

Draft Environmental Assessment

Town of East Hartford
Construction of New Fire
Station and Apparatus
Maintenance Facility

East Hartford, Connecticut
Grant No. EMW-2009-FC-03656

April 2010



FEMA

Federal Emergency Management Agency
Department of Homeland Security
500 C Street S.W.
Washington, D.C. 20472

This document was prepared by:

Milone & MacBroom, Inc.
99 Realty Drive
Cheshire, CT 06410

Prepared for:

FEMA Region I
99 High Street
Boston, Massachusetts 02110

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| 1.0 INTRODUCTION | 1-1 |
| 1.1 Project Authority | 1-1 |
| 1.2 Project Location..... | 1-1 |
| 1.3 Site Description..... | 1-1 |
| 1.4 Project Description | 1-5 |
| 2.0 PURPOSE AND NEED..... | 2-1 |
| 3.0 ALTERNATIVES | 3-1 |
| 3.1 Alternatives Considered and Dismissed | 3-1 |
| 3.2 Alternative 1: No Action..... | 3-1 |
| 3.3 Alternative 2: Construction of a Fire Station and Apparatus Maintenance Facility..... | 3-1 |
| 3.3.1 Alternative 2.1: Construction of a Fire Station and Apparatus Maintenance Facility at 26-36 Brewer Street..... | 3-1 |
| 3.3.2 Alternative 2.2: Construction of a Fire Station and Apparatus Maintenance Facility at 141 Brewer Street | 3-2 |
| 4.0 AFFECTED ENVIRONMENT AND IMPACTS..... | 4-1 |
| 4.1 Physical Resources | 4-1 |
| 4.1.1 Geology and Soils..... | 4-1 |
| 4.1.2 Air Quality | 4-2 |
| 4.2 Water Resources | 4-3 |
| 4.2.1 Surface Water and Water Quality..... | 4-3 |
| 4.2.2 Wetlands | 4-4 |
| 4.2.3 Floodplains..... | 4-5 |
| 4.3 Coastal Resources | 4-6 |
| 4.4 Biological Resources | 4-6 |
| 4.5 Cultural Resources..... | 4-7 |
| 4.6 Socioeconomic Resources | 4-8 |
| 4.6.1 Environmental Justice..... | 4-8 |
| 4.6.2 Neighborhood Character..... | 4-9 |
| 4.6.3 Noise | 4-10 |
| 4.6.4 Traffic | 4-11 |
| 4.6.5 Public Service and Utilities..... | 4-12 |
| 4.6.6 Public Health and Safety..... | 4-14 |
| 4.6.7 Hazardous Materials | 4-14 |
| 4.7 Summary..... | 4-16 |
| 5.0 CUMULATIVE IMPACTS..... | 5-1 |

TABLE OF CONTENTS (continued)

| | <u>Page</u> |
|--|-------------|
| 6.0 PUBLIC INVOLVEMENT | 6-1 |
| 7.0 AGENCY COORDINATION AND PERMITS..... | 7-1 |
| 8.0 CONCLUSIONS..... | 8-1 |
| 9.0 REFERENCES | 9-1 |

LIST OF FIGURES

| | | |
|-------------|------------------------------|-----|
| Figure 1 | USGS Location Map..... | 1-2 |
| Figure 2 | 2004 Aerial Photograph | 1-3 |
| Figure EC-1 | Existing Conditions..... | 1-4 |
| Figure 3 | Fire Station Rendering | 1-7 |
| Figure C-2 | Proposed Conditions | 1-8 |

LIST OF APPENDICES

| | |
|------------|---|
| Appendix A | FEMA FIRMETTE Map and Profile |
| Appendix B | Eight Step Process for Critical Actions |
| Appendix C | USFWS Consultation Letter |
| Appendix D | HPI Phase IA and IB Reports and Consultation Letter |
| Appendix E | Public Notices |

LIST OF ABBREVIATIONS

| | |
|--------|--|
| ACHP | Advisory Council on Historic Preservation |
| ADA | Americans with Disabilities Act |
| APE | Area of Potential Effects |
| ARRA | American Recovery and Reinvestment Act |
| CAA | Clean Air Act |
| CCT | Commission on Culture and Tourism |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CFR | Code of Federal Regulations |
| CGS | Connecticut General Statutes |
| CHC | Connecticut Historic Commission |
| CO | Carbon monoxide |
| CTDEP | Connecticut Department of Environmental Protection |
| CWA | Clean Water Act |
| CZMA | Coastal Zone Management Act |
| dB | Decibels |
| DNL | Day-Night Average Sound Level |
| EA | Environmental Assessment |
| EIS | Environmental Impact Statement |
| EPA | Environmental Protection Agency |
| ESA | Environmental Site Assessment |
| FEMA | Federal Emergency Management Agency |
| FESA | Federal Endangered Species Act |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Map |
| FONSI | Finding of No Significant Impact |
| FPPA | Farmland Protection Policy Act |
| HPI | Historical Perspectives Incorporated |
| ISO | Insurance Service Office |
| LEED | Leadership in Energy and Environmental Design |
| MDC | Metropolitan District Commission |
| MMI | Milone & MacBroom, Inc. |
| MTP | Master Transportation Plan |
| NAAQS | National Ambient Air Quality Standards |
| NAVD | North American Vertical Datum |
| NDDB | Natural Diversity Data Base |
| NEPA | National Environmental Policy Act |
| NFPAS | National Fire Protection Association Standard |
| NHPA | National Historic Preservation Act |
| NMFS | National Marine Fisheries Service |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NOAA | National Oceanic and Atmospheric Administration |

LIST OF ABBREVIATIONS (CONTINUED)

| | |
|--------------------------------------|---|
| NO ₂ | Nitrogen Dioxide |
| NWI | National Wetland Inventory |
| O ₃ | Ozone |
| OLISP | Office of Long Island Sound Programs |
| OSHA | Occupational Safety and Health Administration |
| Pb | Lead |
| PM _{2.5} , PM ₁₀ | Particulate Matter |
| RCRA | Resource Conservation and Recovery Act |
| SCBA | Self Contained Breathing Apparatus |
| SCG | Station Construction Grants |
| SF | Square Foot |
| SO ₂ | Sulfur Dioxide |
| USACE | United States Army Corps of Engineers |
| USDA | United States Department of Agriculture |
| USFWS | United States Fish and Wildlife Service |
| USGB | United States Green Building Council |

1.0 INTRODUCTION

1.1 Project Authority

The Town of East Hartford (East Hartford) Fire Station #5 located at 304 Main Street and the fire apparatus maintenance facility located at 344 Tolland Street have become outdated, undersized, and are deteriorating structurally. The East Hartford Fire Department has applied to the Federal Emergency Management Agency (FEMA) for assistance with constructing a new fire station under subapplication number EMW-2009-FC-03656. The new fire station would consolidate Fire Station #5 and the fire apparatus maintenance facility into one building. FEMA's Assistance to Firefighters Fire Station Construction Grants (SCG) provide financial assistance directly to fire departments to build new or modify existing fire stations in order for departments to enhance their response capability and protect the communities they serve from fire and fire-related hazards. The authority for SCG is derived from the American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5).

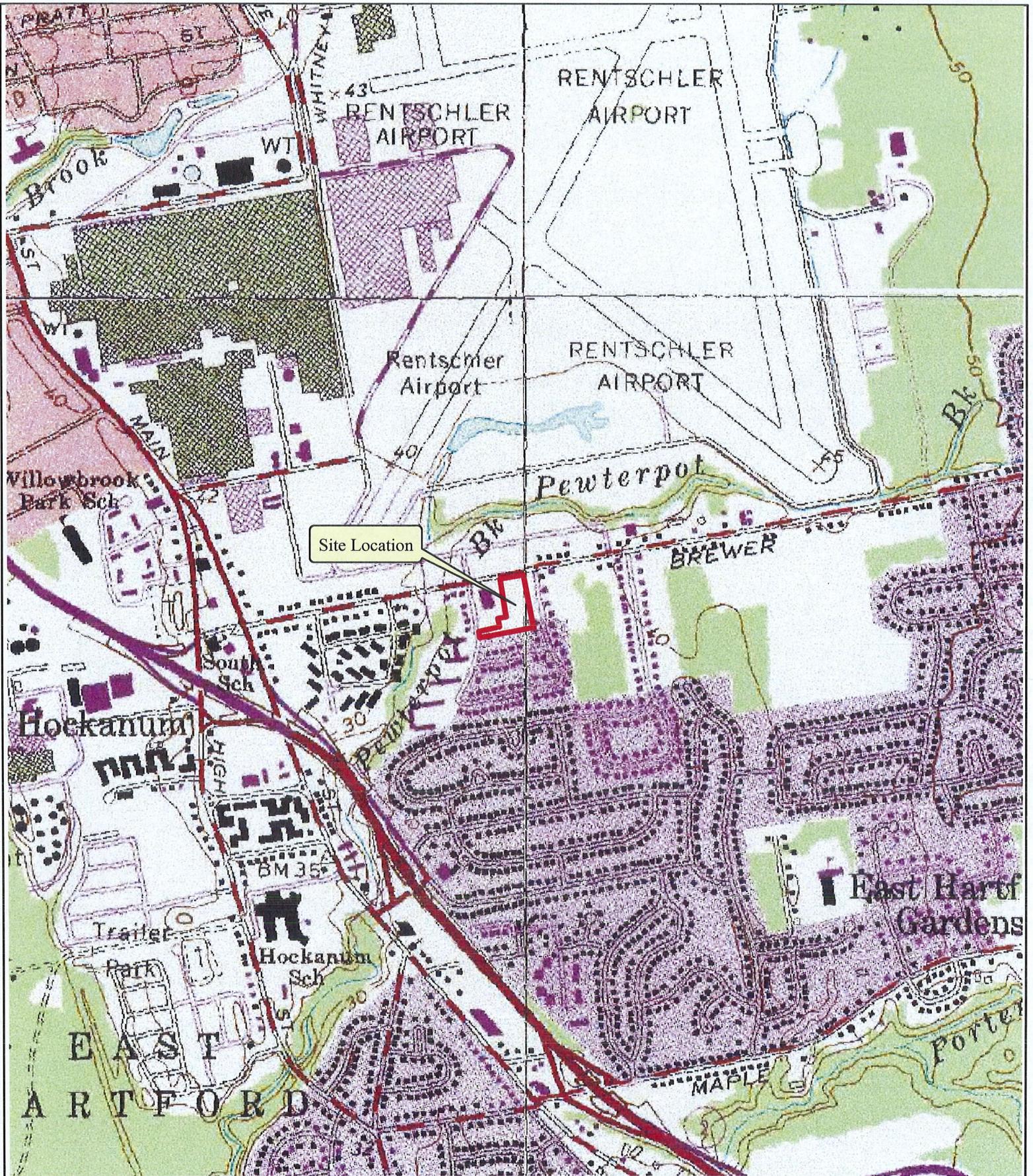
In accordance with 44 Code of Federal Regulations (CFR) for FEMA, subpart B, Agency Implementing Procedures, Part 10.9, this Environmental Assessment (EA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations parts 1500-1508), and FEMA's regulations implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed project and to determine whether FEMA needs to prepare an Environmental Impact Statement (EIS) or can issue a Finding of No Significant Impact (FONSI).

1.2 Project Location

The new fire station will be located at 141 Brewer Street in East Hartford, Connecticut. The project site consists of approximately 2.37 acres of undeveloped land and is bounded to the north by Brewer Street, to the east by Graham Road, to the south by Leichtner Drive and residential properties, and to the west by Glenn Road. The property abuts an existing AT&T facility to the west. The project site is illustrated in Figures 1 and 2.

1.3 Site Description

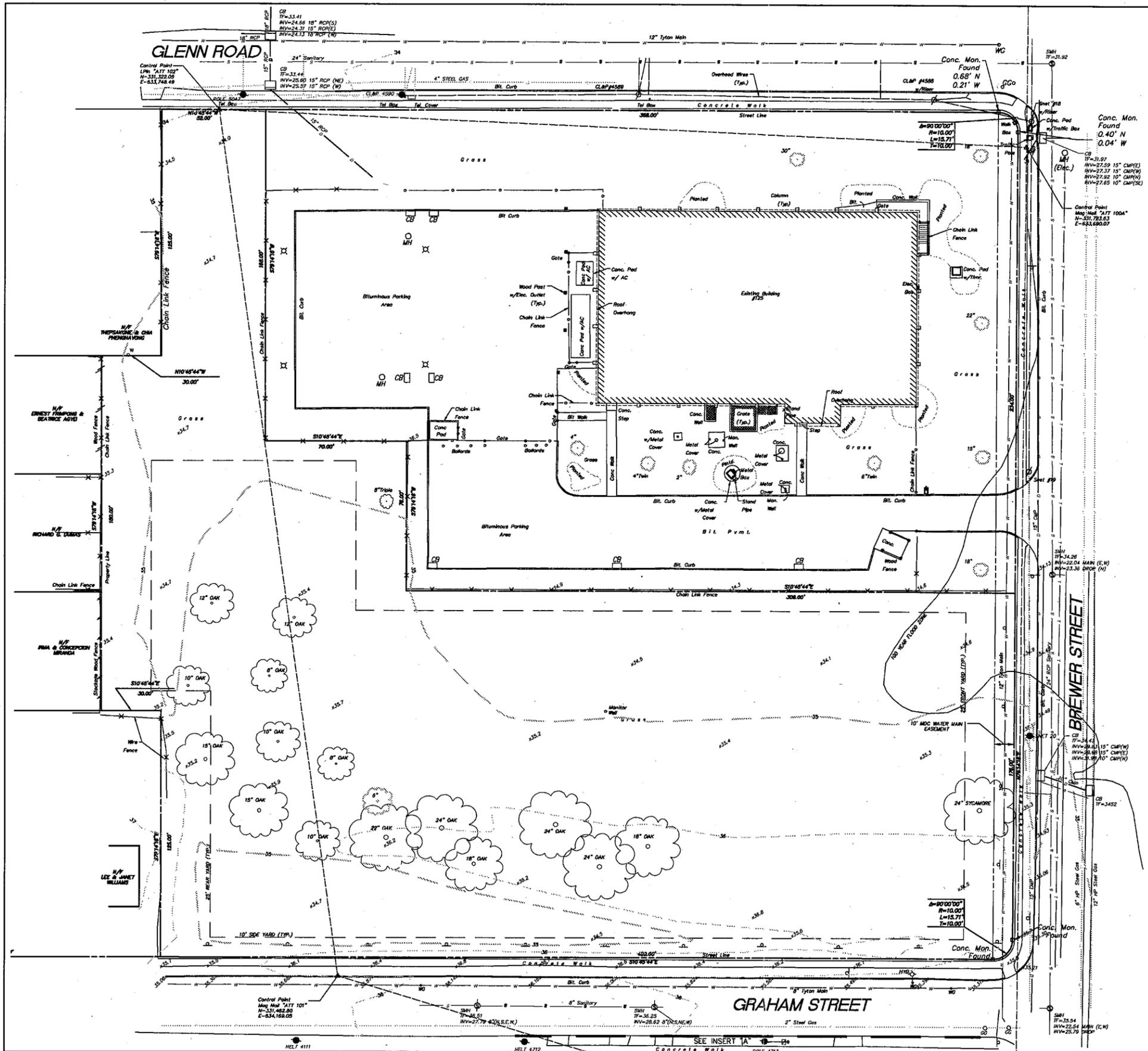
The 2.37-acre site is topographically flat with elevations ranging from 33.5 feet North American Vertical Datum (NAVD) 88 to 36.5 feet NAVD 88. The center of the site is at the highest elevation (36.0 feet) and serves as the drainage divide on the property. The lowest elevation on the property is located along the western property limit. The site is maintained as a meadow and has scattered trees located along the eastern and southern limits of the property. An existing conditions topographic map is illustrated in Figure EC-1.



| | | | | | |
|---|---|-------------------------------|--|--|-----------------------------------|
| <p>Engineering, Landscape Architecture and Environmental Science</p> <p>MILONE & MACBROOM®</p> | <p align="center">Environmental Assessment for Construction of New Fire Station and Apparatus Maintenance Facility</p> | | <p>LOCATION: 141 Brewer Street East Hartford, CT</p> | | |
| <p>99 Realty Drive Cheshire, Connecticut 06410 (203) 271-1773 Fax: (203) 272-9733 www.miloneandmacbroom.com</p> | <p>MMI#: 2854-12 MXD: G:location.mxd SOURCE: DEP Bulletin No.40</p> | <p align="center">N ↑</p> | <p align="center">Environmental Assessment Location Map</p> | <p>DATE: March 2010 SCALE: 1"=1,000'</p> | <p>SHEET: Figure 1</p> |



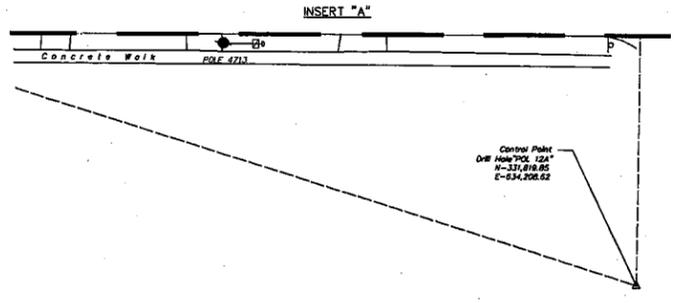
| | | | | |
|---|---|---|---|-----------------------------------|
| <p>Engineering, Landscape Architecture and Environmental Science</p> <p>MILONE & MACBROOM®</p> | <p align="center">Environmental Assessment for Construction of New Fire Station and Apparatus Maintenance Facility</p> | | <p>LOCATION: 141 Brewer Street East Hartford, CT</p> | |
| <p>99 Realty Drive Cheshire, Connecticut 06410 (203) 271-1773 Fax: (203) 272-9733 www.miloneandmacbroom.com</p> | <p>MMI#: 2854-12-4 MXD: H:Fig2_aerial.mxd SOURCE: DEP Bulletin No.40</p> | <p align="center">N 2004 Aerial Photograph Location Map</p> | <p>DATE: March 2010 SCALE: 1"=200'</p> | <p>SHEET: Figure 2</p> |



- NOTES:**
1. THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE STANDARDS FOR SURVEY AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996 CLASS OF TOPOGRAPHIC ACCURACY T-2 INTENDED USE: EXISTING CONDITIONS PLAN
 2. THIS PLAN WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OF OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSIDERED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE. BOUNDARY AS SHOWN IS FROM CLASS A-2 BOUNDARY MAP PER REFERENCE MAP #1
 3. VERTICAL DATUM IS BASED ON METROPOLITAN DISTRICT BENCH MARKS 214-DX AND 214-E-1, ADJUSTED TO NGVD83 DATUM.
 4. THE FLOODPLAIN SHOWN IS FROM THE FEMA FLOOD INSURANCE RATE MAP NUMBER 080300000R EFFECTIVE DATE: SEPTEMBER 26, 2008
 5. EXISTING UTILITIES, WHERE SHOWN HEREON, ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERTY LOCATING AND CORROBORATING ANY DATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERTY LOCATING AND CORROBORATING ANY DATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERTY LOCATING AND CORROBORATING ANY DATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERTY LOCATING AND CORROBORATING ANY DATE.

- REFERENCE MAPS:**
1. "PROPERTY SURVEY LAND OF THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY 125 BREWER STREET EAST HARTFORD, CONNECTICUT" BY GRS CORPORATION AND DATE: JUNE 2008 SCALE: 1"=20' REVISION: 6-21-08
 2. "PROPERTY SURVEY FOR THE SOUTHERN NEW ENGLAND TELEPHONE CO. BREWER ST.-GLENN RD.-GLENN RD EAST HARTFORD, CONN." BY HAYDEN GOSWOLD DATE: OCTOBER, 1959 SCALE: 1"=20' REVISION: THIRD DEC. 30, 1965.
 3. "SITE PLAN HARTFORD-EAST NO 2 CD ADDITION SOUTHERN NEW ENGLAND TELEPHONE CO. EAST HARTFORD CONNECTICUT" SCALE: 1"=20' BY LOUIS J. DRAKOS AND ASSOCIATES DATE: NOVEMBER 13, 1969 SHEET: 11.
 4. "AS-BUILT LEO LEONHARD & JACK LEONHARD EAST HARTFORD, CONN. (NOW KNOWN AS SHARON BARN)" BY WYRON FOSTER ASSOCIATES DATE: 11-29-71 SCALE: 1"=40' SHEETS: 184 OF 4.

- LEGEND:**
- OVERHEAD ELECTRIC
 - DRAIN LINE
 - SEWER LINE
 - WATER LINE
 - GAS LINE
 - CHAIN LINK FENCE
 - TELEPHONE LINE
 - WATER HYDRANT
 - WATER GATE
 - GAS GATE
 - UTILITY POLE
 - CATCH BASIN
 - TREE
 - SEWER MANHOLE
 - SIGN METAL POST



Project Title:
East Hartford Fire House
 141 Brewer Street
 East Hartford, Connecticut

SILVER / PETRUCELLI + ASSOCIATES
 Architects and Engineers
 3190 Whitney Avenue, Hamden, CT 06518-2340
 Tel. 203 230 9007 Fax. 203 230 8247
 silverpetrucci.com

Client:
EXISTING CONDITIONS PLAN
 Date:
 AUGUST 4, 2009
 Scale:
 1"=20'
 Drawing Number:
EC-1

BSC GROUP
 180 Glastonbury Boulevard
 Suite 103
 Glastonbury, Connecticut 06033
 860 652 8227

1.4 Project Description

East Hartford proposes to construct a 16,000 square foot (SF) Leadership in Energy and Environmental Design (LEED) certified fire station, consisting of space for two fire companies, fire personnel offices and living quarters, an apparatus maintenance facility, and associated parking lot. The East Hartford Fire Department retained BSC Group and Silver/Petrucci & Associates to provide engineering and architectural design services for the fire station. The East Hartford Fire Department submitted a local Planning and Zoning permit application to the Planning and Zoning Commission in May 2009. Following acceptance of the application, the commission held a public hearing on said application on June 10, 2009. After the close of that hearing, the application was approved by the Planning and Zoning Commission on June 10, 2009.

East Hartford has been working diligently for over five years to secure land for construction of a new fire station. Several properties were evaluated for size, location, potential for hazardous materials, historical importance, and other important land issues before the current site was selected and purchased. The purchase of land for this project was the result of a cooperative relationship with the local telephone utility that owned the land, which enabled the property to be purchased at less than market value. Because the property is flat, undeveloped, and is situated as a corner lot, the proposed station has been configured with a drive-through apparatus bay, eliminating the need to back up apparatus and, therefore, reducing that inherent safety risk.

The location for the new Fire Station #5 is less than three-quarters of a mile from the existing fire station. This new facility will allow the department to place the south-end ladder company in a more advantageous location. The new location will provide better access for mutual aid response, enable better ladder company distribution to meet the requirements of the Insurance Service Office (ISO), and permit the community to have enhanced compliance with the response criteria included in the National Fire Protection Association Standard (NFPA) 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

The fire station will be bordered on two sides by residential dwelling units. The design of the building places low-noise uses toward one of the residential areas and uses larger trees as a sound buffer along the other property line with the second area.

There is adequate utility service available on site. This includes sufficient water supply for fire sprinkler protection, natural gas, sewerage, telecommunications, and electrical service with sufficient capacity to support the needs of the facility.

General Building Configuration: The building is designed as a single-story building with a pitched roof and a combination of brick veneer and cement board exterior. The building is shaped similar to the letter "L" in order to fit the lot characteristics and enable both the fire station and apparatus maintenance portions of the building to have drive-through vehicle storage bays. A rendering of the fire station is illustrated in Figure 3. The layout of the fire station is presented in Figure C-2.

The building will be fully protected by a fire sprinkler system that meets all applicable codes including, but not limited to, the NFPA standard for the installation of sprinkler systems. The building will also contain a monitoring system for carbon monoxide and smoke and fire detection, all of which will be tied into the municipal fire alarm system providing continuous monitoring.

The building will be equipped with an emergency power generator of sufficient capacity to power the building. This generator will be powered by the natural gas supply available at the street and have an automatic transfer switch. The building has also been designed to be Americans with Disabilities Act (ADA) accessible with ADA-compliant parking spaces being provided.

Apparatus Storage Bay: The apparatus storage bays will have adequate space for two primary response apparatus. Both bay spaces will have diesel exhaust extraction systems for all vehicles. The apparatus bay area will also contain space to properly store the personal protective equipment provided to the firefighters assigned to that station. Additionally, there will be a small work area and a decontamination area for medical equipment used by the members as they deliver advanced life support care in the community. Finally, two storage areas will be created in the mezzanine space, providing an area for storage of bulky items.

Apparatus Maintenance Division Space: The Apparatus Maintenance Division facility will be located at the rear of the building and have its bay door opening face the public utility structure on the neighboring property. Significant care has been taken to minimize the noise impact on the neighborhood from this space. Additional time and effort has been expended to ensure the maintenance facility is operated in an environmentally friendly manner. One example of this will be the collection of waste oil and fluids for transport off site for disposal. Department directives and procedures for the apparatus maintenance shop have a strong focus on safety and compliance with applicable laws and regulations including those provided by the Occupational Safety and Health Administration (OSHA).

The Maintenance Division space will include three maintenance bays. Two will be of sufficient size to accommodate the largest fire apparatus the department operates. One of these bay spaces will be outfitted with a wheel-lift system to elevate the apparatus for under-vehicle maintenance. The third bay will accommodate the maintenance of light fleet vehicles such as cars and trucks. There will also be office space for the Apparatus Maintenance Division and the Municipal Fire Alarm Division. The design team has taken care to ensure there will be adequate storage space for the tools, parts, and supplies used by the Apparatus Maintenance Division.