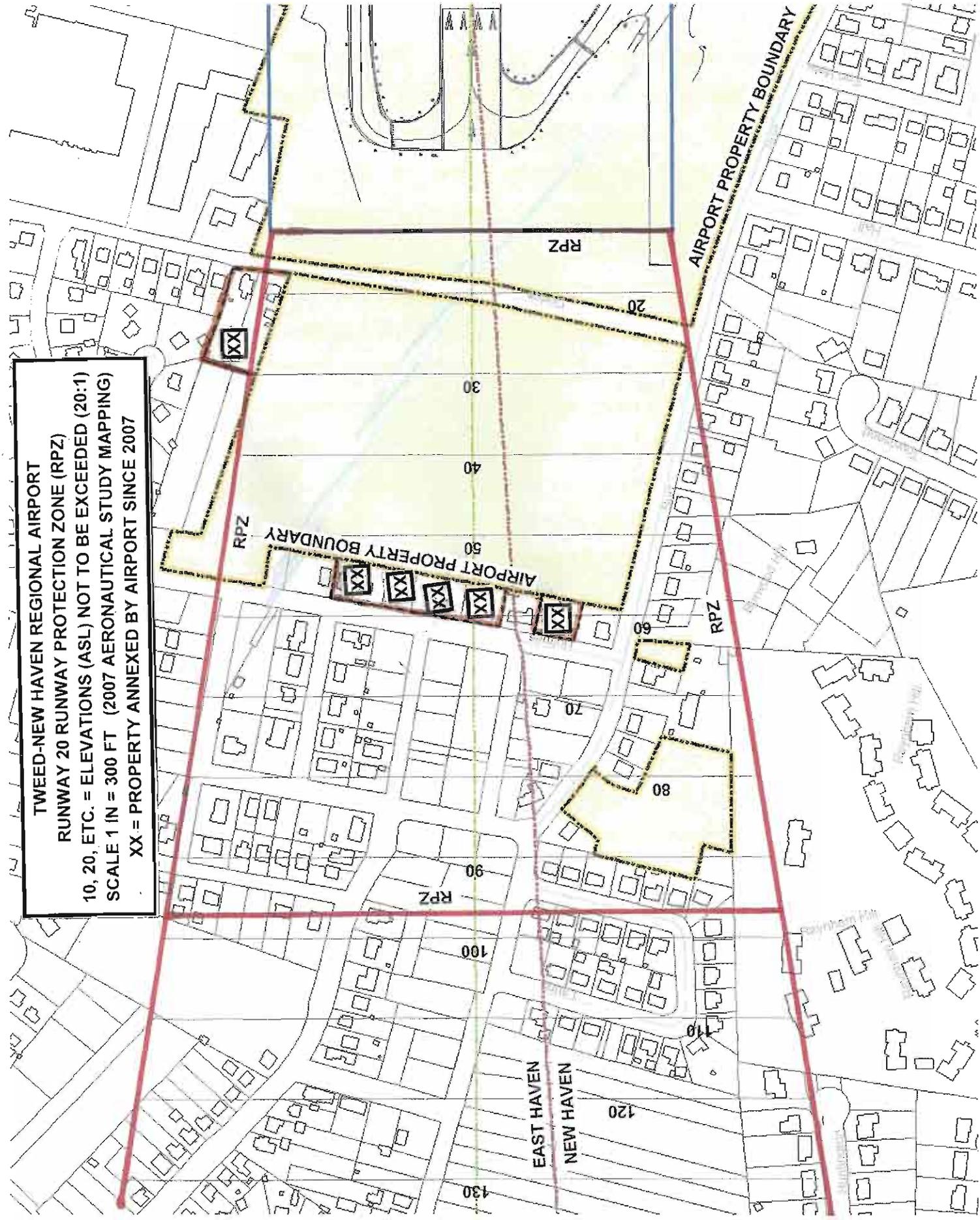
For additional information or questions regarding this interim guidance, please contact either Ralph Thompson, APP-400, at ralph.thompson@faa.gov or (202) 267-8772 or Danielle Rinsler, APP-401, at danielle.rinsler@faa.gov or (202) 267-8784.

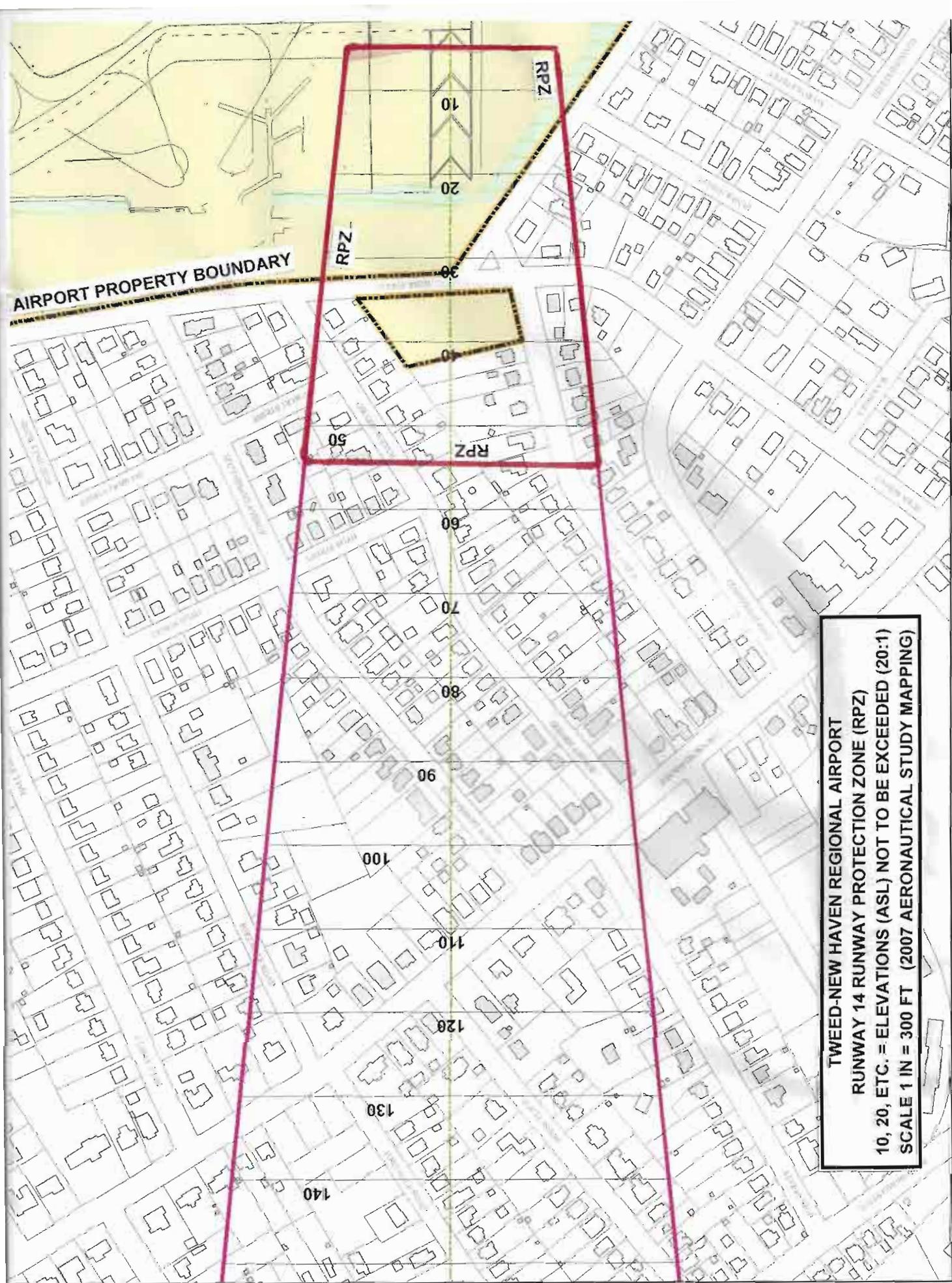


TWEED-NEW HAVEN REGIONAL AIRPORT
RUNWAY 32 RUNWAY PROTECTION ZONE (RPZ)
 10, 20, ETC. = ELEVATIONS (ASL) NOT TO BE EXCEEDED (20:1)
 SCALE 1 IN = 300 FT (2007 AERONAUTICAL STUDY MAPPING)

Runway 32 Approach Surface - 20:1 Obstacle Clearance

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





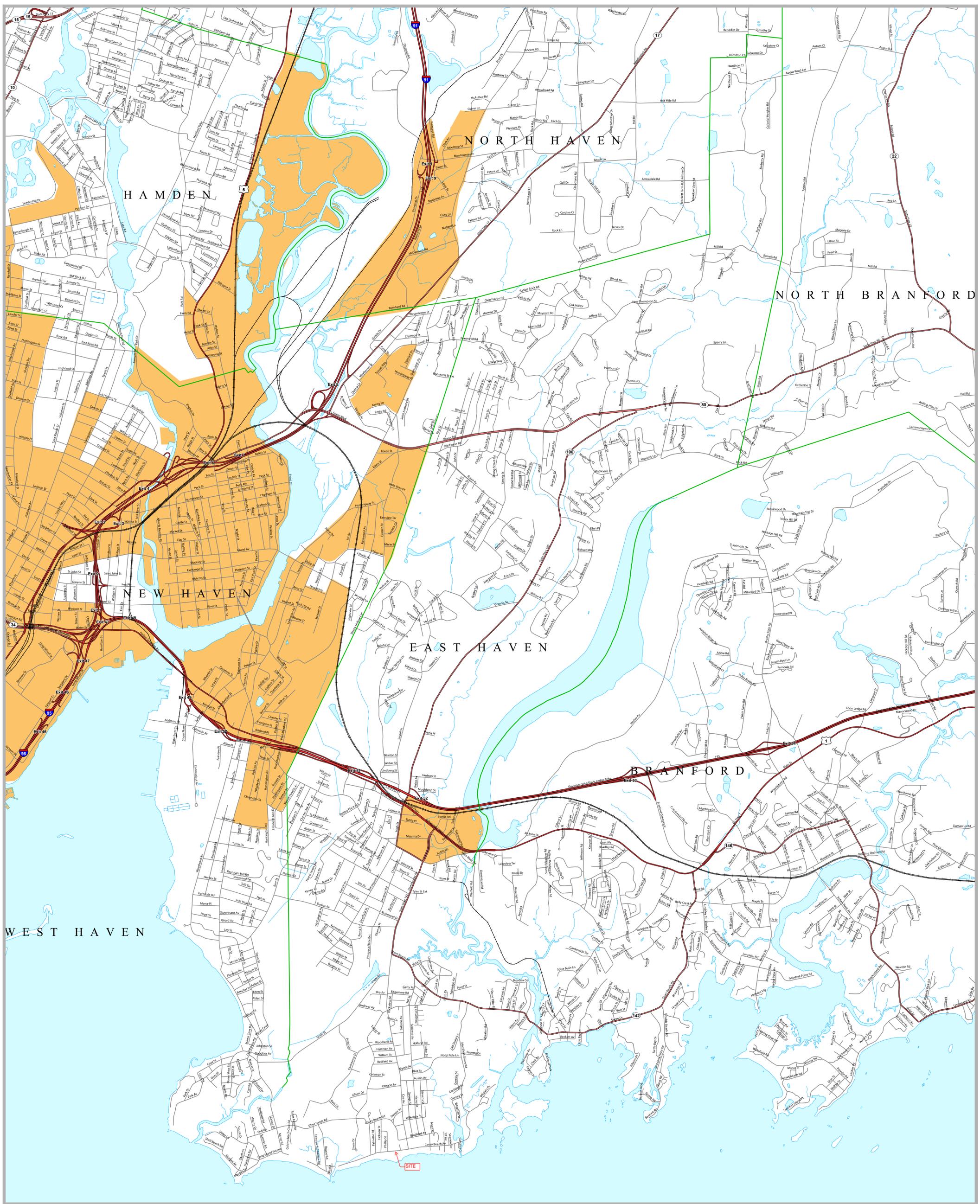
Runway 14 Approach Surface - 20:1 Obstacle Clearance Surface

FAR Part 77

August 2007

TWEED-NEW HAVEN REGIONAL AIRPORT
RUNWAY 02 RUNWAY PROTECTION ZONE (RPZ)
 10, 20, ETC. = ELEVATIONS (ASL) NOT TO BE EXCEEDED (34:1)
 SCALE 1 IN = 300 FT (2007 AERONAUTICAL STUDY MAPPING)
 XX = PROPERTY ANNEXED BY AIRPORT SINCE 2007





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.



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

Map prepared January 2009



Location of Town in Connecticut

Property Search

Residential Sales

Commercial Sales

Vacant Land Sales

Town of EastHaven

Last Updated: 04/22/2014

Internet Map



Summary

Address	216 COSEY BEACH AVE	Map/Block/Lot	030 0215 005
Primary Use	Residential	Acres	0.14
Unique ID	C0689800	Zone	R-1
Volume	0588	Page	0054

Ownership Information

Current Owner	COWLES WILLIAM B & CYNTHIA A & SURV	Appraised Value	70% Assessment
	216 COSEY BEACH AVE	Land	218880
	EAST HAVEN CT 06512	Buildings	59330
		Outbuildings	2018
		Total	280228
			196160

Sales History

Previous Owner		Sale Date	5/7/1990
Sale Price	180000	Deed Type	
Volume/Page	588 / 54	Valid Sale	No

Building #1					
Style	Conventional	Rooms	7	Bsmt Area	0
Building SF	1488	Bedrooms	3	Bsmt Finish	0
Stories	2.00	Baths	1 Full, 1 Half	Bsmt Garage	0 bays
Construction	Wood Frame	Fireplaces	1	Roof	
Overall Condition	Fair	Heating	/ None	Siding	Vinyl,
Year Built	1920	Cooling %	0	Units	1
Special Features	,,				
Components	Wood Deck , Wood Deck , Concrete/Masonry Patio , Concrete/Masonry Patio , Concrete/Masonry Patio , Frame Shed				

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.

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.

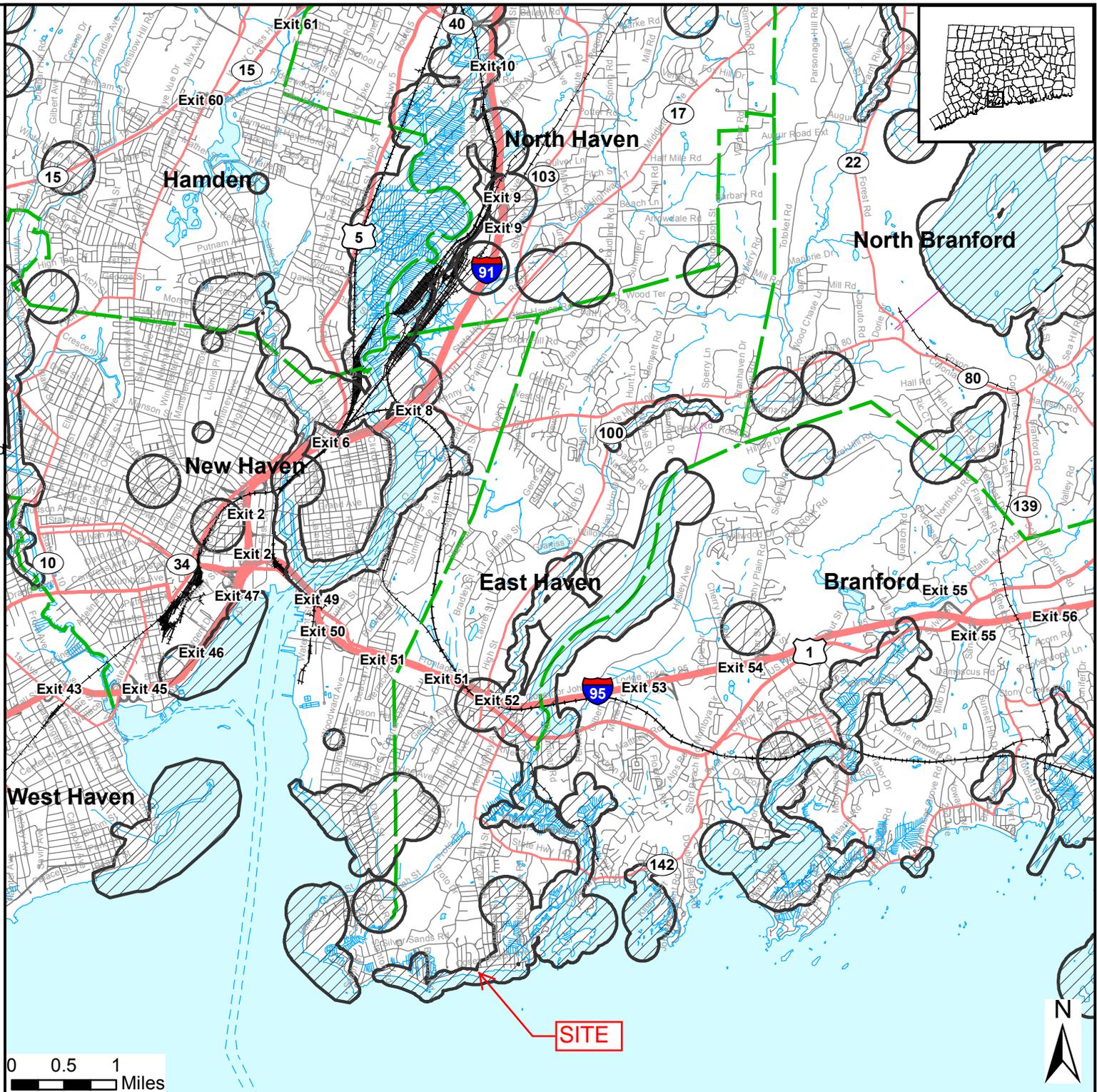
www.ct.gov/deep/nddbrequest

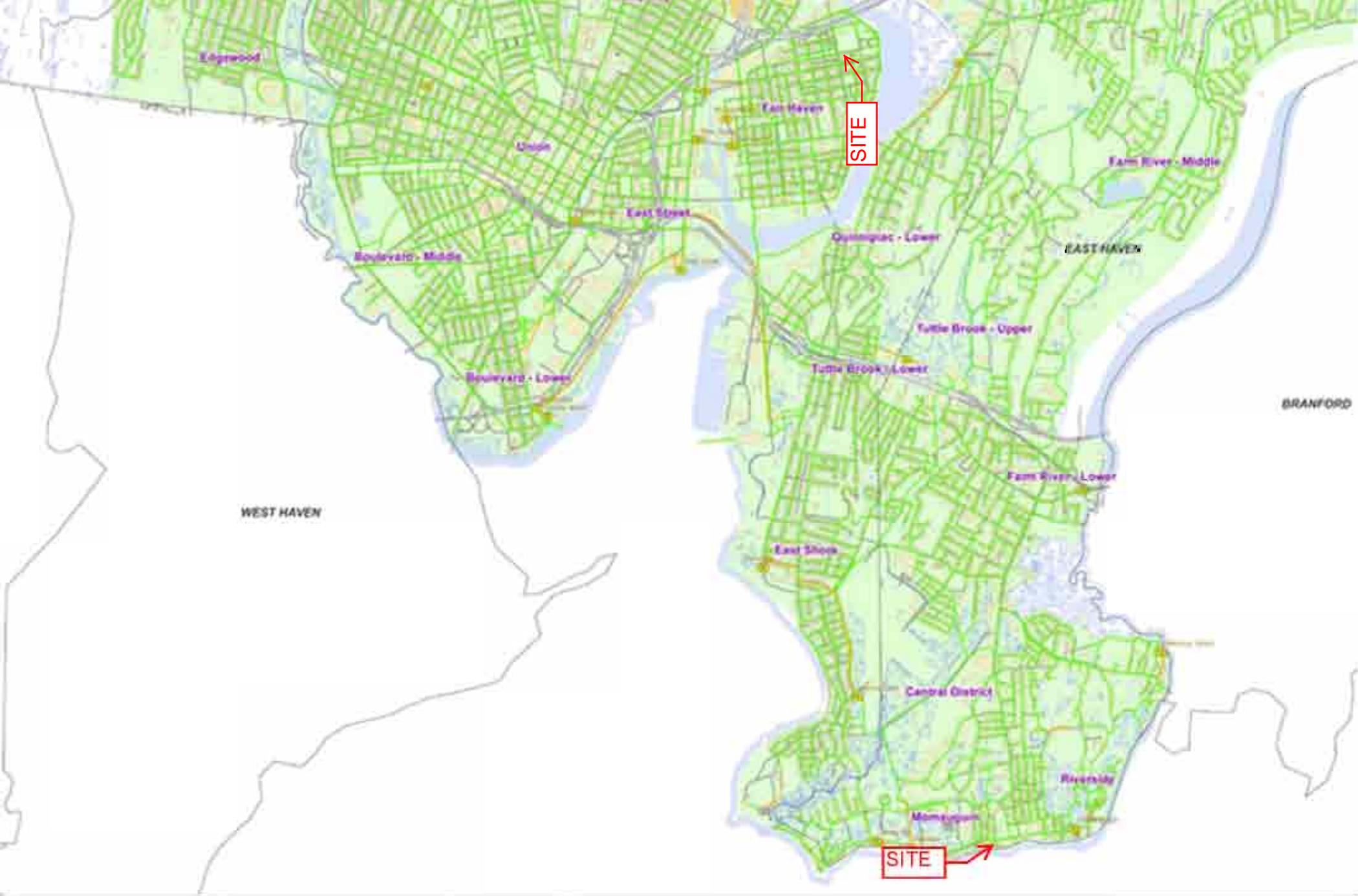
This file has PDF Layers. Look for the Layers tab on the left. Expand the layers and use the "eye" icons to change visibility.

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





Legend

- GNHWPCA Sanitary Sewer Area
- *Existing Preserved Open Space

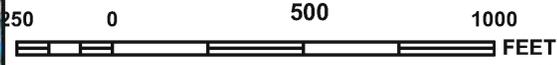
GNHWPCA Sewer Service Area Map

Disclaimer:
 Sewer Mapping Data is for planning purposes only. Although compiled from various public sources, it is not guaranteed. GNHWPCA does not warrant accuracy and completeness.

GNHWPCA Agency Towns Agree to the development consistent with the Commission Office of Policy and Management Commission and Department Plan Localized Quick Map Management as an Existing Preserved Open Space.



MAP SCALE 1" = 500'



PANEL 0576J

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

PANEL 576 OF 635
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BRANFORD, TOWN OF	090073	0576	J
EAST HAVEN, TOWN OF	090076	0576	J

-NOTE-
 THIS MAP INCLUDES BOUNDARIES OF THE COASTAL BARRIER RESOURCES SYSTEM ESTABLISHED UNDER THE COASTAL BARRIER RESOURCES ACT OF 1982 AND/OR SUBSEQUENT ENABLING LEGISLATION.

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.

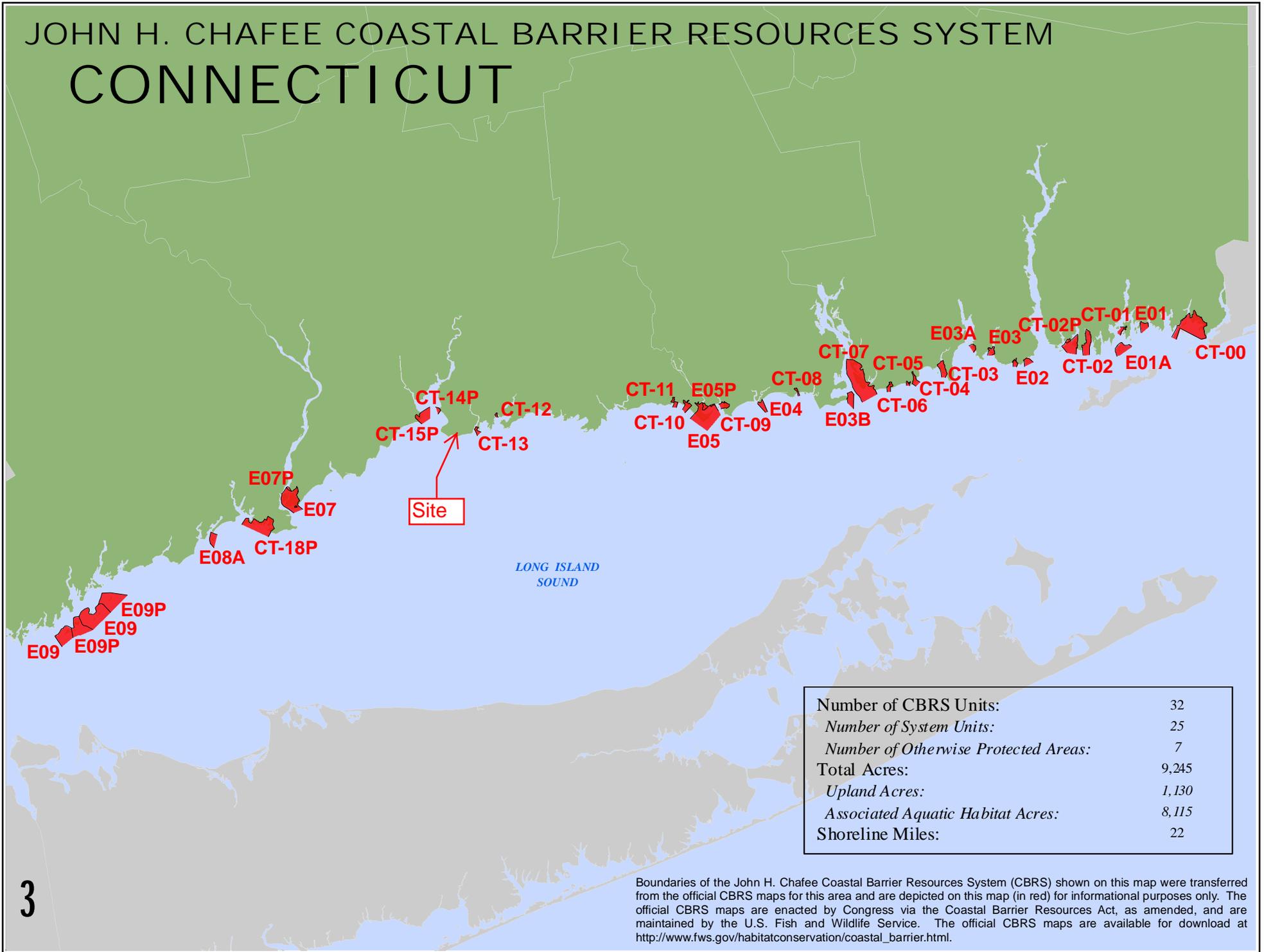


MAP NUMBER
09009C0576J
MAP REVISED
JULY 8, 2013

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

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.

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



Environmental Review Record and Statutory Checklist
216 Cosey Beach Avenue
East Haven, CT



Appendix D

Limited Hazardous Materials Inspection Report

Limited Hazardous Materials Building Inspection Report

216 Cosey Beach Avenue

East Haven, CT

Connecticut Department of Housing Application No. 1170

Lothrop Associates Project No. 1524-02

Lothrop Associates LLP

Hartford, CT

April 2014

Revised May 2014



FUSS & O'NEILL

Fuss & O'Neill EnviroScience, LLC

56 Quarry Road

Trumbull, CT 06611



FUSS & O'NEILL
EnviroScience, LLC

April 25, 2014
Revised, May 30, 2014

Mr. Thomas Streicher
Project Architect
Lothrop Associates LLP
100 Pearl Street, 14th Floor
Hartford, CT 06103

RE: Limited Hazardous Materials Building Inspection
216 Cosey Beach Avenue, East Haven, Connecticut
Fuss & O'Neill EnviroScience Project No. 20140370.B1E
Lothrop Associates Project No. 1524-02

Dear Mr. Streicher:

Enclosed is the report for the limited hazardous materials building inspection performed at 216 Cosey Beach Avenue located in East Haven, Connecticut.

The Inspection was performed from April 10, 2014, through April 14, 2014, by Fuss & O'Neill EnviroScience, LLC state-licensed inspector and included an asbestos inspection, testing for lead-based paint, a mold visual assessment, and an airborne radon assessment. On May 6, 2014, EnviroScience performed a lead-based paint risk 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
f .203.374.4391

www.fando.com

Connecticut
Massachusetts
Rhode Island
South Carolina

Enclosure

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Limited Hazardous Materials Building Inspection Report 216 Cosey Beach Avenue, East Haven, Connecticut Lothrop Associates LLP

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Limited Hazardous Materials Building Inspection Report 216 Cosey Beach Avenue, East Haven, Connecticut Lothrop Associates LLP

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APPENDIX B	LOTHROP ASSOCIATES LLP INITIAL PROPERTY INSPECTION REPORT
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APPENDIX D	LEAD PAINT TESTING PROCEDURES AND EQUIPMENT
APPENDIX E	LEAD TESTING FIELD DATA SHEETS
APPENDIX F	LEAD IN DUST SAMPLE RESULTS AND CHAIN OF CUSTODY FORM
APPENDIX G	LEAD IN SOIL SAMPLE RESULTS AND CHAIN OF CUSTODY FORM
APPENDIX H	LEAD IN DRINKING WATER SAMPLE RESULTS AND CHAIN OF CUSTODY FORM
APPENDIX I	AIRBORNE RADON GAS ASSESSMENT RESULTS AND CHAIN OF CUSTODY

1 Introduction

From April 10, 2014 through April 14, 2014, Fuss & O'Neill EnviroScience, LLC (EnviroScience) Environmental Analyst, Mr. Eduardo Miguel Marques performed a limited hazardous materials building inspection at the property located at 216 Cosey Beach Avenue located in East Haven, Connecticut (the "Site"). On May 6, 2014, EnviroScience's Mr. Ulkens Auguste performed sampling for lead in dust, lead in soil and lead in drinking water. Mr. Auguste is a state-licensed lead inspector/risk assessor. Refer to *Appendix A* for EnviroScience state licenses, certifications and accreditations.

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

- Inspection for asbestos-containing materials (ACM);
- Lead based-paint (LBP) inspection;
- A Mold visual assessment; and
- Airborne radon gas 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 ACM is conducted prior to possible disturbance of suspect ACM during renovation or demolition activities. This is United States (US) Environmental Protection Agency (EPA) requirement (National Emission Standards for Hazardous Air Pollutants [NESHAP] regulation; Title 40 CFR, Part 61, Subpart 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 pipe fitting insulations. Surfacing ACM includes all ACM that is applied by spray or trowel, 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, etc.

EPA requires samples of suspect ACM be collected in a manner sufficient to determine asbestos content and include homogenous (similar in color, texture and date of application) building materials. The EPA NESHAPs regulation does not specifically identify a minimum number of samples to be collected, but recommends the use of sampling protocols included in Title 40 CFR, Part 763, Subpart E - Asbestos Containing Materials in Schools.

2.1 Methodology

Samples of suspect ACM 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.
3. 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.

The Asbestos Consultant – Inspector collected samples and prepared proper chain of custody for transmission of samples to an accredited laboratory for analysis by Polarized Light Microscopy (PLM). The sampling locations, material type, quantity, sample identification, and asbestos content are identified by bulk sample analysis in Table 1 of the “Results” section. Any materials on the site not listed in the following table should be considered suspect ACM until sample results indicated otherwise. Refer to *Appendix C* for PLM analytical results for asbestos bulk samples.

2.2 Results

Utilizing the EPA protocol and criteria, the following materials were determined by sample collection and analysis to be **non-ACM**:

Table 1
Non-Asbestos-Containing Materials

Sample No.	Location	Material Type
041014emm-01A-C	Exterior	Black Vapor Barrier Behind Siding
041014emm-02A-B	Rear Lower Roof	Flashing
041014emm-03A-B	Rear Lower Roof	Roof Shingle
041014emm-04A-B	Exterior – Fireplace	Fireplace Mortar
041014emm-05A-B	Basement	Concrete Block Mortar
041014emm-06A-B	Wood Windows	Exterior Window Glazing Compound
041014emm-07A-C	Room 4 & Room 8	Textured/Popcorn Ceiling
041014emm-08A-C	Room 4 Ceiling, Room 4 Wall, & Room 10 Ceiling	Sheetrock/Joint Compound (Composite)
041014emm-09A-C	Room 4 Wall & Room 10 Ceiling	Joint Compound

2.3 Discussion

The EPA defines any material that contains greater than one percent (>1%) asbestos, utilizing PLM, as being an ACM. Materials that are identified as “none detected” are specified as not containing asbestos.

2.4 Conclusion

The analytical results of the suspect ACM identified during this inspection indicate these materials are non-ACM.

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

3 Lead-Based Paint Testing

On April 10, 2014, EnviroScience representative Mr. Eduardo Miguel Marques conducted the comprehensive LBP testing at the Site structure. The purpose of the inspection was for compliance with the EPA’s Renovation, Repair and Painting Rule (RRP) located at Title 40 CFR, Parts 745.80 through 92

and the US Department of Housing and Urban Development (HUD) Lead-Safe Housing Rule (24 CFR 35, Subparts B-R).

3.1 Methodology

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 D*).

For the purpose of this testing, interior and exterior building 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 two-story residential building is constructed of wood. Window systems are composed of wood; and vinyl; door systems are composed of wood and metal. There were no children under the age of six present in the residence at the time and date of the inspection.

3.2 Results

The testing indicated consistent painting trends throughout the building interior and exterior. The following painted components were determined to contain toxic levels of lead (greater than 1.0 milligram of lead per square centimeter of paint [mg/cm²]):

Table 2
Lead Painted Building Components

Building Component	Location	Reading (mg/cm ²)	Defective?
Wood Window Sash	Exterior – C-Side	8.0	Yes
Wood Window Trim	Exterior - C-Side	2.5	No
Wood Window Well	Rooms 7, 9, & 10	>9.9, 1.6, 2.6	Yes

The lead testing field data sheets are provided as *Appendix E* in this report.

3.3 Dust Wipe Samples

On May 6, 2014, EnviroScience lead inspector/risk assessor, Mr. Ulkens Auguste, collected dust wipe samples inside the Site structure to evaluate whether a lead dust hazard existed. The sample numbers, locations, and results are as follows:

Table 3
Lead Dust Wipe Sample Results

Sample No.	Location	Results
050614UA-16	Room 1, floor	<10 µg/ft ²
050614UA-17	Room 1, window sill	<40 µg/ft ²
050614UA-18	Room 7, floor	<10 µg/ft ²
050614UA-19	Room 7, window sill	<40 µg/ft ²
050614UA-20	Room 9, floor	<10 µg/ft ²
050614UA-21	Room 9, window sill	44 µg/ft ²
050614UA-22	Room 10, floor	<10 µg/ft ²
050614UA-23	Room 10, window sill	260 µg/ft ²
050614UA-24	Room 10, window sill - duplicate	240 µg/ft ²
050614UA-25	Field Blank	<10 µg/ft ²
050614UA-26	Field Blank	<10 µg/ft ²

Dust wipe samples were collected from window sill and floor locations as delineated on our chain of custody form. The dust wipe sampling was conducted in accordance with the protocol outlined in the document “Lead Testing Procedures and Equipment” (*Appendix D*). Sample results were compared to State of Connecticut standards for lead in dust as follows:

- 40 µg/ft² - for floors
- 250 µg/ft² - window sills

One dust wipe sample result was above the State of Connecticut standard on window sill surfaces; a lead dust hazard does exist in the areas tested.

The analytical dust wipe sample results are provided as *Appendix F* in this report.

3.4 Soil Samples

On May 6, 2014, one composite soil sample was collected from the exterior bare soil area along the drip line. The sample result is as follows:

Table 4
Soil Sample Results

Sample No.	Location	Results
050614UA-	D-Side, Drip Line Composite	49 mg/kg

* Results reported in milligrams per kilogram

The soil sampling was conducted in accordance with the protocol outlined in the document “Lead Testing Procedures and Equipment” (*Appendix D*).

The soil sample analytical result was below the State of Connecticut standard for lead in soil (400 mg/kg). A lead in soil hazard does not exist in the area tested at this Site.

The analytical sample location and result are provided as *Appendix G* in this report.

3.5 Drinking Water Samples

On May 6, 2014, drinking water samples (first draw and flush) were collected from the kitchen faucet. Both sample results were none detected for lead.

The water sample results were below the federal lead in drinking water standard of 15 parts per billion (ppb); a lead in drinking water hazard does not exist at this Site

The analytical sample results and their locations are provided as *Appendix H* in this report.

3.6 Conclusions

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

- Exterior wood window sash – C-Side;
- Exterior wood window trim – C-side; and
- Wood window wells.

Interior defective LBP identified (window wells) need to be abated. Exterior defective LBP may be addressed with interim controls.

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

If these components are to be demolished during renovations, a representative sample of the demolition waste stream must be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) to determine disposal requirements.

One of the representative lead in dust wipe sample analytical results was above the State of Connecticut standard for a window sill surface; a lead dust hazard does exist at this Site.

The soil sample analytical result was below the State of Connecticut standard for lead in soil of 400 mg/kg. A lead in soil hazard does not exist in the area tested.

The water sample results were below the federal drinking water standard of 15 ppb. A lead in drinking water hazard does not exist in the Site structure.

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. If a specific component or surface is not identified as having been tested, it should be presumed to be coated with LBP until tested. Contractors should be aware that the threshold limit of 1.0 mg/cm² for purposes of RRP requirements is not recognized by the OSHA Lead in Construction standard. Workers' exposures are still subject to the Lead in Construction standard, regardless of paint testing results.

4 Mold Visual Assessment

On April 9, 2014, EnviroScience representative Mr. Eduardo Miguel Marques performed a visual assessment for the presence of suspect mold and water intrusion at the Site structure.

4.1 Observations

Based on our findings, water damaged sheetrock ceilings were observed in Rooms 4 and 10. In addition, the textured ceiling paint was noted to be deteriorating in Room 8 (2nd floor bathroom). This could potentially be due to the moist conditions noted in the Site structure.

4.2 Recommendations

Mold may exist above the water damaged sheetrock ceilings. Potential exposure to mold during renovation should be considered; appropriate work protection, possible use of engineering controls and surface treatment of mold (if encountered) on building materials to remain should be considered.

If mold is encountered above the water damaged sheetrock ceilings, the building materials to remain in areas of visible suspect mold growth should be thoroughly cleaned and have a mold inhibitor applied to them, if possible.

Remediation of visible suspect mold growth and removal of water damaged building materials should be performed within a negative pressure enclosure, using properly-trained and protected workers. Removal should comply with guidance according to EPA and the Institute of Inspection, Cleaning and Restoration Certification (IICRC).

5 Airborne Radon Gas 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 US. Radon gas 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 that can damage lung tissue and lead to lung cancer over the course of a person's lifespan.

EPA studies indicated that radon gas concentrations in outdoor air average approximately 0.4 picoCuries per liter of air (pCi/L). However, radon gas and its decay products can accumulate to a much higher concentration inside a building. The EPA has adopted a recommended 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 gas within 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 gas is present in a building is to test the air. Each frequently-occupied room that is in the lowest living space of the building should be tested, as even adjacent rooms can have significantly different levels of radon gas.

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 currently underway.

EPA estimates that radon may cause about 14,000 lung cancer deaths in the US each year, with a range of 7,000 to 30,000. The US 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 Methodology

From April 10, 2014 to April 14, 2014, EnviroScience representative Mr. Eduardo Miguel Marques deployed passive radon gas detection canisters in the Site structure, 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 Heating, Ventilating and Air Conditioning (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 was performed by RTCA; analytical results are included in *Appendix I*.

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 that are deployed with, and shipped with the exposed canisters, so that the processing laboratory treats them without bias. 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 Site structure during the sampling period that occurred from April 10, 2014 to April 14, 2014. The concentration of radon in the sample and associated duplicate sample ranged from 0.1 pCi/L to 0.2 pCi/L. The EPA threshold for radon is 4.0 pCi/L.

In *Table 5* below, the location and result of the quality control duplicate test is listed:

**Table 5
Duplicate Sample Result**

Location	Canister Numbers	Radon Concentration (pCi/Liter)			Relative Percent Difference (RPD, %)
		Sample	Sample Duplicate	Sample Average	
Living Room	2302450 & 2302437	0.2	0.1	0.15	Percent Difference Not Needed (No Concentrations Above 4.0 pCi/Liter)

Note Duplicate testing result was satisfactory.

In *Table 6* below, the location and result of the quality control blank test is listed:

**Table 6
Blank Sample Result**

Location	Canister Numbers	Radon Concentration (pCi/Liter)
Living room	2302365	0.1

Note Blank testing result was satisfactory.

5.5 Conclusions

During the course of the airborne radon gas measurement assessment, four sampling canisters, including one duplicate and one blank, were placed in the residence. The analytical results of the samples collected were below the EPA recommended action level of 4.0 pCi/L. No further action regarding radon gas is required.

Report prepared by Environmental Analyst Eduardo Miguel Marques.

Reviewed by:



Kevin McCarthy
Project Manager



Timothy M. Downey
Senior Project Manager

Appendix A

Fuss & O'Neil EnviroScience State Licenses, Certifications and Accreditations



0001769 FP **PRSR T7 0 1264 06040

ULKENS AUGUSTE
146 HARTFORD RD
C/O FUSS & O'NEIL ENVIRO SCIENCE
MANCHESTER CT 06040-5992

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Department of Public Health
P.O. Box 38000

(860) 508-7603

M.S. #12100A
Hartford, CT 06135-0300

<http://www.dph.state.ct.us>

Sincerely,

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

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Fuss & O'Neill EnviroScience, LLC

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

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Ulken Auguste

xxx-xx-6277

has successfully completed the
4 Hr. Asbestos Inspector Refresher
Asbestos Accreditation under TSCA Title II
40 CFR Part 763



John Rowinski, Principal Instructor

January 6, 2014

Date of Course

January 6, 2014

Examination Date



Robert L. May, Jr., Training Manager

AI-R-01/14-4

Certificate Number

January 6, 2015

Expiration Date

0001768 FP **PRSR T7 D 1264 08040

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MLS #12880A <http://www.dph.state.ct.us>
Hartford, CT 06134-0308

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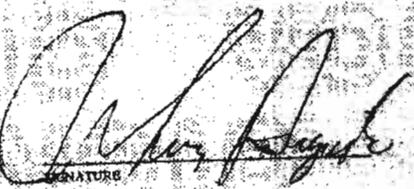
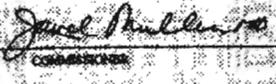
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LEAD INSPECTOR RISK ASSESSOR

ULKENS AUGUSTE

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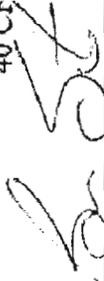
Ulkens Auguste

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has successfully completed the

8 Hour Lead Inspector Risk Assessor Refresher Course
(Approved per Sec. 20-477, CT General Statutes)

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Brian Santos, Principal Instructor



Robert L. May, Jr., Training Manager

February 20 & 25, 2014

Date of Course

LIRA-R-02/14-1

Certificate Number

February 25, 2014

Examination Date

February 25, 2015

Expiration Date

0001729 FP **PRSR T7 0 0684 06040

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

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P.O. Box 340308
M.S.#12MQA <http://www.dph.state.ct.us>
Hartford, CT 06134-0308

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02/28/15
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03-720789

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COMMISSIONER

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NAME

EDUARDO M. MARQUES

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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 FSCA Title II

40 CFR Part 763

John Rowinski

John Rowinski, Principal Instructor

Robert L. May, Jr.

Robert L. May, Jr., Training Manager

September 4, 2013

Date of Course

AI-R-09/13-9

Certificate Number

September 4, 2013; A

Examination Date & Grade

September 4, 2014

Expiration Date

0001728 FP **PRSR T7 0 0664 06040

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

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P.O. Box 340308
M.S.#12MQA <http://www.dph.state.ct.us>
Hartford, CT 06134-0308

Sincerely,
Jewel Mullen

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

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LEAD INSPECTOR

EDUARDO M. MARQUES

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

Jewel Mullen
COMMISSIONER

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DEPARTMENT OF PUBLIC HEALTH

NAME:
EDUARDO M. MARQUES

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

PROFESSION:
LEAD INSPECTOR

Jewel Mullen
COMMISSIONER

WALLET CARD

STATE OF CONNECTICUT
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NAME:
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VALIDATION NO. 03-720788 **CERTIFICATION NO.** 002132 **CURRENT THROUGH:** 02/28/15

PROFESSION:
LEAD INSPECTOR

Jewel Mullen
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

LJ-R-02/14-1

Certificate Number

February 24, 2015

Expiration Date

Appendix C

Asbestos Sample Results and Chain of Custody Forms





041409780

22 PLM

SAMPLE LOG FOR ASBESTOS BULKS

Sheet 1 of 1

Project Name: Lathrop Assoc.

Project No. 2014 0370.B1E

Building: 216 Casey Beach Ave., East Haven, CT

Project Manager: KM

Sample ID	Sample Location	Material	Result (%)
041014 EMM-01A-C	Exterior	black vapor barrier behind siding	
-02A-B	Rear lower roof	flashing	
-03A-B		roof shingle	
-04A-B	fireplace - exterior	fireplace mortar	
-05A-B	BSmt.	CMU mortar (foundation)	
-06A-B	Wood windows	Ext. window glazing compd.	
-07A-C	Rm. 4, 8, 8	textured popcorn ceiling	
-08A-C	Rm. 4 - ceiling, Rm. wall, Rm. 10 - ceiling	Sheetrock (joint compd. (composite))	
-09A-C		Joint compd.	

Analysis Method: PLM Other

Turnaround Time: 24 hr

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call the EnviroScience Laboratory if analyses will be late at (860) 646-2469.

Fax Results to the EnviroScience Laboratory at: 888-838-1160.

Special Instructions: Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. EPA 400 Point Count all samples of content <4%, positive stop on all point counts.

Samples collected by: [Signature] Date: 4-10-14 Time: am.

Samples [Rec'd][Sent by] [] [] Date: [] [] Time: [] []

Samples Received by: [Signature] EMSL FX Date: 4/12/14 Time: 1000

Shipped To: EMSL State NJ Other _____

Method of Shipment: Fed Ex Other _____

2014 APR 12 A 10:15
RECEIVED
EMSL
CINNAMINSON, N.J.

22

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com>cinnaslab@EMSL.com

EMSL Order: 041409780

CustomerID: ENVI54

CustomerPO:

ProjectID:

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
 Fax: (888) 838-1160
 Received: 04/12/14 10:00 AM
 Analysis Date: 4/13/2014
 Collected: 4/10/2014

Project: 20140370.B1E / Lathrop Associates / 216 Cosey Beach Avenue, East Haven, CT

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
041014EMM-01A 041409780-0001	Exterior - Black Vapor Barrier behind Siding	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
041014EMM-01B 041409780-0002	Exterior - Black Vapor Barrier behind Siding	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
041014EMM-01C 041409780-0003	Exterior - Black Vapor Barrier behind Siding	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected
041014EMM-02A 041409780-0004	Rear lower roof - Flashing	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (other)	None Detected
041014EMM-02B 041409780-0005	Rear lower roof - Flashing	Black Non-Fibrous Homogeneous	15% Glass	85% Non-fibrous (other)	None Detected
041014EMM-03A 041409780-0006	Rear lower roof - Roof Shingle	Brown/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (other)	None Detected
041014EMM-03B 041409780-0007	Rear lower roof - Roof Shingle	Tan/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (other)	None Detected
041014EMM-04A 041409780-0008	Fireplace-exterior - Fireplace Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Juli Patel (9)

Jillian Yurick (13)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from 04/14/2014 07:02:10

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> cinnasblab@EMSL.com

EMSL Order: 041409780
 CustomerID: ENVI54
 CustomerPO:
 ProjectID:

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
 Fax: (888) 838-1160
 Received: 04/12/14 10:00 AM
 Analysis Date: 4/13/2014
 Collected: 4/10/2014

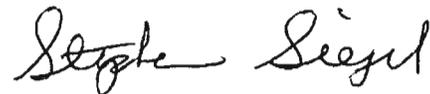
Project: 20140370.B1E / Lathrop Associates / 216 Cosey Beach Avenue, East Haven, CT

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
041014EMM-04B <i>041409780-0009</i>	Fireplace-exterior - Fireplace Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-05A <i>041409780-0010</i>	Bsmt - CMU Mortar (Foundation)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-05B <i>041409780-0011</i>	Bsmt - CMU Mortar (Foundation)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-06A <i>041409780-0012</i>	Wood windows - Ext Window Glazing Cmpd	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-06B <i>041409780-0013</i>	Wood windows - Ext Window Glazing Cmpd	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-07A <i>041409780-0014</i>	Rm 4 - Textured / Popcorn Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-07B <i>041409780-0015</i>	Rm 8 - Textured / Popcorn Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-07C <i>041409780-0016</i>	Rm 8 - Textured / Popcorn Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

 Juli Patel (9)
 Jillian Yurick (13)


 Stephen Siegel, CIH, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from 04/14/2014 07:02:10

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (800) 220-3675 / (856) 786-5974
<http://www.EMSL.com> cinnasblab@EMSL.com

EMSL Order:	041409780
CustomerID:	ENVI54
CustomerPO:	
ProjectID:	

Attn: Kevin McCarthy Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040	Phone: (860) 646-2469 Fax: (888) 838-1160 Received: 04/12/14 10:00 AM Analysis Date: 4/13/2014 Collected: 4/10/2014
Project: 20140370.B1E / Lathrop Associates / 216 Cosey Beach Avenue, East Haven, CT	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
041014EMM-08A-Composite <i>041409780-0017</i>	Rm 4-ceiling - Sheetrock / Joint Cmpd	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
This is a composite result of wallboard and jt. compound.					
041014EMM-08B-Composite <i>041409780-0018</i>	Rm 1-wall - Sheetrock / Joint Cmpd	Brown/White Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
This is a composite result of wallboard and jt. compound.					
041014EMM-08C-Composite <i>041409780-0019</i>	Rm 10-ceiling - Sheetrock / Joint Cmpd	Brown/White Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
041014EMM-09A <i>041409780-0020</i>	Rm 4-ceiling - Joint Cmpd	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-09B <i>041409780-0021</i>	Rm 1-wall - Joint Cmpd	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
041014EMM-09C <i>041409780-0022</i>	Rm 10-ceiling - Joint Cmpd	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Juli Patel (9)
Jillian Yurick (13)

Stephen Siegel

 Stephen Siegel, CIH, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from 04/14/2014 07:02:10

Appendix D

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

30-Second Standard Mode Reading Description	Substrate	Threshold (mg/cm²)
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

Quick Mode Reading Description	Substrate	Threshold (mg/cm²)	Inconclusive Range (mg/cm²)
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.

Lead Dust Wipe Sampling Protocol

Data Collection

- A. A description of the sample location is recorded.
- B. Surface type (floor, windowsill, window well) is noted.
- C. Surface area measurements are recorded.

Wipe Sampling Method

- A. The area to be wiped is identified and measured.
- B. A disposable glove is put on and the “ghost wipe” package is opened.
- C. Without touching any other surface, the wipe is opened and placed flat down on the surface. Using firm, consistent pressure, a wipe is taken in a single “S” motion.
- D. Next the wipe is folded in half with the contaminated side facing inward and another wipe is taken again at 90 degrees to the first “S” wipe. Do not use a scrubbing motion, but be sure to collect all visible dust in the measured area.
- E. The wipe is folded again with the contaminated side inward. Without touching any other surface, the wipe is placed into a plastic centrifuge tube. The tube is sealed and labeled. The sample number indicates the date and sampler’s identity.
- F. The samples are submitted to our laboratory on our standard sample log. Date and time of transfer is recorded to ensure proper chain of custody. The analytical procedure utilized is a modified EPA SW-846-3050. Blanks are submitted in accordance with EnviroScience's QA/QC program.

Fuss and O'Neill EnviroScience, LLC Lead In Soil Composite Sampling Protocol

Linear Transect Method:

For use around roadways, buildings, and other structures such as painted fencing, concrete walls, etc. Each side of the building is labeled with a letter. The 'A' side of the building is the street side. The remaining sides are labeled B, C, and D, clockwise around the building. Fencing and concrete walls are similarly labeled if there is a street side. Otherwise, along with roadways, these structures can be labeled using the directional points North, South, East and West.

1. Linear transects are established parallel to the building, wall, fence or roadway at 2 foot intervals.
2. Three (3) to ten (10) distinct locations roughly equidistant from one another along the transect line are selected as sample points. As a general rule, we would like to see five sampling points for each 100 feet of transect line, but sample points should be at least 2 feet apart, so in smaller areas (less than 10 feet), fewer samples may be collected.
3. Samples of the top one-half inch (.5") of soil should be taken using a metal spoon or stainless-steel scoop. Collect soil until a circular hole of approximately 2 inches in diameter (0.5" deep) has been created. Samples from each of the sampling points should be composited into a 24-ounce plastic bag of at least 3 mil in weight. The bags should be either zip-locked or foldable with puncture proof tabs.
4. After each composite sample is collected, the sampling spoon or scoop should be thoroughly cleaned with a disposable wipe to prevent cross contamination of other composite samples to be collected in other areas on the site.
5. The soil samples are dried, weighed out and digested in nitric acid according to EPA Method 3050. Analysis is performed by direct aspiration flame atomic absorption spectrophotometry according to EPA Method 7420. Results are expressed in milligrams per kilogram (mg/kg), or parts-per-million (ppm).

Grid Method:

In other areas, such as play areas and other open spaces, an X shaped axis should be developed with directional reference points of North, South, East and West. At least five, but not more than ten sampling points should be designated along each axis. The sampling points should be equidistant from one another and should be at least one foot distant from each other.

The sampling and compositing procedures outlined in the linear transect method should be followed for each axis.

For all soil sampling, a property sketch should be drawn. It is recommended that you use the space provided on the back of the lead in soil sample log.



Appendix E

Lead Testing Field Data Sheets





LEAD INSPECTION COVER SHEET

Inspector's Information

Inspector's Name: Edwardo Miguel Marquez License Number: 002132
 XRF Model: RMD Serial Number: 324RT
 Date of Inspection: 7-16-14 Project Number: 20140370.B/E

Property Information

Building Address: 216 Casey Beach Ave.
 (Street)
East Haven, CT (City) Age of Property: _____
 Describe Structure: two-story residential; wood trim/wood/vinyl/windows
wood doors, SR wall/ceiling

- 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

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

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)? _____

XRF Calibration Check

- Calibration Paint Film Used: NIST 1.02 mg/cm² Manufacturer's Standard 1.0 mg/cm²
- Calibration Check Limits Used: RMD (0.7 to 1.3 mg/cm² inclusive)
 Scitec MAP4 (0.6 to 1.2 mg/cm² inclusive)

	Hour	First Reading	Second Reading	Third Reading	Average
First Check	7:20am	0.9	1.0	0.9	0.93
Second Check	9:40am	1.0	0.9	0.9	0.90
Third Check					
Fourth Check					



Project Name: Lothrop Assoc.

Project Number: 20140370.01E

Address: 216 Casey Beach Ave, East Haven, CT

Project Manager: KM

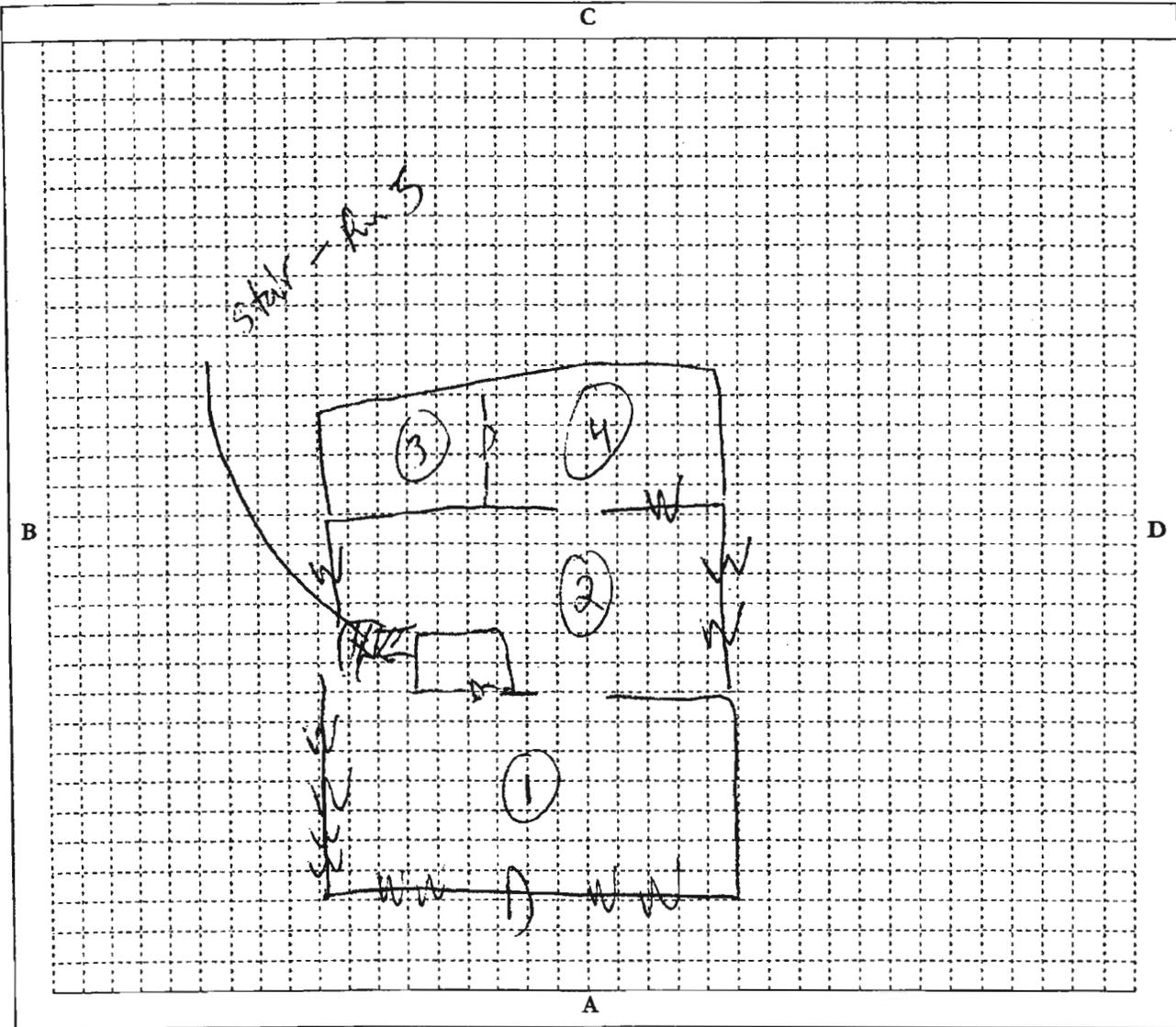
Floor: _____ Room: _____

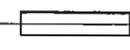
Apt. #/Bldg #: _____

Number of Doors: _____ No. of Windows: _____

Page 1 of 2

Diagram of: 1st Floor



Room Number  Door  Window

Page _____ of _____



Project Name: Lothrop Assoc.

Project Number: 20140370. B1E

Address: 216 Casey Beach Ave, East Haven CT

Project Manager: KM

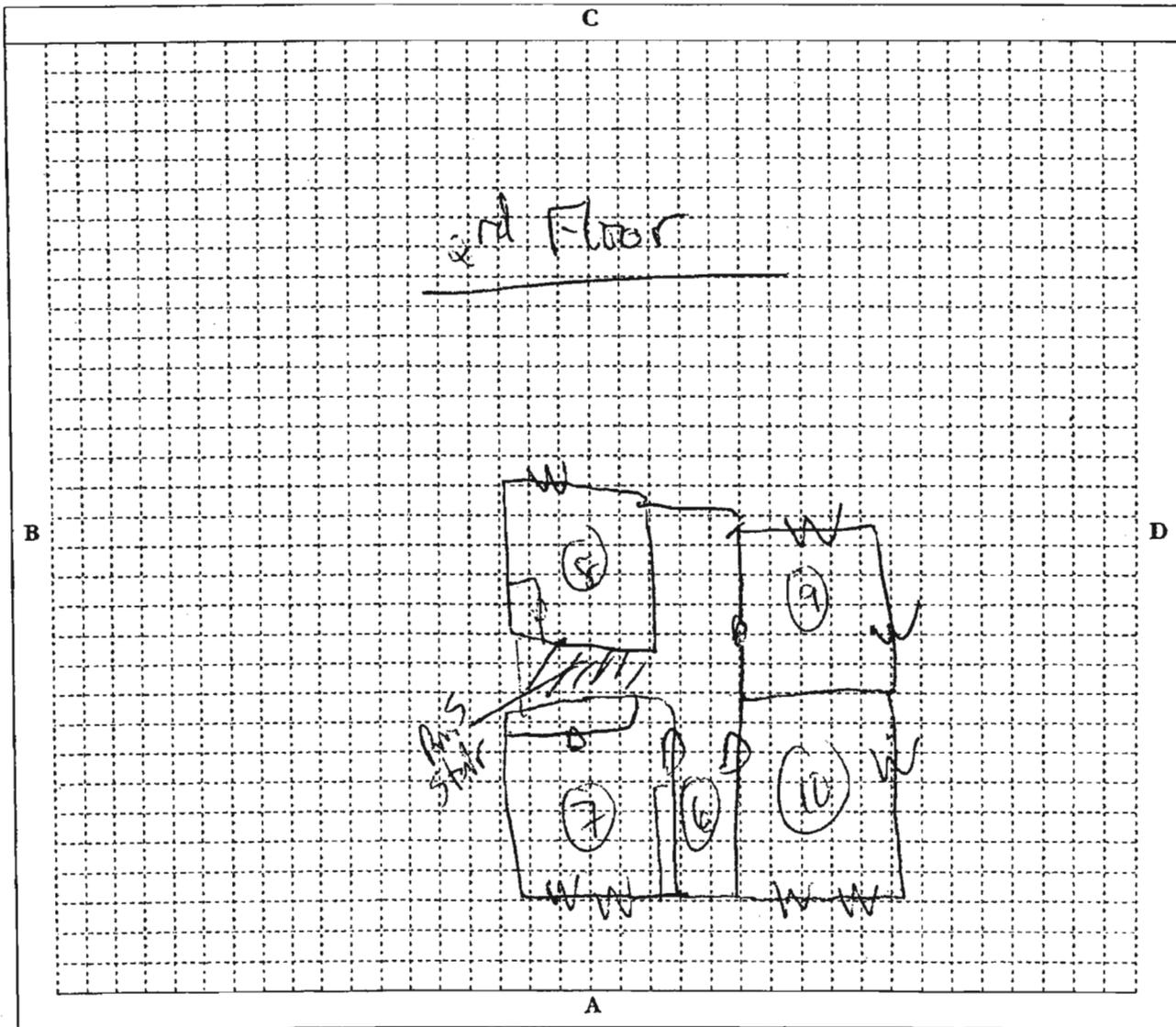
Floor: _____ Room: _____

Apt. #/Bldg #: _____

Number of Doors: _____ No. of Windows: _____

Page 2 of 2

Diagram of: 2nd Floor



(#) Room Number  Door  Window

Page _____ of _____



XRF FIELD DATA SHEET

Address: 216 Casey Beach Ave, East Haven, CT

Apt. #: _____

Floor: _____ Room: _____

Page 1 of 6

Project Name: Lathrop Assoc.

Project Number: 20140370-BLE

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

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
A	w. trim	-0.1		W					Ext. window
A	w. sash	N/C		Vinyl					
A	corner	-0.2		M					
A	trim	-0.1		Vinyl					
B	front entry stool	-0.2		W					
A	door frame	-0.4		W					
A	storm door	-0.3		M					
A	soffit	-0.3		M					
B	w. trim	-0.2							
B	Siding	-0.2		W					
B	walk	0.3		C					under vinyl front interior
	column	-0.2		W					↓ Ext. window ↓ Ext. window ↓ Ext. window ↓ Ext. window ↓ Ext. window ↓ Ext. window ↓ Ext. window ↓ Ext. window ↓ Ext. window
	ceiling	-0.3		W					
	beam	-0.2		W					
A	walk	0.2		C					
C	↓	0.0		C					
D	↓	-0.0		C					
B	door	-0.1		M					
B	door head	-0.1		W					
B	door handle	-0.1		M					
B	handle trim	0.2		W					
C	deck floor	-0.1		W					
C	ceiling	-0.0		W					
C	post	0.1		W					
C	w. trim	0.0	✓	W	✓				
C	w. trim	2.5	✓	M	✓				
C	door	0.0		W					
C	door jamb	0.1		W					
C	door frame	0.1		M					
C	lath & plaster	-0.2		W					
D	w. 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: _____



XRF FIELD DATA SHEET

Address: 216 Casey Beach Ave, East Haven, CT
 Floor: _____ Room: _____
 Project Name: Lothrop Assoc.
 Project Manager: KM (If Positive - Check All That Apply)

Apt. #: _____
 Page 2 of 6
 Project Number: 20140370.01E

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
A	wall	-0.2		S					Rm 1 ↓
B		-0.2		S					
C		-0.0		S					
D		-0.1		S					
A	w. trim	0.1		W					
A	w. Sash	0.0		W					
	floor	-0.2		W				entry	
A	w. threshold	-0.0		W					
A	door	-0.1		W					
A	door trim	-0.1		W					
A	door jamb	0.0		W					
	caulking	-0.2		S					
D	shelf	-0.2		W					
	shelf	-0.2		W					
C	closet door	-0.3		W					
C	closet door	-0.1		W					
	closet caulking	0.1		W				steps underside	
C	wall - closet	-0.0		part W					
D	↓ - closet	0.0		part W					
D	fireplace brick	0.6		Brick					
D	mantle	0.1		W					
A	wall	0.0		S					Rm 2
B		-0.1		S					↓
C		-0.3		S					
D		-0.1		S					
	caulking	0.1		S					
C	w. trim	-0.1		W					
C	w. wall	-0.2		W					
A	w. trim	0.0		W					
A	cabinets	-0.3		W					
C	d. trim	N/C		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: _____



XRF FIELD DATA SHEET

Address: 216 Cossey Beach Ave, East Haven, CT

Apt. #: _____

Floor: _____ Room: _____

Page 3 of 6

Project Name: Lothrop Assoc.

Project Number: 20140370-B/E

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

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
A	wall	-0.4		S					Rm. 3
B	↓	-0.4		S					
C	↓	-0.1		S					
D	↓	-0.1		S					
	ceiling	-0.2		S					
	floor	-0.1		W					
D	door trim	-0.2		W					
D	door jamb	0.0		W					
D	door	-0.2		W					
	ceiling	0.2		S					
A	walls	-0.1		S					Rm. 4
B	↓	-0.4		S					
C	↓	-0.3		S					
D	↓	-0.1		W					
C	w. trim	0.1		W					
C	w. sill	0.2		W					
C	w. sash	0.2		W					
	floor	-0.3		W					
C	door	-0.1		W					
C	door trim	-0.3		W					
C	door jamb	-0.1		W					
	ceiling	0.3		S					Rm. 5 - stair
	step S. tread	-0.3		W					
	ceiling	-0.3		S					
A	wall	-0.3		S					
D	↓	-0.0		S					
C	↓	-0.1		S					
D	↓	-0.3		S					
D	ceiling	-0.2		W					
B	wall	-0.2		W plaster					
	ceiling	-0.1		S					

* 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: 216 Casey Beach Ave., East Haven, CT

Apt. #: _____

Floor: _____ Room: _____

Page 4 of 6

Project Name: Lottrup Assoc.

Project Number: 20140370-BLE

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

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
A	wall	-0.2		S					Run 6
B		-0.1		S					
C		0.0		S					
D		0.0		S					
D	door	-0.2		W					↓
D	door trim	-0.2		W					
D	door jamb	0.1		W					
	ceiling	-0.0		S					Run 7
A	walls	-0.1		S					
B		0.0		S					↓
C		-0.3		S					
D		-0.1		S					
D	door	-0.0		W					
D	door trim	-0.0		W					
D	door jamb	-0.0		W					
A	w. trim	-0.3		W					
A	w. SASH	-0.3		W					
A	w. sill	-0.0		W					
A	w. well	79.9	✓	W	Yes				
	skelf support	0.1		W					
A	walls - chest	-0.0		S					
D		0.1		S					
C		0.0		S					
D		0.1		S					
	ceiling - chest	-0.0		S					
	floor	-0.1		W					
A	door chest	-0.0		W					
A	door trim	-0.1		W					
A	door jamb	-0.1		W					
	ceiling	-0.2		S					
A	walls	-0.1		S					

* 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: 2116 Casey Beach Ave, East Haven, CT

Apt. #: _____

Floor: _____ Room: _____

Page 5 of 6

Project Name: Lothrop Assoc

Project Number: 20140370 BLE

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

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
B	wall	-0.1		S					Rm. 8
C		0.1		S					
D		-0.0		S					
D	baseboard	-0.1		W					
C	w. trim	-0.3		W					
C	w. sill	-0.3		W					
C	w. sash	-0.5		W					
D	door	-0.2		W					
D	door trim	-0.4		W					
D	door jamb	-0.3		W					
B	closet door	-0.2		W					Rm. 9
B	↓ trim	-0.0		W					
	closet wall	-0.1		S					
	shelf	N/C		W					
A	wall	-0.3		S					
B		-0.1		S					
C		0.0		S					
D	↓	-0.1		S					
	Ceiling	-0.0		S					
A	baseboard	-0.1		W					
B	door	-0.3		W					
B	door trim	-0.0		W					
B	door jamb	-0.0		W					
C	window trim	-0.0		W					
C	w. sill	-0.1		W					
C	w. sash	0.0		W					
C	w. wall	1.6	✓	W	yes				
A	wall - closet	-0.3		S					
B		-0.1		S					
C		0.0		S					
D	↓	-0.2		S					

* 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: 216 Cosy Beach, East Haven, CT Apt. #: _____
 Floor: _____ Room: _____ Page 6 of 6
 Project Name: Lothrop Assoc. Project Number: 20140370. BIE
 Project Manager: KM (If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
	closet-shelf	-0.1		W					Run 9
	shelf support	-0.0		W					↓
	ceiling-closet	0.0		S					↓
	ceiling	0.3		S					Run 10
	floor	-0.3		W					↓
A	wall	-0.1		S					↓
B		-0.3		S					↓
C		-0.1		S					↓
D		0.0		S					↓
	ceiling	0.1		w-panel					↓
A	w. trim	-0.1		W					↓
A	w. sill	-0.1		W					↓
A	w. sash	0.1		W					↓
A	w. well	2.6	✓	W	yes				↓
B	door	-0.0		W					↓
B	door trim	0.1		W					↓
B	door jamb	0.1		W					↓
A	closet wall	0.1		S					↓
D		0.0		S					↓
C		-0.2		S					↓
D		0.0		S					↓
	shelf	-0.2		W					↓
	shelf support	0.1		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: _____

Appendix F

Lead in Dust Sample Results and Chain of Custody Form





SAMPLE LOG FOR LEAD WIPES

Sheet No. 1 of 1

Project Name: Lathrop Assoc.
Building: 216 CoSey Beach AVE, East Haven, CT

Project Number: 20140370-B/E
Project Manager: KM

Sample ID Number	Sample Location/Building	Surface		Result (ug/ft)	Lab Number
		Component	Sq. ^{inches} ft		
1- 0506144A-16	Room # 1	Floor	144		
2- -17	↓	W. Sill	36		
3- -18	Room # 7	Floor	144		
4- -19	↓	W. Sill	36		
5- -20	Room # 9	Floor	144		
6- -21	↓ e-window	W. Sill	36		
7- -22	Room # 10	Floor	144		
8- -23	Room # A window	W. Sill	36		
9- -24	↓ Dup	W. Sill	36		
10- -25	Weld Blank	N/A	-		
11- -26	Field Blank	N/A	-		

Analysis Method: EPA-SW-846-3050(MOD.)
Wipe Media ASTM Non ASTM

Turnaround Time 2 hrs

Based on the turnaround time indicated above, analyses are due to Fuss & O'Neill EnviroScience on or before this date: 5/9/14
Please call the Fuss & O'Neill EnviroScience laboratory at 860-646-2469 if analyses will be late.

Fax Results To: Fuss & O'Neill EnviroScience Laboratory at 888-838-1160

Special Instructions: _____

Samples Collected By: Elitno August Date: 5/6/14 Time: 0830
Samples Rec'd/Sent By: _____ Date: _____ Time: _____
Samples Received By: [Signature] Date: 5/7/14 Time: 10:35am EMSL

Shipped To: EMSL (State) CT Other _____
Method of Shipment: Fed Ex UPS Overnight UPS Ground Other _____

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856) 303-2500 / (856) 786-5974
<http://www.EMSL.com> cinnaminsonleadlab@emsl.com

EMSL Order: 201406735
 CustomerID: ENVI54
 CustomerPO: 20140370.B1E
 ProjectID:

Attn: **Fuss & O'Neill EnviroScience, LLC**
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
 Fax: (888) 838-1160
 Received: 05/07/14 10:35 AM
 Collected: 5/6/2014

Project: 20140370.B1E / Lothop Assoc. / 216 Cosey Beach Avenue East Haven, CT

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Lab ID	Collected	Analyzed	Area Sampled	Lead Concentration
050614UA-16 Site: Room #1 Floor	0001	5/6/2014	5/7/2014	144 in ²	<10 µg/ft ²
050614UA-17 Site: Room #1 W.Sill	0002	5/6/2014	5/7/2014	36 in ²	<40 µg/ft ²
050614UA-18 Site: Room #7 Floor	0003	5/6/2014	5/7/2014	144 in ²	<10 µg/ft ²
050614UA-19 Site: Room #7 W.Sill	0004	5/6/2014	5/7/2014	36 in ²	<40 µg/ft ²
050614UA-20 Site: Room #9 Floor	0005	5/6/2014	5/7/2014	144 in ²	<10 µg/ft ²
050614UA-21 Site: Room #9 C-Window W.Sill	0006	5/6/2014	5/7/2014	36 in ²	44 µg/ft ²
050614UA-22 Site: Room #10 Floor	0007	5/6/2014	5/7/2014	144 in ²	<10 µg/ft ²
050614UA-23 Site: Room #A1 Window W.Sill	0008	5/6/2014	5/7/2014	36 in ²	260 µg/ft ²
050614UA-24 Site: Room #A1-Dup W.Sill	0009	5/6/2014	5/7/2014	36 in ²	240 µg/ft ²
050614UA-25 Site: Field Blank	0010	5/6/2014	5/7/2014	n/a	<10 µg/wipe
050614UA-26 Site: Field Blank	0011	5/6/2014	5/7/2014	n/a	<10 µg/wipe

Julie Smith - Laboratory Director
 NJ-NELAP Accredited:03036
 or other approved signatory

*Analysis following Lead in Dust by EMSL SOP/ Determination of Environmental Lead by FLAA. Reporting limit is 10 ug/wipe. ug/wipe = ug/ft2 x area sampled in ft2. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities (such as volume sampled) or analytical method limitations. Samples received in good condition unless otherwise noted. The lab is not responsible for data reported in µg/ft² which is dependant on the area provided by non-lab personnel. The test results contained within this report meet the requirements of NELAC unless otherwise noted. "<" (less than) results signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise
 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 05/08/2014 09:36:55

Appendix G

Lead in Soil Sample Results and Chain of Custody Form





EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
<http://www.EMSL.com> cinnaminsonleadlab@emsl.com

EMSL Order: 201406720
CustomerID: ENVI54
CustomerPO: 20140370.B1E
ProjectID:

Attn: **Fuss & O'Neill EnviroScience, LLC**
146 Hartford Road
Manchester, CT 06040

Phone: (860) 646-2469
Fax: (888) 838-1160
Received: 05/07/14 10:35 AM
Collected: 5/6/2014

Project: 20140370.B1E / Lothrop Assoc. / 216 Cosey Beach Avenue, East Haven, CT

Test Report: Lead in Soils by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
050614UA-27	0001	5/6/2014	5/7/2014	49 mg/Kg
Site: D-Side @ Dripline Desc: Bare				

Julie Smith - Laboratory Director
NJ-NELAP Accredited:03036
or other approved signatory

*Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. Results reported based on dry weight. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 05/08/2014 09:17:25

Appendix H

Lead in Drinking Water Sample Results and Chain of Custody Form



Date Samples Received: 05/06/14

Client Name : Fuss & O'Neill EnviroScience	CTL Lab No. : 0514059
Report Date : 05/09/14	PO/ Job No. : 20140370.B1E

RESULTS OF ANALYSIS

EPA Method 200.9

Matrix Type :	W	W
CTL Sample No.:	6025	6026
Field ID :	1st Draw	Flush
	Kitchen Sink	Kitchen Sink
	050614UA-14	050614UA-15

Parameters	RL			Date Analyzed
Total Lead-mg/L	0.005	ND	ND	05/08/14

RL= Reporting Limit ND= Not Detected

Matrix Type: W= Water/Aqueous S= Soil/Solid O= Oil/Hydrocarbon

Appendix I

Airborne Radon Gas Assessment Results and Chain of Custody





4/15/14

Disciplines to Deliver

ENVIRON

DE

*RTCA: These items must be included on our results pages
Radon Testing Summary Sheet

*Project Number: 20140370.BLE Placed by: EMM
 *Client Name: Latrop Assoc. Retrieved by: 4-14-14
 *Building: 216 Casey Beach Ave. Start Date: 4-10-14
 *Site Address: East Haven, CT 06512 Stop Date: _____
 Weather at Placement: sunny, cool
 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
2302450

Start Time: 9:19 am
 Stop Time: 7:50 am
 Identifier: Living rm

Start Time: _____
 Stop Time: _____
 Identifier: _____

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2308579

Start Time: 9:19 am
 Stop Time: 7:51 am
 Identifier: Rhoden

Start Time: _____
 Stop Time: _____
 Identifier: _____

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2302365

Start Time: 9:19 am
 Stop Time: 7:50 am
 Identifier: Living rm (Blank)

Start Time: _____
 Stop Time: _____
 Identifier: _____

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2302437

Start Time: 9:20 am
 Stop Time: 7:50 am
 Identifier: Living rm Duplex

Start Time: _____
 Stop Time: _____
 Identifier: _____

Start Time: _____
 Stop Time: _____
 Identifier: _____

Start Time: _____
 Stop Time: _____
 Identifier: _____

Site Radon Inspection Report

Date : 4/16/2014

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

Client: Lathrop Assoc
Test Location 216 Cosey Beach Avenue
Project #: 20140370.B1E
East Haven, CT 06512-

Individual Canister Results

Canister ID# : 2302365
Canister Type : Charcoal Canister 3 inch
Location : Living rm - Blank
Radon Level : **0.1 pCi/L**
Error for Measurement is: \pm 0.2 pCi/L

Test Start : 04/10/2014 @ 09:19
Test Stop : 04/14/2014 @ 07:50
Received: 04/15/2014 @ 10:17
Analyzed: 04/15/2014 @ 16:47

Canister ID# : 2302437
Canister Type : Charcoal Canister 3 inch
Location : Living rm - Dup
Radon Level : **0.1 pCi/L**
Error for Measurement is: \pm 0.2 pCi/L

Test Start : 04/10/2014 @ 09:20
Test Stop : 04/14/2014 @ 07:50
Received: 04/15/2014 @ 10:17
Analyzed: 04/15/2014 @ 16:47

Canister ID# : 2302450
Canister Type : Charcoal Canister 3 inch
Location : Living rm
Radon Level : **0.2 pCi/L**
Error for Measurement is: \pm 0.2 pCi/L

Test Start : 04/10/2014 @ 09:19
Test Stop : 04/14/2014 @ 07:50
Received: 04/15/2014 @ 10:17
Analyzed: 04/15/2014 @ 16:47

Canister ID# : 2308579
Canister Type : Charcoal Canister 3 inch
Location : Kitchen
Radon Level : **0.2 pCi/L**
Error for Measurement is: \pm 0.2 pCi/L

Test Start : 04/10/2014 @ 09:19
Test Stop : 04/14/2014 @ 07:51
Received: 04/15/2014 @ 10:17
Analyzed: 04/15/2014 @ 16:47



Andreas C. George
Andreas C. George
Radon Measurement Specialist
NJ MES 11089

Dante Galan
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 : 4/16/2014

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). 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.

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*

Andreas C. George
Radon Measurement Specialist
NJ MES 11089

Dante Galan

Dante Galan
Laboratory Director

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