

**SOUTHINGTON INDUSTRIAL PARK**  
**DRAFT ENVIRONMENTAL IMPACT EVALUATION**  
**Connecticut Environmental Policy Act**  
**(C.G.S. Sections 22a-1 through 22a-1h)**

**April 6, 2004**

*Sponsoring Agency:*  
State of Connecticut  
Department of Economic and Community Development

*In Cooperation With:*  
Town of Southington

*Prepared By:*  
Fuss & O'Neill, Inc.  
Manchester, Connecticut

**SOUTHINGTON INDUSTRIAL PARK**  
**DRAFT ENVIRONMENTAL IMPACT EVALUATION**  
**VOLUME II - APPENDICES**

**April 6, 2004**

*Sponsoring Agency:*  
State of Connecticut  
Department of Economic and Community Development

*In Cooperation With:*  
Town of Southington

*Prepared By:*  
Fuss & O'Neill, Inc.  
Manchester, Connecticut

**SOUTHINGTON INDUSTRIAL PARK  
DRAFT ENVIRONMENTAL IMPACT EVALUATION  
April 6, 2004**

**TABLE OF CONTENTS**

| <b><u>SECTION</u></b>                                  | <b><u>PAGE</u></b> |
|--|--------------------|
| EXECUTIVE SUMMARY .....                                | vi                 |
| 1.0 INTRODUCTION .....                                 | 1                  |
| 1.1 Background.....                                    | 1                  |
| 1.2 CEPA Process.....                                  | 1                  |
| 1.3 Proposed Project Description .....                 | 3                  |
| 1.5 Public Participation and Agency Coordination ..... | 6                  |
| 2.0 EXISTING ENVIRONMENT.....                          | 7                  |
| 2.1 Physical Resources .....                           | 7                  |
| 2.1.1 Air Quality.....                                 | 7                  |
| 2.1.2 Noise and Light.....                             | 9                  |
| 2.1.2.1 Noise.....                                     | 9                  |
| 2.1.2.2 Light.....                                     | 10                 |
| 2.1.3 Traffic and Roadways.....                        | 11                 |
| 2.1.3.1 Data Collection .....                          | 11                 |
| 2.1.3.2 Roadways.....                                  | 12                 |
| 2.1.3.3 Site Access.....                               | 14                 |
| 2.1.3.4 Accident History .....                         | 15                 |
| 2.1.3.5 Existing Capacity.....                         | 16                 |
| 2.1.4 Utilities and Services .....                     | 17                 |
| 2.1.4.1 Water (Domestic and Fire Protection).....      | 17                 |
| 2.1.4.2 Sanitary Sewer.....                            | 20                 |
| 2.1.4.3 Storm Drainage.....                            | 22                 |
| 2.1.4.4 Electrical, Emergency Power, and Energy .....  | 22                 |
| 2.1.4.5 Natural Gas .....                              | 22                 |
| 2.1.4.6 Telecommunications & Cable .....               | 23                 |
| 2.1.5 Hazardous Materials .....                        | 23                 |
| 2.1.6 Solid Waste and Recycling.....                   | 25                 |
| 2.1.7 Aesthetics and Viewsheds .....                   | 25                 |
| 2.1.8 Cultural Resources.....                          | 26                 |
| 2.2 Natural Resources.....                             | 33                 |
| 2.2.1 Geology, Topography, and Soils .....             | 33                 |
| 2.2.2 Farmland Soils.....                              | 38                 |
| 2.2.3 Hydrology and Water Quality .....                | 40                 |
| 2.2.3 Ecological Resources.....                        | 44                 |
| 2.2.3.1 Wetland Habitat.....                           | 44                 |
| 2.2.3.2 Upland Habitat.....                            | 47                 |
| 2.2.3.3 Wildlife and Listed Species.....               | 47                 |

|         |  |    |
|---------|--|----|
| 2.3     | Socioeconomic Resources .....                            | 48 |
| 2.3.1   | Land Use and Zoning.....                                 | 48 |
| 2.3.1.1 | Land Use.....  | 48 |
| 2.3.1.2 | Zoning.....  | 49 |
| 2.3.2   | Long Range State and Local Planning.....                 | 53 |
| 2.3.2.1 | Statewide Planning.....                                  | 53 |
| 2.3.2.2 | Regional Planning.....                                   | 54 |
| 2.3.2.3 | Local Planning.....                                      | 56 |
| 2.3.3   | Community Facilities and Services .....                  | 57 |
| 2.3.3.1 | Education.....   | 58 |
| 2.3.3.2 | Health Care.....   | 58 |
| 2.3.3.3 | Public Safety and Emergency Services .....               | 59 |
| 2.3.3.4 | Parks and Recreation .....                               | 59 |
| 2.3.4   | Population, Demographics and Environmental Justice ..... | 60 |
| 2.3.4.1 | Population.....  | 60 |
| 2.3.4.2 | Demographics and Environmental Justice .....             | 61 |
| 2.3.5   | Economy, Employment, and Income.....                     | 63 |
| 3.0     | ALTERNATIVES ANALYSIS.....                               | 68 |
| 3.1     | The No Action Alternative .....                          | 68 |
| 3.2     | Alternative Industrial Sites .....                       | 69 |
| 3.3     | Selection of Preferred Alternative .....                 | 69 |
| 4.0     | ANALYSIS OF IMPACT .....                                 | 76 |
| 4.1     | Buildout Analysis .....                                  | 76 |
| 4.2     | Physical Resources .....                                 | 77 |
| 4.2.1   | Air Quality.....   | 77 |
| 4.2.2   | Noise and Light.....                                     | 79 |
| 4.2.2.1 | Noise.....   | 79 |
| 4.2.2.2 | Light.....   | 80 |
| 4.2.3   | Traffic and Roadways.....                                | 80 |
| 4.2.3.1 | Background Traffic.....                                  | 80 |
| 4.2.3.2 | Site-Generated Traffic .....                             | 81 |
| 4.2.3.3 | Combined Volumes .....                                   | 81 |
| 4.2.3.4 | Analysis .....   | 82 |
| 4.2.3.5 | Mitigation Improvements .....                            | 84 |
| 4.2.4   | Utilities and Services .....                             | 87 |
| 4.2.4.1 | Water (Domestic and Fire Protection).....                | 87 |
| 4.2.4.2 | Sanitary Sewer.....                                      | 87 |
| 4.2.4.3 | Storm Drainage.....                                      | 89 |
| 4.2.4.4 | Electrical, Emergency Power, and Energy .....            | 90 |
| 4.2.4.5 | Natural Gas.....   | 90 |
| 4.2.4.6 | Telecommunications & Cable .....                         | 90 |
| 4.2.5   | Hazardous Materials .....                                | 90 |
| 4.2.6   | Solid Waste and Recycling.....                           | 91 |
| 4.2.7   | Aesthetics and Viewsheds .....                           | 91 |
| 4.2.8   | Cultural Resources.....                                  | 91 |
| 4.3     | Natural Resources.....                                   | 92 |

|         |  |     |
|---------|--|-----|
| 4.3.1   | Geology, Topography, and Soils .....   | 92  |
| 4.3.2   | Farmland Soils .....   | 92  |
| 4.3.3   | Hydrology and Water Quality .....  | 92  |
| 4.3.4   | Ecological Resources .....   | 94  |
| 4.4     | Socioeconomic Resources .....  | 95  |
| 4.4.1   | Land Use and Zoning .....  | 95  |
| 4.4.2   | Long Range State and Local Planning .....  | 95  |
| 4.4.2.1 | Statewide Planning .....   | 95  |
| 4.4.2.2 | Regional Planning .....  | 95  |
| 4.4.2.3 | Local Planning .....   | 96  |
| 4.4.3   | Community Facilities and Services .....  | 96  |
| 4.4.4   | Demographics and Environmental Justice .....   | 96  |
| 4.4.5   | Economy, Employment, and Income .....  | 96  |
| 5.0     | COSTS AND BENEFITS .....   | 99  |
| 5.1     | Costs .....  | 99  |
| 5.2     | Benefits .....   | 100 |
| 6.0     | IMPACT ANALYSIS SUMMARY .....  | 100 |
| 6.1     | Unavoidable Adverse Impacts .....  | 100 |
| 6.2     | Irreversible and Irretrievable Commitments of Resources .....                          | 102 |
| 6.3     | Cumulative Impacts .....   | 102 |
| 6.4     | Mitigating Measures and Considerations that Offset Adverse Environmental Impacts ..... | 103 |
| 6.5     | Certificates, Permits and Approvals .....  | 103 |

**SOUTHINGTON INDUSTRIAL PARK  
DRAFT ENVIRONMENTAL IMPACT EVALUATION  
April 6, 2004**

**TABLE OF CONTENTS**

| <b><u>TABLES</u></b>  | <b><u>PAGE</u></b> |
|---|--------------------|
| Table 2-1. Connecticut and National Ambient Air Quality Standards.....  | 7                  |
| Table 2-2. Connecticut Noise Zones .....  | 9                  |
| Table 2-3. FHWA Noise Abatement Criteria.....   | 10                 |
| Table 2-4. Existing Conditions Traffic Capacity Analysis Results.....   | 17                 |
| Table 2-5. Southington Water Company Water Supply Wells.....  | 19                 |
| Table 2-6. Summary of Archaeological Sensitivity and Recommended Further Testing.....   | 30                 |
| Table 2-7. Summary of Ecological Resources .....  | 44                 |
| Table 2-8. Siting Considerations from the Southington Plan of Development.....  | 57                 |
| Table 2-9. Population Trends and Projections (1990 – 2007).....   | 61                 |
| Table 2-10. Total Employment: 2002.....   | 63                 |
| Table 2-11. Labor Force and Residential Employment Trends: 1995 - 2002 .....  | 64                 |
| Table 2-12. Business Establishment Changes by Sector: 1996 - 2001.....  | 66                 |
| Table 2-13. Distribution of Households by Income: 1999 .....  | 67                 |
| Table 3-1. Summary of Total Site Area Available for Development.....  | 70                 |
| Table 3-2. Comparison of Potential Environmental Constraints and Impacts for Alternative<br>Industrial Park Sites.....  | 75                 |
| Table 4-1. Alternative Development Scenarios.....   | 77                 |
| Table 4-2. Estimated Trip generation for Alternative Development Scenarios .....  | 81                 |
| Table 4-3. Level of Service (LOS) for Alternative Development Scenarios .....   | 83                 |
| Table 4-4. Level of Service (LOS) With Future Improvements.....   | 86                 |
| Table 4-5. Projected Average Daily Sanitary Sewer Flows .....   | 88                 |
| Table 4-6. Summary of Archaeological Reconnaissance Survey Findings.....  | 91                 |
| Table 4-7. Estimated Employment Impact .....  | 96                 |
| Table 4-8. Estimated Earnings from Employment .....   | 97                 |
| Table 4-9. Estimated Property Tax Base Impact.....  | 97                 |
| Table 6-1. Mitigation Measures Summary .....  | 103                |
| Table 6-2. Certificates, Permits, and Approvals Potentially Required for Initial Development<br>of Industrial Park Site.....  | 104                |
| Table 6-3. Certificates, Permits, and Approvals Potentially Required for Development of<br>Individual Industrial Lots and Operation of Facilities Within the Industrial Park<br>..... | 105                |

**SOUTHINGTON INDUSTRIAL PARK  
DRAFT ENVIRONMENTAL IMPACT EVALUATION  
April 6, 2004**

**TABLE OF CONTENTS**

| <b><u>FIGURES</u></b>  | <b><u>PAGE</u></b> |
|--|--------------------|
| Figure 1-1. Alternative Project Sites .....                      | 4                  |
| Figure 2-1. Study Area Roadway Network and Intersections .....   | 12                 |
| Figure 2-2. Water Distribution System.....                       | 17                 |
| Figure 2-3. Sanitary Sewer System .....                          | 20                 |
| Figure 2-4. Archaeological Sensitivity, Site #1 .....            | 26                 |
| Figure 2-5. Archaeological Sensitivity, Site #2 .....            | 27                 |
| Figure 2-6. Archaeological Sensitivity, Site #3 .....            | 28                 |
| Figure 2-7. Topography .....                                     | 33                 |
| Figure 2-8. Surficial Geology and Aquifer Protection Areas ..... | 34                 |
| Figure 2-9. Soils.....   | 35                 |
| Figure 2-10. Farmland Soils .....                                | 38                 |
| Figure 2-11. Surface Water Resources and FEMA Flood Zones .....  | 40                 |
| Figure 2-12. Wetlands and Ecological Resources .....             | 45                 |
| Figure 2-13. Land Use .....                                      | 50                 |
| Figure 2-14. Zoning.....   | 51                 |
| Figure 2-15. 2000 U.S. Census Data .....                         | 61                 |
| Figure 2-16. Distribution of Businesses by Sector: 2001 .....    | 65                 |
| Figure 2-17. Unemployment Rate Trends: 1995 – 2002 .....         | 67                 |
| Figure 3-1. Development Constraints Summary: Site #1 .....       | 71                 |
| Figure 3-2. Development Constraints Summary: Site #2 .....       | 72                 |
| Figure 3-3. Development Constraints Summary: Site #3 .....       | 73                 |

| <b><u>APPENDICES</u></b> | <b><u>VOLUME II</u></b>   |
|--------------------------|---|
| A                        | DECD Stage One Environmental Assessment Findings                      |
| B                        | Notice of Scoping and Comments  |
| C                        | Market Analysis   |
| D                        | Public Information Meeting  |
| E                        | Traffic Evaluation Data   |
| F                        | Phase Ia/Partial Phase Ib Archaeological Reconnaissance Survey Report |
| G                        | Ecological Resources Evaluation Report                                |
| H                        | Existing Conditions Summary Table                                     |
| I                        | List of Preparers   |
| J                        | Persons Contacted   |
| K                        | References  |

## EXECUTIVE SUMMARY

### Introduction

The Town of Southington proposes to develop a new industrial park in Southington, Connecticut. In September 2001, the Southington Town Council passed a resolution in support of an application to the Connecticut Department of Economic and Community Development (DECD) for financial assistance to undertake the necessary planning efforts for the proposed industrial park. An agreement was developed between the State and Town to initially undertake an Environmental Impact Evaluation (EIE) in accordance with the Connecticut Environmental Policy Act (CEPA), with each contributing 50 percent of the cost of the planning process. The agreement was executed in June 2003, followed by implementation of the EIE process.

This EIE has been prepared for DECD in accordance with the requirements of both CEPA and the Regulations of Connecticut State Agencies (RCSA) Sections 22a-1a-1 through 22a-1a-12, inclusive. It provides a description of the proposed action, an evaluation of the direct, indirect, and cumulative effects of the proposed action, unavoidable adverse environmental effects, alternatives, and mitigation measures. In the preparation of this document, the purpose and need for the proposed project was examined, three alternative sites were evaluated, the existing environment and impacts for each site was evaluated, potential impacts were further analyzed for the preferred site, and mitigation measures were identified. A market study was also performed during the EIE process.

### Project Description

The proposed project involves the development of a new industrial park on existing undeveloped land in Southington, Connecticut. All three sites consist of primarily undeveloped, industrially-zoned land located within the Business Enterprise Zone in the northern portion of Southington. Facilities that are anticipated to occupy the proposed industrial park will consist of light manufacturing, associated office space, and warehouse or distribution space consistent with the current I-1 (light industrial) zoning of the land. The three alternative sites are summarized below (see Figure 1-1 for site locations):

- **Site #1:** This 102± acre parcel is located approximately 1.25 miles north of the Interstate 84 (I-84) Interchange 31. The site is bordered by West Street to the west and West Queen Street to the north. Site #1 slopes eastward toward the Farmington Canal and Quinnipiac River.
- **Site #2:** Site #2 consists of two contiguous parcels, which comprise approximately 62 acres of land, and is situated just north of the I-84 Interchange 31. The site is partially bordered by I-84 and lies to the west of West Street, Executive Boulevard North, and Executive Boulevard South.
- **Site #3:** Site #3 is the northernmost site located approximately 2 miles north of Interchange 31. The site is located on the east side of West Street, west of Captain Lewis Drive, and north of West Queen Street. Site #3 encompasses two contiguous

parcels and approximately 68 acres of land. Site #3 is adjacent to an existing industrial park on Captain Lewis Drive and Robert Porter Road.

As a result of this EIE, Site #3 was selected as the preferred alternative site for the industrial park development based on the results of an alternatives evaluation, which included the three sites described above as well as the No Action Alternative. Potential impacts to natural resources and overall development constraints were comparatively lower for Site #3 than the other two sites considered.

The proposed development scenario for Site #3 involves subdividing the two contiguous parcels into approximately 18 to 20 lots ranging in total lot size from 2 to 9 acres, resulting in approximately 1 to 4 acres of buildable area per lot considering zoning setbacks and buffers, wetlands, and utility easements. Access to the park would be provided from Captain Lewis Drive and an extension of the existing cul-de-sac at the end of Robert Porter Road. The proposed industrial park is capable of supporting up to 530,000 square feet of building space on approximately 60 acres. Building sizes would range from 10,000 to 50,000 square feet, with an average size of approximately 25,000 square feet. The intent of the proposed development plan is to allow sufficient flexibility to combine lots to accommodate larger facilities (e.g., up to 10 acres and between 80,000 and 100,000 square feet of building space), as necessary. The proposed development also includes preservation of a minimum 50-foot wooded buffer along the perimeter of the site adjacent to existing residential land, as well as open space and conservation areas.

### Statement of Purpose and Need

The purpose of the proposed project is to provide ready-to-build, industrially-zoned lots allowing businesses to locate or expand their facilities in Southington, Connecticut. With the existing municipal industrial park near full occupancy, Southington wishes to provide additional, reasonably-priced industrial lots within the town to expand the non-residential tax base in the community and to recover the approximately 2,000 manufacturing jobs lost in Southington during the period 1996-2001.

The proposed industrial park is consistent with the goals of the DECD Industrial Park Program, currently funded under the Manufacturing Assistance Act of 1990, to address the need to create new sites within the state for industrial employers and manufacturing facilities. The type of industrial park proposed (for small and medium size manufacturing and distribution facilities) is also consistent with the needs of existing regional industrial businesses as identified in the market analysis conducted as part of this study. The market analysis findings indicate that such space is particularly critical for the retention of regional businesses that need to expand operations and whose needs could not be met by existing built industrial space available in the region.

### Alternatives Considered

In addition to the No Action Alternative, the three previously described alternative sites were considered for the proposed industrial park. In the selection of the preferred alternative, DECD considered many factors addressed in this document such as the economic development goals of the Town of Southington, the mission of the DECD Industrial Parks

Program, the draft *Conservation and Development Policies Plan for Connecticut 2004-2009* (OPM, 2004), and the goal of avoiding or minimizing potential environmental impacts.

Under the No Action Alternative a new industrial park would not be developed by the Town. The land identified for industrial park development may remain vacant, be privately developed, or may be rezoned and converted to other non-industrial land uses. The No Action Alternative was not selected as the most feasible and prudent alternative because it is inconsistent with the Town's efforts to recover lost manufacturing jobs and businesses and the desire for responsible controlled growth. Additionally, under the No Action Alternative future industrial development in Southington would occur in a piece-meal fashion resulting in greater infrastructure burden and potentially greater cumulative impacts, and businesses may leave the region or state if existing vacant industrial facilities available for reuse do not fulfill the needs of businesses looking to expand or locate in the area.

The three alternative sites were evaluated for overall development constraints and potential environmental impacts based on the existing conditions at each site. Overall, all three sites are similar in terms of physical and socioeconomic resources. Minor differences between each site are anticipated relative to potential impacts on traffic, utilities, noise and light, and aesthetics. Residential land use exists in the vicinity of all three sites, while Sites #2 and #3 directly border residential developments.

The major differences between the three sites are related to potential development constraints and impacts on natural resources. Sites #1 and #2 have significantly more moderate and high value wetland resources and associated wetland and upland habitat than Site #3. These wetland areas also correspond to areas of moderate to high archaeological sensitivity. The presence of steep topography near potential site access locations on Sites #1 and #2 is a significant constraint that either precludes development on large portions of these sites or substantially increases the site development costs as compared to Site #3. Sites #1 and #2 also contain relatively larger contiguous tracts of farmland soils. The vast majority of Site #3 contains non-farmland soils. Overall, Site #3 was selected as the preferred alternative site for the proposed industrial park development based on the significantly lower development constraints and potential impacts to natural resources as compared to the other sites that were evaluated.

### Analysis of Impact

The proposed project will not result in impacts to cultural resources, critical species of plants or animals and their habitat, or displace or disrupt any individuals or their communities. No adverse impacts to surface water or groundwater will occur as a result of the proposed development. Development of the proposed industrial park is consistent with state, regional, and local plans to retain and promote manufacturing businesses and locate those businesses in areas zoned for industrial development. The proposed project is also consistent with DECD's efforts to attract and retain manufacturing businesses in Connecticut. Therefore, the project is anticipated to have a beneficial impact on local, regional, and state planning efforts as well as economic conditions and employment in Southington and Connecticut.

Potential impacts associated with the proposed project include construction-related impacts to air, noise, and water quality during the initial development of the site and subsequent

development of individual lots/facilities; increased traffic; increased volume, flow rate, and pollutant loading of stormwater runoff from the site; potential disturbance of an inland wetland to access the northern portion of the site; additional generation of solids waste; potential noise and aesthetic impacts due to the proximity of residential land use; and the generation of increased demands on utilities and services.

### Mitigation

The potential adverse impacts associated with the proposed project can be largely offset or avoided through appropriate mitigation measures. The major types of mitigation recommended for the project include construction best management practices to limit fugitive dust impacts and sediment and erosion, preservation of a vegetative wooded buffer around the perimeter of the site to transition from industrial to residential land use, traffic improvements including rehabilitation of Captain Lewis Drive, a new traffic signal, and signal phasing/cycle length modifications, site design elements to minimize impervious cover and runoff peak flow and volume, post-development stormwater quantity and quality controls, industrial pollution prevention programs, and potential wetland mitigation. The planning, design, and permitting process for the initial development of the industrial park and subsequent development of individual lots and facilities within the park will further identify mitigation measures related to wetlands, stormwater, wastewater, and traffic to reduce potential environmental impacts.

### Conclusion

The proposed project will provide the Town of Southington with additional ready-to-build, industrially-zoned lots allowing businesses to locate or expand their facilities in Southington, Connecticut. The benefits associated with the proposed industrial park include direct and indirect job creation, earnings associated with those jobs, potential expenditures in the community, and tax revenue. The total cost of the development, including proposed mitigation, is estimated at approximately \$7.3 million. Expected adverse impacts include potential increases in traffic, potential noise and aesthetic impacts due to the proximity of adjacent residential land use, increases in solid waste and energy demand, increased demand on utilities, potential impacts to stormwater and water quality, and construction-related impacts. However, these impacts will be avoided or minimized through project design, permitting, and specific mitigation measures.

### CEPA/EIE Process and Draft EIE Review Period Comments

The Connecticut Environmental Policy Act (CEPA) process used to prepare the Draft Environmental Impact Evaluation (EIE) for this project is discussed under Section 1.2, which has included public/agency input to date.

The Draft EIE for this project is being circulated by DECD for a 45-day public/agency review period beginning April 6, 2004. Written comments on the document must be submitted to DECD no later than May 24, 2004 by 4:00pm. DECD will hold a public hearing on the Draft EIE if twenty-five persons or an association having not less than twenty-five persons requests such a hearing within ten days of the April 6, 2004 publication

of this notice. Written comments on the Draft EIE and/or requests for a public hearing must be submitted to the below-listed DECD contact.

Department of Economic & Community Development  
Marie E. McGuinness  
Office of Infrastructure & Real Estate  
505 Hudson Street  
Hartford, CT 06107-7106  
Phone: 860/270-8148  
Fax: 860/270-8157  
Email: [marie.mcguinness@po.state.ct.us](mailto:marie.mcguinness@po.state.ct.us)

## 1.0 INTRODUCTION

### 1.1 Background

The Town of Southington proposes to develop an industrial park in Southington, Connecticut. In September 2001, the Southington Town Council passed a resolution in support of an application to the Connecticut Department of Economic and Community Development (DECD) for financial assistance to undertake the necessary planning efforts for the proposed industrial park. An agreement was developed between the State and Town to initially undertake an Environmental Impact Evaluation (EIE) in accordance with the Connecticut Environmental Policy Act (CEPA), with each contributing 50 percent of the cost of the planning process. The financial assistance is provided under the provisions of the Economic Development and Manufacturing Assistance Act (Chapter 588I of the Connecticut General Statutes). The agreement was executed in June 2003, followed by implementation of the EIE process. Subject to the results of the EIE, grant funds are also available toward the preparation of a Municipal Development Plan (MDP) for the industrial park project (with each contributing 50 percent).

The Town of Southington is seeking to utilize existing industrially-zoned land within the town to provide space for businesses looking to locate within central Connecticut or to expand their existing facilities. Based on inquiries to the Southington Economic Development Coordinator, the town has identified a need for additional space with the town for one to five acre lots to provide buildable space for businesses looking to construct facilities ranging in size from 10,000 to 100,000 square feet (SF). The existing municipal industrial park is near maximum capacity, with only three lots remaining. Through the development of an additional industrial park, the municipality hopes to recover manufacturing jobs and businesses lost from the community over the past decade and to gain additional non-residential tax revenue to support existing and proposed capital improvements within Southington.

The DECD Industrial Parks Program is intended to create new sites within the state for industrial employees and to improve existing manufacturing facilities in Connecticut through the planning, development, and construction of industrial parks. The Industrial Parks Program is currently funded under the Manufacturing Assistance Act of 1990 (Sections 32-220 through 32-234 of the Connecticut General Statutes (CGS)) and authorized under CGS Sections 8-186 through 8-200, Municipal Development Projects.

### 1.2 CEPA Process

The Connecticut Environmental Policy Act (CGS Sections 22a-1 through 22a-1h) requires that state agencies consider the potential consequences of their actions on the physical, biological, social, and economic surroundings and conditions which exist within the area of a proposed project. DECD uses a "Stage One" review process to provide information about proposed development projects to the Connecticut Office of Policy and Management (OPM) and other appropriate state agencies. Agency review comments are used to determine the necessity for an EIE, identify potential resource impacts and regulatory issues, and refine the scope of the project for consistency with state plans and policies.

In February 2001, DECD issued the findings of the Stage One environmental assessment for the proposed Southington Industrial Park development (Appendix A). At that time, the Town of Southington had identified four alternative sites as potential development locations. Based on the comments received from the state agencies, DECD determined that an Environmental Impact Evaluation (EIE) should be prepared for the project. The determination was based on the potential for environmental impact to wetlands, floodplains, historic resources and threatened and endangered species.

In 2003, DECD contracted Fuss & O'Neill, Inc. (F&O) to prepare an EIE and market analysis for the proposed Southington Industrial Park. Once the EIE process was ready to commence in June 2003, the Town identified changes affecting the original alternative sites. The Town provided updated site information and options, which were reviewed with DECD. As a result, the current three sites were evaluated in the EIE.

The CEPA process involves an early scoping process to identify issues of concern related to the proposed project, the preparation of a draft EIE and final EIE. The scoping period begins with the publication of a notice of scoping in the Environmental Monitor, which is posted on the Connecticut Council on Environmental Quality (CEQ) website (<http://www.ct.gov/ceq>). The scoping includes a 30-day public comment period during which governmental agencies, as well as other organizations and members of the public, can submit comments on the proposed project and request a public scoping meeting. The Notice of Scoping for this project appeared in the July 22, 2003 edition of the Environmental Monitor as well as a legal notice in the July 22, 2003 edition of the *Record Journal* (Appendix B).

As described further in Section 1.5, a public information meeting was held on November 19, 2003 at the Southington Town Hall. Notices for the public information meeting appeared in the November 4, 2003 editions of the Environmental Monitor and the *Record Journal* (Appendix D). The purpose of the meeting was to solicit comment on the prospective sites and present initial study findings.

The publication of the draft EIE is followed by a 45-day public comment period during which DECD receives comments on the proposed project and the information presented in the draft EIE from other governmental agencies and the public. Responses to the comments are addressed in the final EIE. Once the final EIE is published, DECD prepares a Record of Decision that is forwarded with the final EIE to the Office of Policy and Management (OPM). OPM reviews the EIE, the comments received, and the record of decision and determines if the EIE is adequate. If the EIE is found to be adequate, the sponsoring agency may proceed with the project.

This EIE has been prepared in accordance with the requirements of both CEPA and the Regulations of Connecticut State Agencies (RCSA) Sections 22a-1a-1 through 22a-1a-12, inclusive. This document provides a description of the proposed action, an analysis of the direct, indirect, and cumulative effects of the proposed action, and a description of unavoidable adverse environmental effects, alternatives for the proposed actions, and mitigation measures to offset potential impacts. In the preparation of this document, the purpose and need for the proposed project was examined, project alternatives were

documented, the existing environment was evaluated, potential impacts were analyzed, and mitigation measures identified.

### 1.3 Proposed Project Description

The proposed project involves the development of a new industrial park on existing undeveloped land in Southington, Connecticut. Three potential industrial park sites were evaluated in the EIE process. All three sites consist of primarily undeveloped, industrially-zoned land (I-1 zone or light industrial) located within the Business Enterprise Zone in the northern portion of Southington. The three sites are located north of Interchange 31 of Interstate 84 (I-84), along the State Route 229 (West Street) corridor in Southington. Figure 1-1 shows the locations of the alternative project sites, which are described further in Section 2 (Existing Conditions) and Section 3 (Alternatives Analysis) of this document. Facilities that are anticipated to occupy the proposed industrial park will consist of light manufacturing, associated office space, and warehouse or distribution space consistent with the current I-1 zoning of the three alternative sites.

Site #1 is located approximately 1.25 miles north of the I-84 Interchange 31. The site is bordered by West Street to the west and West Queen Street to the north. Its northern boundary has approximately 2,400 feet of frontage along the south side of West Queen Street, while only several hundred feet of frontage exist along West Street, including the residence of the current property owner. The site slopes eastward toward the Farmington Canal and an adjacent trailer park along the Quinnipiac River. A power transmission line crosses the western portion of the property. Site #1 consists of a single 102± acre parcel, according to the Town of Southington Residential Property Record Card. (The parcel acreage reported in the Town's GIS parcel database for all three sites was used for quantitative evaluation purposes, unless noted otherwise in the EIE.)

Site #2 is situated just north of Interchange 31 and is partially bordered by I-84. It lies to the west side of West Street and is also west of Executive Boulevard North and Executive Boulevard South. The site consists of two contiguous parcels, which comprise approximately 62 acres of land, and is situated adjacent to an office park that houses The Hartford insurance company.

Site #3 is the northernmost site located approximately 2 miles north of Interchange 31. The site is located on the east side of West Street, west of Captain Lewis Drive, and north of West Queen Street. Site #3 encompasses two contiguous parcels and approximately 68 acres of land. The property owners of the northern parcel currently reside in two houses located on the northern portion of the parcel along Town Line Road. Site #3 is adjacent to an existing industrial park on Captain Lewis Drive and Robert Porter Road. The power transmission line that crosses Site #1 also traverses the western and northern sections of this site.

An alternatives evaluation was performed to select a preferred alternative site for development of the industrial park. The alternatives evaluation is described in Section 3 of this document. Selection of the preferred alternative site was based on potential environmental impacts, development constraints at each site, economic development goals of the Town of Southington, the mission of the DECD Industrial Parks Program, and the

goals of the draft *Conservation and Development Policies Plan for Connecticut 2004-2009* (OPM, 2004).

As described in Section 3, Site #3 was selected as the preferred alternative site for the industrial park development. Potential impacts to natural resources and overall development constraints were comparatively lower for Site #3 than the other two sites considered. Further details of the alternatives analysis and the rationale for selection of Site #3 are described in Section 3.

The proposed development scenario for Site #3 involves subdividing the two contiguous parcels into approximately 18 to 20 lots ranging in total lot size from 2 to 9 acres, resulting in approximately 1 to 4 acres of buildable area per lot considering zoning setbacks and buffers, wetlands, and utility easements. Access to the park would be provided from Captain Lewis Drive and an extension of the existing cul-de-sac at the end of Robert Porter Road. The proposed industrial park is capable of supporting up to 530,000 square feet of building space on approximately 60 acres. Building sizes would range from 10,000 to 50,000 square feet, with an average size of approximately 25,000 square feet. The intent of the proposed development plan is to allow sufficient flexibility to combine lots to accommodate larger facilities (e.g., up to 10 acres and between 80,000 and 100,000 square feet of building space), as necessary. A buildout analysis was performed to assess the environmental and economic impacts of the proposed development scenario. The buildout analysis and identified impacts are described in Section 6 (Impact Analysis Summary) of this document.

The proposed development scenario provides for a minimum 50-foot buffer along the perimeter of the proposed industrial park lots that border adjacent residential land use. Additional area is set aside for open space and conservation areas, which consist of the wetland areas at the northern and western portions of the site, in addition to the existing utility easement that traverses the site and adjacent areas to the west.

Figure 1-1. Alternative Project Sites

#### 1.4 Purpose and Need for the Proposed Project

The purpose of the proposed project is to provide ready-to-build, industrially-zoned lots allowing businesses to locate or expand their facilities in Southington, Connecticut. With the existing municipal industrial park near full occupancy, Southington wishes to provide additional, reasonably-priced industrial lots within the town to expand the non-residential tax base in the community and to recover the approximately 2,000 manufacturing jobs lost in Southington during the period 1996-2001.

DECD has recognized the need to attract and retain industrial businesses within the state. The Industrial Park Program, currently funded under the Manufacturing Assistance Act of 1990, provides assistance for the planning, development, and construction of industrial parks, such as the proposed project. The specific intent of the program is to address the need to create new sites within the state for industrial employers and manufacturing facilities. This program is designed to stimulate job creation and retain existing industrial employers by providing manufacturing assistance and the space necessary for expansion.

The type of industrial park proposed, with one to five acre lots for small and medium size manufacturing and distribution facilities, is also consistent with the needs of existing regional industrial businesses as identified in the market analysis contained in Appendix C. The analysis indicates that such space is particularly critical for the retention of regional businesses that need to expand operations and whose needs could not be met by existing built industrial space available in the region.

#### 1.5 Public Participation and Agency Coordination

As described in Section 1.2, the initial agency coordination for the project began with the Stage One environmental assessment. Information regarding the proposed industrial park development was circulated in November 2000 to the following state agencies:

- Office of Policy and Management (OPM),
- Department of Environmental Protection (DEP),
- Council on Environmental Quality (CEQ),
- Department of Agriculture,
- Connecticut Historical Commission (CHC),
- Department of Transportation (DOT),
- State Traffic Commission (STC),
- Department of Public Health (DPH), and
- Connecticut Department of Public Works (DPW).

Comments received from the state agencies were synthesized into the Stage One environmental assessment found in Appendix A.

A Notice of Scoping for the Environmental Impact Evaluation (Appendix B) appeared in the Connecticut Council on Environmental Quality Environmental Monitor (<http://www.ct.gov/ceq>) on July 22, 2003, and a legal notice appeared in the *Record Journal* on July 22, 2003. During the 30-day scoping period, comments were received from the

Connecticut Department of Public Health, the Connecticut Department of Environmental Protection, and one member of the public. These comments can be found in Appendix B. Comments were also subsequently received from the Connecticut Department of Agriculture and the Connecticut Department of Public Health during the preparation of the draft EIE.

A public information meeting was held on November 19, 2003 at the Southington Town Hall. Notices for the public information meeting appeared in the November 4, 2003 editions of the Environmental Monitor and the *Record Journal*. In addition, the Town's Economic Development Coordinator distributed informational flyers containing a meeting announcement at various public locations throughout Southington. The purpose of the meeting was to solicit comment on the prospective sites and present initial study findings. A copy of the legal notices, informational flyer, and a summary of the comments received are contained in Appendix D.

## 2.0 EXISTING ENVIRONMENT

As stated in Section 1.3, three sites were retained for assessment as alternative locations for the development of an industrial park. This section provides a description of the physical, natural, and socioeconomic resources associated with each of the three sites considered. The analysis of the existing environment is the basis for the alternatives analysis described in Section 3.

### 2.1 Physical Resources

#### 2.1.1 Air Quality

Under the authority of the Clean Air Act, as amended, the United States Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for six pollutants: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone, particulate matter ten microns or smaller in diameter (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. Ambient air quality standards define allowable limits for atmospheric concentrations of air pollutants. Primary standards are established to protect public health, and secondary standards are established at levels designed to protect the public welfare by accounting for the effects of air pollution on vegetation, soil, materials, visibility, and other aspects of the general welfare. These standards are summarized in Table 2-1. The Connecticut Ambient Air Quality Standards are similar to the NAAQS and are also presented in Table 2-1.

**Table 2-1. Connecticut and National Ambient Air Quality Standards**

| Pollutant        | Standard              | Averaging Period       | Connecticut <sup>a</sup>           | National <sup>a,b</sup>                         |
|------------------|-----------------------|------------------------|------------------------------------|---|
| Carbon Monoxide  | Primary and Secondary | 8-hour average         | 10 mg/m <sup>3</sup> (9 ppm)       | 9 ppm (10 mg/m <sup>3</sup> ) <sup>d</sup>      |
|                  | Primary and Secondary | 1-hour average         | 40 mg/m <sup>3</sup> (35 ppm)      | 35 ppm (40 mg/m <sup>3</sup> ) <sup>d</sup>     |
| Ozone            | Primary and Secondary | 1-hour average         | 0.125 ppm (240 µg/m <sup>3</sup> ) | 0.125 ppm (235 µg/m <sup>3</sup> ) <sup>e</sup> |
| Nitrogen Dioxide | Primary and Secondary | Annual arithmetic mean | 100 µg/m <sup>3</sup> (0.05 ppm)   | 0.05 ppm (100 µg/m <sup>3</sup> )               |

| Pollutant                                | Standard              | Averaging Period             | Connecticut <sup>a</sup>         | National <sup>a,b</sup>            |
|--|-----------------------|------------------------------|----------------------------------|------------------------------------|
| Sulfur Dioxide                           | Primary               | Annual arithmetic mean       | 80 µg/m <sup>3</sup> (0.03 ppm)  | 80 µg/m <sup>3</sup> (0.03 ppm)    |
|  | Primary               | 24-hour average <sup>c</sup> | 365 µg/m <sup>3</sup> (0.14 ppm) | 365 µg/m <sup>3</sup> (0.14 ppm)   |
|  | Secondary             | 3-hour average               | 1300 µg/m <sup>3</sup> (0.5 ppm) | 1300 µg/m <sup>3</sup> (0.5 ppm)   |
| Respirable Particles (PM <sub>10</sub> ) | Primary and Secondary | Annual arithmetic mean       | 50 µg/m <sup>3</sup>             | 50 µg/m <sup>3</sup> <sup>f</sup>  |
|  | Primary and Secondary | 24-hour average              | 150 µg/m <sup>3</sup>            | 150 µg/m <sup>3</sup> <sup>g</sup> |
| Lead                                     | Primary and Secondary | Calendar quarterly mean      | 1.5 µg/m <sup>3</sup>            | 1.5 µg/m <sup>3</sup>              |

- a Units are milligrams per cubic meter (mg/m<sup>3</sup>), parts per million (ppm), and micrograms per cubic meter (µg/m<sup>3</sup>).
- b National short-term standards are not to be exceeded more than once in a calendar year.
- c National averages are block averages rather than moving averages.
- d National secondary standards for carbon monoxide have been dropped.
- e Maximum daily 1-hour average (averaged over a three year period, the expected number of days above the standard must be less than or equal to one).
- f To attain the PM<sub>10</sub> annual standard, the arithmetic average of the 24-hour samples for a period of 1 year, averaged over 3 consecutive years, must not exceed 50 µg/m<sup>3</sup>.
- g To attain the PM<sub>10</sub> 24-hour standard, the maximum 24-hour average concentration must not exceed 150 µg/m<sup>3</sup> more than once per year (3-year average).

Sources: National - 40 CFR Part 50. Connecticut - RCSA Section 22a-174-24.

In order to determine compliance with the NAAQS, long-term air quality monitoring is conducted by the Connecticut Department of Environmental Protection (DEP). The DEP operates several continuous monitoring sites in Connecticut that measure ambient concentrations of criteria pollutants.

The EPA has designated the Southington area as attainment (in compliance with the NAAQS) for all pollutants except ozone. The Southington area currently is classified as a serious ozone non-attainment area (having measured ozone concentrations higher than the NAAQS) due to violations of the ozone standard in the recent past. The entire State of Connecticut is currently designated as non-attainment for the 1-hour ozone standard. Fairfield County (except Shelton), New Milford and Bridgewater are classified as severe non-attainment. The remainder of the State, including the Southington area, is a serious non-attainment area.

The nearest DEP-operated ozone monitoring station to the three proposed project areas is located in Middletown, Connecticut (Site No. 090070007). There was one (1) exceedance of the 1-hour ozone standard at this location during the summer of 2003, with the highest recorded ozone concentration of 0.138 mg/m<sup>3</sup> on July 4, 2003.

Emissions inventories are quantities of pollutants emitted over a given period of time, which provide information about the contribution of a source to the total atmospheric pollutant burden. Under the Federal Clean Air Act Amendments of 1990, major sources of air pollution are required to obtain a facility-wide permit, known as a Title V Operating Permit, which is administered in Connecticut by the DEP Bureau of Air Management. The General Permit to Limit Potential to Emit Air Pollutants (GPLPE) is available to major sources that are subject to the Title V Operating Permit program but are able to cap their potential and actual emissions below prescribed thresholds. The DEP Bureau of Air Management lists all

registered GPLPE and full Title V Permit Holders in the State of Connecticut. As of January 2, 2004, there were no Title V facilities in Southington, Connecticut.

## 2.1.2 Noise and Light

### 2.1.2.1 Noise

The unit typically used to describe sound levels perceptible to humans is the A-weighted decibel (dBA). The A-weighting attempts to approximate the human ear's sensitivity to sounds of varying frequencies and pitch. The decibel is a logarithmic unit of measure. For instance, a 10-decibel change in noise level is perceived as a doubling or halving of loudness. A 3-dB change would be barely perceivable for most people.

The Leq, or Equivalent Level, is the steady-state noise level for a given time period that has the same acoustic energy as the fluctuating noise levels observed during that time period. The Leq can be evaluated over different time periods including one hour (expressed as a one-hour Leq or Leq(h)) or 24 hours (expressed as a 24-hour Leq or Leq(24)).

The Connecticut Department of Environmental Protection (DEP) has set Noise Zone Standards for the evaluation of noise generated by adjacent noise zones (RCSA 22a-69-1 through 22a-69-7.4). The standards establish 3 noise zones based on land use place limits within each class on the allowable amount of noise to be emitted by a source in an adjacent noise zone. Table 2-2 describes the various classes, with Class A, being the most noise-sensitive of the 3 types and Class C being the least sensitive.

**Table 2-2. Connecticut Noise Zones**

| <b>Class</b> | <b>Description of Noise Zone</b>  |
|--------------|---|
| A            | Generally residential areas where human being sleep or areas where serenity and tranquility are essential to the intended use of the land |
| B            | Generally commercial in nature, areas where human beings converse and such conversation is essential to the intended use of the land      |
| C            | Generally industrial where protection against damage to hearing is essential and the necessity for conversation is limited                |

As indicated by the zoning of the three sites (see Section 2-3.1), the intended use for all three sites is industrial. There is a small portion of land zoned Limited Business on Site #3, which is commercial in nature. However, under RCSA 22a-69-2.2, when multiple uses exist within a given noise zone, the least restrictive land use category shall apply regarding the noise standards. Industrial land use is considered a Class C Noise Zone. According to RCSA Section 22a-69-3.5, a Class C emitter shall not emit noise exceeding Leq levels of 61 dBA in daytime or 51 dBA in nighttime to an adjacent Class A Noise Zone, 66 dBA (daytime or nighttime) to an adjacent Class B Noise Zone and 70 dBA (daytime or nighttime) to an adjacent Class C Noise Zone. Construction noise is exempt from these

regulations per RCSA 22a-69-1.8.

In addition to the quantitative criteria for noise provided by the DEP, the Southington Zoning Regulations provide some general guidance relative to noise, and state in Section 5-00.4(A) that “no noise which is objectionable due to volume, intermittence, beat, frequency or shrillness shall be transmitted beyond the property from which it originates.”

In addition to stationary sources associated with activities at a particular location, highway and traffic noise is an additional source. Adverse impacts from highway or traffic noise sources occur when the estimated sound levels approach (within one decibel), meet, or exceed the Noise Abatement Criteria (NAC) set forth by the Federal Highway Administration (FHWA). The NAC are sound levels corresponding to exterior sound levels that are acceptable for various land use activities. When highway traffic associated with a proposed project is predicted to cause sound levels that approach, meet, or exceed the NAC as described above, noise mitigation measures must be considered.

The noise criteria described above and shown in Table 2-3 are based on land use categories. Category A includes outdoor areas where quiet is an essential element in their intended purpose. Category B includes residences, schools, and libraries. Category C encompasses all other areas, including developed lands. Industrial land uses are within Category C. Whereas the DEP criteria listed above are a function of both the noise emitter and receptor, the FHWA criteria relate only to traffic-related noise and specified for receptors based on land use.

**Table 2-3. FHWA Noise Abatement Criteria**

| <b>Activity Category</b> | <b>Leq(h) (dBA)</b> | <b>Description of Activity Category</b>   |
|--------------------------|---------------------|---|
| A                        | 57 (Exterior)       | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. |
| B                        | 67 (Exterior)       | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.   |
| C                        | 72 (Exterior)       | Developed lands, properties, or activities not included in Categories A or B above.   |

2.1.2.2 Light

Since the three sites are currently undeveloped with the exception of a single house and associated accessory structures on both Site #1 and Site #3, existing lighting on the sites themselves is limited or non-existent. Street lighting from roadways and lighting on adjacent developed parcels provides additional light sources on the parcel.

### 2.1.3 Traffic and Roadways

#### 2.1.3.1 Data Collection

Existing conditions information was gathered by Fuss & O'Neill, Inc. for the roadways and intersections that could experience an increase in traffic as a result of a new industrial park at one of the alternative sites under consideration. The initial data collection effort included the following:

- Fuss & O'Neill conducted field observations on August 28, 2003 to review existing roadway conditions, traffic operations, access points, and intersections in the vicinity of the alternative project sites.
- The Town of Southington and the State Traffic Commission (STC) were contacted to identify other pending or approved developments that would potentially impact traffic in the vicinity of the sites. Several developments were identified including the Baptist Church College located on West Street at the intersection of Spring Street and a retail and age-restricted residential housing located on West Street north of West Queen Street.
- Traffic signal plans and the latest three years of accident data for intersections and roadways within the study area were obtained from the Connecticut Department of Transportation (ConnDOT).
- Intersection turning movement counts were conducted during the morning peak period from 7-9 AM, and during the afternoon peak period from 4-6 PM. These periods were selected since they represent the times when an industrial park development would most likely impact traffic operations. The traffic counts were compiled and it was determined that the morning peak hour of traffic occurs during the period from 7:30 to 8:30 AM, and the afternoon peak hour of traffic occurs from 5:00 to 6:00 PM. These periods were subsequently analyzed for existing and proposed traffic conditions. The existing conditions traffic volumes are identified in Figures 2 and 3 of Appendix E of this document for the AM and PM peak hours respectively. Turning movement counts were conducted at the following intersections:

#### Signalized Intersections:

- State Route (SR) 10 (Queen Street) and West Queen Street
- SR 229 (West Street) and West Queen Street
- SR 229 (West Street/Middle Street) and Birch Street
- SR 229 (West Street) and Welch Road
- SR 229 (West Street) and Executive Boulevard North
- SR 229 (West Street) and Executive Boulevard South
- SR 229 (West Street) and I-84 Eastbound Ramps
- SR 229 (West Street) and I-84 Westbound Ramps
- SR 229 (West Street) and Spring Street

Unsignalized Intersections:

- West Queen Street and Captain Lewis Drive
- SR 229 (West Street) and Corporate Boulevard

2.1.3.2 Roadways

The roadway network and intersections within the study area are depicted in Figure 2-1.

*West Street (State Route 229)*

West Street (State Route 229) is a state-owned roadway classified as a Principal Arterial by ConnDOT. The roadway provides a major north/south corridor connecting from the town line at the City of Bristol in the north to I-84 at several interchanges in the south. Development along the corridor consists of numerous small commercial sites mixed with residential properties. Two travel lanes are provided on West Street in both directions from the I-84 interchange northward to Executive Boulevard. West Street provides two northbound and one southbound lane to the north of Executive Boulevard. Concrete sidewalk is present on the west side of the road between the Mobil station north of I-84 and Executive Boulevard North.

The Average Daily Traffic (ADT) on West Street north of the I-84 interchange is 12,500 vehicles in the northbound direction and 12,300 vehicles in the southbound direction. The Average Daily Traffic (ADT) on West Street in the vicinity of West Queen Street is 10,600 vehicles in the northbound direction and 10,700 vehicles in the southbound direction. The posted speed limit on West Street is typically 40 miles per hour.

*West Queen Street*

West Queen Street is a three lane local roadway providing two lanes westbound and one lane eastbound, with a 35 mph posted speed limit. The roadway serves as a collector road for the primarily residential developments located on and adjacent to the corridor, and provides an east west connection between two heavily traveled state roads. The eastern terminus of the roadway forms a four-way signalized intersection with Queen Street (Route 10). The western terminus of West Queen Street forms a four-way signalized intersection with West Street (State Route 229). Average daily traffic on West Queen Street is approximately 7,000 vehicles per day. There are no sidewalks along West Queen Street.

*Queen Street (Route 10)*

Queen Street (Route 10) is a state owned roadway classified as a Principal Arterial by ConnDOT. The roadway provides a major north-south corridor connecting from the town line at Town of Plainville in the north, through the center of Southington to the town of Cheshire in the south. Developments along Queen Street within the study area consist primarily of retail oriented strip mall plazas, restaurants, gas stations, and other commercial business sites. Two travel lanes are provided in each direction, and exclusive turning lanes are typically provided at traffic signal controlled intersections. Average daily traffic on Queen Street is approximately 20,000 vehicles per day within the study area.

Figure 2-1. Study Area Roadway Network and Intersections

### *Captain Lewis Drive*

Captain Lewis Drive is a two lane bi-directional local roadway that is approximately 30 feet wide. It serves an existing industrial park (see [Figure 2-1](#)) and runs north from West Queen Street approximately 2,500 feet and terminates at a cul-de-sac. Progressing north on Captain Lewis Drive from West Queen Street, the road condition deteriorates from fair to poor. Many patches, dips, and bumps are present in the road. A sanitary sewer line runs down the center of the road, and the sewer manhole covers are raised above the pavement elevation. Captain Lewis Drive would require roadway improvements in order to service the proposed development. There are no curbs or sidewalks provided, and there is no posted speed limit.

Captain Lewis Drive intersects West Queen Street at an unsignalized three-way intersection. The sight distance on the southbound approach was observed to be less than adequate looking to the left (west) due to a vertical crest curve west of the intersection.

### *Robert Porter Road*

Robert Porter Road is a two lane bi-directional roadway that runs east/west and, together with Captain Lewis Drive, serves the existing industrial park. The road begins at a three-way intersection with Captain Lewis Drive. Its eastbound approach to Captain Lewis Drive is controlled by a stop sign. The west end of Robert Porter Road terminates at a cul-de-sac. The roadway is in fair to good condition.

#### 2.1.3.3 Site Access

##### *Site #1*

Site #1 is located east of West Street and south of West Queen Street as shown in [Figure 2-1](#). The primary road frontage is along West Queen Street, and access to the site would likely be at a four way intersection opposite Captain Lewis Drive. Captain Lewis Drive is currently stop sign controlled at West Queen Street, and connects to Robert Porter Road to the north.

A traffic signal would be required at the West Queen Street intersection with Captain Lewis Drive at some time in the future in the event that the proposed industrial park is developed at this site. With the addition of a site drive to the proposed industrial park, the traffic signal would be necessary for safe access to/from the industrial park.

A small portion of site frontage also exists along West Street, which could provide a secondary access drive for the site. Access from West Street would be feasible, although less desirable due to the existing traffic volumes along West Street. A traffic signal may be warranted, or access restrictions such as right in/right out could be considered to reduce impacts to the West Street corridor.

##### *Site #2*

Site #2 is located west of West Street and northwest of the Interstate 84 interchange 31 as shown in [Figure 2-1](#). Three potential site access alternatives are available for Site #2. All

three alternatives will provide site access from West Street and are in close proximity to the Exit 31 interchange on I-84.

Two of the potential site access drives are located at Executive Boulevard South, and Executive Boulevard North. Both of these roads intersect West Street at signalized 'T' intersections and both roadways service "The Hartford" insurance company. Both Executive Boulevard South and Executive Boulevard North are two lane roadways (one lane each direction) with existing curbs and sidewalks.

The third potential access drive is from Corporate Drive, which is located north of Executive Drive North on West Street. Its eastbound approach to West Street is stop sign controlled. Corporate Drive currently serves the Pepsi Distribution Center and an industrial facility. The roadway is in overall good condition and would need to be extended to provide access to the proposed site. If utilized as a site access, a traffic signal may be warranted at the intersection of West Street and Corporate Drive. In addition, some trees and vegetation would need to be cleared or trimmed at the intersection.

### *Site #3*

Site #3 is located east of West Street and north of West Queen Street as shown in [Figure 2-1](#). The most feasible access points to this site are from the existing cul-de-sacs of Captain Lewis Drive and Robert Porter Road.

Access to Site #3 is potentially available from the Robert Porter Road cul-de-sac at the western terminus of the roadway. Robert Porter Road may be extended to allow for better access into the proposed industrial park. The majority of the parcels within the Industrial Park would likely utilize the new access drive while several of the sites may have drives directly onto Robert Porter Road.

Access to Site #3 is also potentially available from an existing unpaved Town road near the cul-de-sac at the end of Captain Lewis Drive. The road condition on Captain Lewis drive is poor, and many patches, dips, and bumps are present in the road. Captain Lewis Drive would require roadway improvements in order to service the proposed development. There are no curbs or sidewalks provided on Captain Lewis Drive.

A traffic signal would be required at the West Queen Street intersection with Captain Lewis Drive at some time in the future in the event that the proposed industrial park is developed at this site. With the addition of traffic from the proposed industrial park, the traffic signal would be necessary for safe access to/from the industrial park.

#### 2.1.3.4 Accident History

The ConnDOT Bureau of Planning and Research assembles reported accidents on State roadways and compiles the accidents in a report entitled Traffic Accidents Surveillance Report (TASR). The TASR is used to prioritize accident sites statewide. A second list, the Suggested List of Surveillance Study Sites (SLOSSS), is a listing of locations that offer the greatest promise of accident reduction. ConnDOT may institute corrective action at these locations. The most recent TASR and SLOSSS are for the years 1998 to 2000.

The SLOSS listing indicated that West Street (SR 229) between the I-84 Ramps and Executive Boulevard South experienced an above-normal accident rate for this type of roadway. The SLOSS did not indicate any current projects to improve the accident frequency along this segment of roadway. The available data did not identify any other accident areas in the vicinity of the alternative sites.

#### 2.1.3.5 Existing Capacity

As indicated previously, weekday AM and PM peak hour traffic capacity analyses for existing conditions were performed for both signalized and unsignalized intersections within the study area (using Synchro Professional Software, version 5.0).

In discussing intersection capacity analyses results, two terms are used to describe the operating condition of the road or intersection. These two terms are volume to capacity ratio (v/c) and level of service (LOS). LOS is generally used to describe the operation (based on delay time) of both signalized and unsignalized intersections, while v/c ratio is applied to signalized intersections only. These definitions for v/c ratio and LOS, as well as the methodology for conducting signalized and unsignalized intersection capacity analyses, are taken from the *2000 Highway Capacity Manual* published by the Transportation Research Board.

The v/c ratio is a ratio of the volume of traffic using an intersection to the total capacity of the intersection (the maximum number of vehicles that can utilize the intersection during an hour). The v/c ratio can be used to describe the percentage of capacity utilized by a single intersection movement, a combination of movements, an entire intersection approach, or the intersection as a whole. As the v/c ratio approaches 1, the intersection nears capacity and it may become impossible to accommodate all the vehicles attempting to travel through the intersection.

LOS is a measure of the delay experienced by stopped vehicles at an intersection. LOS is rated on a scale from A to F, with A describing a condition of very low delay (less than 10 seconds per vehicle), and F describing a condition where delays will exceed 80 seconds per vehicle. Delay is described as a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Therefore, intersections with longer delay times are less acceptable to most drivers. In discussing unsignalized intersection capacity analyses, LOS is used to provide a description of the delay and operational characteristics of the turns from the minor street (stop sign controlled) to the major street, and turns from the major street to the minor street. Through vehicles are not delayed by the minor street and do not experience delay, therefore they are not rated with a level of service.

Table 2-4 presents a summary of the existing conditions LOS and v/c ratio at the unsignalized and signalized intersections in the study area. Copies of the analysis worksheets can be found in Appendix E of this document.

**Table 2-4. Existing Conditions Traffic Capacity Analysis Results**

| Intersection | Name   | Existing Capacity (LOS/VC ratio) |                      |
|--------------|--|----------------------------------|----------------------|
|              |  | AM                               | PM                   |
| 1            | SR 229 (West St./Middle St.) and West St.              | A/0.52                           | A/0.51               |
| 2            | SR 229 (West St.) and West Queen St.                   | B/0.90                           | C/0.79               |
| 3            | SR 229 (West St.) and Welch Rd.                        | B/0.82                           | C/0.90               |
| 4            | SR 229 (West St.) and Spring St.                       | A/0.73                           | A/0.64               |
| 5            | SR 229 (West St.) and Corporate Dr.<br>Unsignalized +  | EB F/53<br>NBL A/0.1             | EB D/30<br>NBL A/0.1 |
| 6            | SR 229 (West St.) and Executive Blvd. North            | A/0.45                           | A/0.41               |
| 7            | SR 229 (West St.) and Executive Blvd. South            | A/0.53                           | C/0.64               |
| 8            | SR 229 (West St.) and I-84 Westbound Ramps             | B/0.81                           | B/0.77               |
| 9            | SR 229 (West St.) and I-84 Eastbound Ramps             | C/0.79                           | C/0.83               |
| 10           | West Queen St. and Captain Lewis Dr.<br>Unsignalized + | EB A/1.5<br>SB B/12              | EB A/0.2<br>SB B/11  |
| 11           | SR 10 (Queen St.) and West Queen St.                   | B/0.35                           | B/0.61               |

Values indicated are intersection LOS/Volume to Capacity Ratio

+Values indicated are LOS/Control delay for Unsignalized Intersection

EB – eastbound

SB – southbound

NBL – northbound lane

As indicated in Table 2-4, the longest delay times (LOS C or worse) in the study area are currently experienced during the PM peak hour at several of the West Street intersections (West Queen Street, Welch Road, Corporate Drive, and Executive Boulevard South), as well as at the intersection of West Street and the I-84 eastbound ramps. Eastbound traffic on Corporate Drive at the intersection of West Street and Corporate Drive had the longest delay time (LOS F and LOS D for AM and PM peak hour, respectively) of any of the intersections analyzed.

#### 2.1.4 Utilities and Services

Public utilities and services in the vicinity of the proposed industrial park sites are described in the following section. Figure 2-2 and Figure 2-3 depict the water and sanitary sewer systems, respectively, in the project area. Mapping was unavailable for storm sewer lines, natural gas lines, telecommunications, and cable.

##### 2.1.4.1 Water (Domestic and Fire Protection)

The Town of Southington is currently serviced by a mixture of water companies and private wells. Eighty-five percent of the Town’s water, including the water for the three proposed locations, comes from Southington Water Company (SWC). SWC began providing the town water in 1883 and currently provides water for the central portion of the town. Five percent of the town gets its water from Plainville, two percent is served by Meriden, and the remaining population utilizes private wells. The SWC is supplied water from three reservoirs (Crystal Lake, Mirror Lake and Distribution Reservoir) and seven active wells.

Figure 2-2. Water Distribution System

The SWC Water Supply Plan approved by the Department of Public Health in January 2003, with the concurrence of DEP, reports that the utility has adequate supply to meet projected demands through 2020. According to the Water Supply Plan, industrial demand is projected to increase by 132,500 gallons per day (gpd) by the year 2005, with development of 53 acres of industrially zoned land. An additional 18 acres are expected to be developed over 20 years, with a corresponding demand of 45,000 gpd. All three sites are within the existing service area.

The SWC is supplied water from three reservoirs (Crystal Lake, Mirror Lake and Distribution Reservoir) and seven active wells. The water supplied by the reservoirs is treated at the water treatment plant located on Mariondale Drive prior to distribution. Water withdrawn from the active supply wells generally does not require treatment. The wells are located as follows.

**Table 2-5. Southington Water Company Water Supply Wells**

| Well        | Address                     |
|-------------|-----------------------------|
| 1A          | 65 High Street              |
| 2           | 1005 Meriden-Waterbury Road |
| 3           | 223 Hobart Street           |
| 7           | 153 Rustic Oak Drive        |
| 8           | 13 Peters Circle            |
| 9           | 177 Dunham Place            |
| New Britain | 2 Tanglewood Drive          |

The available yield is the actual amount of water that can be distributed while taking into account pump or well performance problems, treatment limitations, hydraulic restrictions, and permit limits. The estimated available yield of the SWC water supply system is approximately 10 million gallons per day (MGD).

Adequate water mains exist in close proximity to all three sites. The availability of water service to the three proposed sites is as follows:

*Site #1*

12-inch water mains are located along West Street and West Queen Street, adjacent to Site #1.

*Site #2*

12-inch water mains serve West Street in the vicinity of Site #2, as well as Executive Boulevard North. Executive Boulevard South is served by a 12-inch water main that reduces to a 4-inch water main at the southern extent of the system.

*Site #3*

12-inch water mains serve West Street, West Queen Street, the southern half of Captain Lewis Drive, and Robert Porter Road. The northern half of Captain Lewis Drive is served by a 4-inch water main. A 16-inch water main extends south from the Redstone Hill Storage Tanks to the end of Robert Porter Road and West Queen Street.

2.1.4.2 Sanitary Sewer

The Town of Southington operates a 7.4 million gallon per day (MGD) sewer treatment plant, located just north of the Cheshire border on Maxwell Noel Drive. The plant was constructed in 1984 and currently operates at a flow rate of between 3.4 and 4.4 MGD. Effluent from the treatment plant discharges to the Quinnipiac River. The sanitary sewer spans the Town of Southington between the borders of Cheshire and Bristol. Figure 2-3 shows the layout and extent of the existing and proposed sewer system. Sewer service could be extended to all three sites via lateral connections. The availability of sewer service to the three proposed sites is as follows:

*Site #1*

Sewer service is available via an existing 8-inch vitrified clay pipe in West Queen Street that runs past the property to the high point of the road, west of the site. Based on available topographic information, the site could be sewered by gravity.

*Site #2*

Sewer service is available via a 12-inch sewer main that transects the property and also a 21-inch sewer that runs to the southwest border of the site.

*Site #3*

Sewer service is available via an existing 8-inch vitrified clay pipe that serves Captain Lewis Drive and Robert Porter Road. The sewer on Captain Lewis Drive is relatively flat and cannot accommodate significant increases in peak sewer flows. An 8-inch sewer line also extends eastward from the topographic high point along West Queen Street south of Site #3 to a pump station near the intersection with Aircraft Road. An 8 to 10-inch sewer line that extends north from the intersection of West Street and West Queen Street to a pump station near the Bristol town line is currently under design.

Figure 2-3. Sanitary Sewer System

#### 2.1.4.3 Storm Drainage

Storm drainage exists in the vicinity of each of the three prospective sites. The Town has a policy of “zero net increase” in peak discharge runoff for new development and redevelopment projects. Development of the proposed industrial park would also be subject to construction and post-construction stormwater quality requirements associated with state and federal stormwater regulations. The availability of storm sewers for the three proposed sites is as follows:

##### *Site #1*

The storm sewer along West Queen Street flows past Site #1. The reinforced concrete pipe transitions from 18 inches to 24 inches in front of the parcel and then enlarges to 30 inches east of the site, where it discharges to a tributary of the Quinnipiac River.

##### *Site #2*

Storm sewers exist along Executive Boulevard Drive, which abuts Site #2. Drainage from the existing roadway discharges onto Site #2 in an existing drainage easement.

##### *Site #3*

An 18-inch reinforced concrete storm sewer exists adjacent to Site #3 along Robert Porter Road. The roadway drainage discharges to a detention basin at the intersection of Captain Lewis Drive.

#### 2.1.4.4 Electrical, Emergency Power, and Energy

Northeast Utilities (NU) is the distributor of electrical power in the region. The company provides full service to the three prospective sites. Three-phase power, which is generally required to run larger industrial equipment, exists in close proximity to each site. An electrical easement traverses the two northern sites (Site #1 and Site #3). The easement traverses the western portion of Site #3 and the central portion of Site #1. According to representatives from NU, structures are not allowed within a NU easement, although roads and utilities may be allowed. Specific restrictions would be determined by NU based on review of a proposed site design. Work performed within the easement would need to be performed in accordance with NU guidelines (Michael Green, pers. com., October 24, 2003).

#### 2.1.4.5 Natural Gas

Yankee Gas is the service provider in the area of the three sites. Two gate stations are located in close proximity to Site #1 and Site #3. One is located in Plainville, and the other is located in Southington. Gas availability to the three sites is as follows:

*Site #1*

A 6-inch steel gas main at 60 pounds per square inch (PSI) pressure is located along West Street. A similar 6-inch steel gas main is also located along West Queen Street. Gas could be supplied to the industrial park via a lateral from the existing gas main. Based on conversations with representatives at Yankee Gas, the available gas service is sufficient to supply the proposed industrial park due to the close proximity of the existing gate stations to Site #1.

*Site #2*

No gas is currently available to this area. The gas main from the north stops short of the site south of West Queen Street, and from the south near Jude Lane. Therefore, Site #2 would require an approximately 2000-foot extension of the existing gas main (plus a lateral into the site) to provide service to the site from the existing gas main near Jude Lane. Based on conversations with representatives at Yankee Gas, any proposed extension of the existing service in the vicinity of Site #2 would be evaluated in terms of overall demand and economic benefit.

*Site #3*

A 6-inch steel gas main at 60 PSI pressure is located along West Street. Similarly, a 4-inch plastic gas main is located along Captain Lewis Drive and Robert Porter Road. Gas could be supplied to the industrial park via a lateral from the existing gas main. Based on conversations with representatives at Yankee Gas, the available gas service is sufficient to supply the proposed industrial park due to the close proximity of the existing gate stations to Site #3.

2.1.4.6 Telecommunications & Cable

Southern New England Telephone Company provides local telephone services to the area, with existing service on all roads in the vicinity of the proposed sites. Cable services and fiber optics in the Town of Southington are provided by Cox Communications Services.

2.1.5 Hazardous Materials

According to the draft *Conservation and Development Policies Plan for Connecticut 2004-2009* (OPM, 2004), hazardous wastes are defined by their corrosive, reactive, ignitable, or toxic characteristics that can potentially harm human health or the environment when improperly managed. Hazardous waste generation, treatment, storage, and disposal is regulated by the Federal Resource Conservation and Recovery Act (RCRA) (OPM, 2004).

Phase I Environmental Site Assessments (Phase I ESA) were conducted, in accordance with ASTM Practice E 1527-00, at each of the three potential project sites to identify recognized environmental conditions (RECs) with regard to the subject sites (Fuss & O'Neill, 2003). As defined by Standard Practice for Environmental Site Assessments E 1527-00 (ASTM Practice E 1527-00) developed by the American Society for Testing and Materials (ASTM, 2000), REC means the presence or likely presence of any hazardous substances or petroleum

products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de-minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

As part of the Phase I ESA, research on the subject sites and nearby properties included site history, site reconnaissance, and federal, state, and local file reviews for the site and nearby properties. Based on this research, the following RECs were identified at all three sites:

- All three sites contain existing and/or historical agricultural uses such as dairy farming, pastureland, hayfields, etc. Agricultural crops with typically high applications of pesticides and herbicides (e.g., tobacco and strawberries) are not believed to have been cultivated on the subject sites. However, as with any site that has been used agriculturally, residual concentrations of pesticides and herbicides may exist in the soil. If public exposure to the soils at the site is anticipated, soil sampling is recommended.
- Small amounts of debris (residential construction debris, road construction debris, abandoned vehicles, old tires, abandoned appliances) were found on portions of the sites. This debris should be removed, and if any evidence of a release (including staining, stressed or dead vegetation, or odors) is found, soil sampling is recommended.

Several additional site-specific RECs were also identified, as summarized below:

#### *Site #1*

Petroleum releases were identified in areas nearby and upgradient (inferred) of the subject site. These releases were generally small and appear to have been adequately addressed.

Several active upgradient industrial facilities are generators of hazardous waste. There are no documented releases of hazardous substances or hazardous materials at these facilities. However, due to their upgradient position relative to the site, any unreported or unidentified releases have the potential to impact the site.

#### *Site #2*

Petroleum releases were identified in areas nearby and upgradient (inferred) of the subject site. These releases were generally small and appear to have been adequately addressed.

Several active upgradient industrial facilities are generators of hazardous waste. There are no documented releases of hazardous substances or hazardous materials at these facilities.

However, due to their upgradient position relative to the site, any unreported or unidentified releases have the potential to impact the site.

### *Site #3*

Petroleum releases were identified in areas nearby the subject site. These releases were downgradient or sidegradient of the site, generally small, and appear to have been adequately addressed. Therefore, the risk of impact from these releases to groundwater at the subject site is low.

A household hazardous waste collection program is sponsored by the Town and neighboring towns for collection and proper disposal of materials that are not suitable for recycling and incineration. The collection program is held approximately six times each year at participating town transfer stations, during which time residents can deposit waste materials for pickup by a licensed contractor (Cook, pers. comm., 2003).

#### 2.1.6 Solid Waste and Recycling

According to the draft *Conservation and Development Policies Plan for Connecticut*, the overall state policy is to maintain a statewide, integrated recycling, composting, resource recovery, and landfill system. Particular objectives, which are also articulated in the State Solid Waste Management Plan, are to recycle 40 percent of the waste stream and to offset any growth of the waste stream which occurs after 2000 by either waste avoidance or recycling (OPM, 2004).

All three sites are largely unoccupied. At this time, it is unclear whether the few on-site residences and associated buildings would be included in the developed portion of the site. Due to their age (constructed prior to 1978), the buildings could potentially contain lead (paint/plumbing), asbestos, and fluorescent light ballasts. This would likely present little environmental risk to the site property, although these items may be future liabilities during demolition. However, no significant building demolition is anticipated that would generate large quantities of solid waste.

Southington operates a transfer station, which accepts bulky waste materials including wood debris, scrap metal, demolition material, and propane tanks, which are then routed to a processing facility. The Transfer Station is open every Saturday from 8:00am to 3:30pm. Household waste and recycling are handled by town-certified private haulers, which are contracted directly by Town residents and businesses (Wlodkowski, pers. comm., 2003).

#### 2.1.7 Aesthetics and Viewsheds

Aesthetic considerations related to the proposed industrial park consist of setting within the landscape and preservation of viewsheds.

All three of the potential project sites include forested land, open space, and varying degrees of surface water and/or wetland areas. Each of the sites is surrounded by a mixture of industrial, commercial, and residential land uses. Potential concerns could arise in areas where industrial facilities border residential land uses. In the construction of both natural

and architectural elements of the industrial park, it is important that the aesthetic resources of the site continue to contribute to the desirable bordering residential land.

#### 2.1.8 Cultural Resources

Comments from the State Historic Preservation Office (SHPO) (Appendix B) noted:

- The potential for the sites under consideration to have moderate to high sensitivity for containing prehistoric archaeological resources based on their favorable environmental locations, and
- Concern about possible adverse impacts to properties listed on the National Registry of Historic Places and to undocumented potentially significant historic structures or features.

In response to these comments, Phase Ia and Partial Phase Ib Archaeological Reconnaissance Surveys of the three sites were conducted in July – September 2003 by Archaeological and Historical Services, Inc. (AHS). The reconnaissance survey conducted by AHS included the following elements:

- Detailed background research in maps, reports, records and archives,
- A walkover inspection of each site to identify areas of relative archaeological sensitivity,
- The excavation of approximately 64 test pits to refine estimates of archaeological sensitivity, and
- Assessment of significant above-ground resources which may be impacted, directly or indirectly, by the project.

The results of the Phase Ia and Partial Phase Ib Archaeological Reconnaissance Surveys are summarized in this section. The findings are described in further detail in the report contained in Appendix F.

Table 2-6 identifies the percentage of each site that is classified as having low, low to moderate, or moderate archaeological sensitivity (also see Figures 2-4 to 2-6). Low to moderate and moderate sensitivity areas would require further subsurface testing to better determine the potential for prehistoric archaeological resources. The cultural resources identified at each site are described in the following paragraphs.

Figure 2-4. Archaeological Sensitivity, Site #1

Figure 2-5. Archaeological Sensitivity, Site #2

Figure 2-6. Archaeological Sensitivity, Site #3

**Table 2-6. Summary of Archaeological Sensitivity and Recommended Further Testing**

| Site #1<br>(110± acres)            |                                  |                                  | Site #2<br>(81± acres) |                                  |                                  | Site #3<br>(70± acres) |                                  |                                  |
|------------------------------------|----------------------------------|----------------------------------|------------------------|----------------------------------|----------------------------------|------------------------|----------------------------------|----------------------------------|
| Low                                | Low to Moderate                  | Moderate                         | Low                    | Low to Moderate                  | Moderate                         | Low                    | Low to Moderate                  | Moderate                         |
| 36%<br>(40 acres)                  | 44%<br>(48 acres)                | 20%<br>(22 acres)                | 82%<br>(66 acres)      | 18%<br>(15 acres)                | <1%<br>(<1 acres)                | 14%<br>(10 acres)      | 85%<br>(59 acres)                | 1%<br>(1 acres)                  |
| <i>Recommended Further Testing</i> |                                  |                                  |                        |                                  |                                  |                        |                                  |                                  |
| No further testing                 | 15-m intervals on 60-m transects | 15-m intervals on 15-m transects | No further testing     | 15-m intervals on 60-m transects | 15-m intervals on 15-m transects | No further testing     | 15-m intervals on 60-m transects | 15-m intervals on 15-m transects |

Source: AHS (2003)

Acreage as reported in the Town of Southington GIS parcel database.

*Site #1*

The eastern border of Site #1 is Section 14 of the Farmington Canal, a National Register-listed property. The Farmington Canal, built in 1828, was the longer of two canals in Connecticut built during the Early National period. Although it was replaced by a railroad, the Farmington Canal was a major work of engineering (it connected New Haven with Northampton, Massachusetts), and it also has significance as an engine of manufacturing and commercial development, including supporting many of Southington’s earliest industries. Several historic houses, which are listed in the National Register of Historic Places or included in the Southington Historical and Archaeological Survey (1986), are located along West Street. None are located on Site #1, but could potentially be affected, depending upon where access to Site #1 would be located.

Office of State Archaeology site files show that only one archaeological site has been reported within one mile of Site #1. Site 131-5 is located approximately 900 feet south of Site #1 and approximately 400 feet north of Spring Street, along the northern edge of a small seasonal stream. Aside from the fact the site is prehistoric, no additional information is recorded on the site form. Prehistoric use of the area was likely limited by several factors. As noted above, wetlands were often focal points within prehistoric settlement and subsistence networks; however, the generally poor drainage conditions within Site #1 would have discouraged long-term occupations in the area. Prehistoric use of the surrounding uplands in Site #1 was probably directed toward hunting and collecting of resources inaccessible within the immediate surroundings of the larger encampments. The locations of such small, short-term camps oriented towards hunting and collecting can be difficult to predict, as they were likely placed to meet the immediate needs of small foraging groups responding to highly dynamic conditions such as the movement of game animals across the local landscape.

Based on the results of the walkover survey, limited subsurface investigation, and background research, approximately 36% of Site #1 has low archaeological sensitivity, 44% has low to moderate sensitivity, and 20% has moderate sensitivity (Figure 2-4). The areas of low sensitivity are defined as such based on steep slope and poorly drained soils; they are present primarily in the eastern half of the project, with a small locus in the southwestern

corner (Figure 2-4). No additional archaeological testing is recommended in the low-sensitivity areas. The areas of low to moderate sensitivity are those on well-drained, relatively level soils which show no evidence of disturbance and are greater than 50 meters from a wetland or water source. Most of the western half of Site #1 is categorized as having low to moderate sensitivity, and a narrow linear strip within the eastern half also falls under this classification.

Areas of moderate archaeological sensitivity are defined as undisturbed, well-drained, relatively level and within 50 meters of a wetland or water source. Bands of moderate potential are in the southwest corner and central portion of Site #1 (Figure 2-4). In order to conclusively determine the presence of prehistoric sites in Site #1, additional subsurface testing of the moderate-potential area at 15-meter intervals, the minimum testing intensity recommended by the Connecticut Historical Commission (CHC), would need to be performed prior to development of the site. According to CHC standards, set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*, 15-meter-interval subsurface testing would also be required in the areas of low to moderate sensitivity unless an argument for less intensive testing can be made. However, less intensive testing is appropriate in these areas, and coordination with the staff archaeologist of the CHC is recommended to develop a mutually acceptable testing design. Specifically, test pits could be excavated at 15-meter-intervals along transects spaced 60 meters apart in these areas, rather than 15 meters apart.

#### *Site #2*

A long, level embankment crosses the northwest corner of Site #2. This marks the course of an 1899 water pipe line that runs six miles between Roaring Brook on Wolcott Mountain and the City of New Britain's Shuttle Meadow Reservoir. Although it is not a National Register-listed property, it is a feature of substantial historic interest because this was a relatively large work of engineering for its day, one that doubled the watershed of New Britain's water supply. In addition, although there are no historic properties on or immediately adjacent to Site #2, there are several houses along West Street, north of the site that are National Register-listed or included in the 1986 Southington Historical and Archaeological Survey.

A total of 20 test pits (J1 through J20) were excavated within Site #2 following the walkover survey. The pits were placed in areas of potential intact soils, as judged by topography and ground surface conditions. Test pits which encountered potentially intact soils were all concentrated along the western and southern parcel boundaries. Soil profiles consistently show a shallow plowzone above very fine sandy loams. The water table was intercepted in four test pits, ranging in depth between 20 and 80 centimeters below the surface, indicating that even those sections of the parcel with intact soils may have limited archaeological potential due to poor drainage. The remaining test pits encountered fill deposits above either shallow bedrock or unweathered glacial sands and gravel.

Two archaeological sites, including 131-5 approximately 0.9 miles to the northeast, have been reported within one mile of Site #2's boundaries. Site 131-3 is a small Late Woodland site, identified along the edge of a gravel pit within the Roaring Brook drainage, approximately 0.6 mile southwest of Site #2. The site yielded several quartz Levanna

projectile points, an unidentified “flint” side-notched biface, and debitage (small flakes of stone produced during the making of stone tools). The site was originally located on a well-drained terrace overlooking the wetlands surrounding Roaring Brook.

Based on the results of the walkover survey and the limited subsurface survey, approximately 82% of Site #2 has low archaeological potential. Comprising all of the northern and central portions, soils within these areas are disturbed by extensive earthmoving and graveling operations; the areas with intact soils are generally poorly drained. No further testing is recommended in these low-potential areas.

Approximately 18% of Site #2 is considered to have low to moderate archaeological sensitivity, based on the same criteria as outlined for Site #1, above. These areas are in the southwest and northwest corners (Figure 2-5). Only two very small areas in the western portion of Site #2, less than 1% of the area of the site, are moderately sensitive. Testing at 15-meter intervals in the moderate-potential areas would need to be performed. In low-to-moderate areas, consultation with the CHC staff archaeologist is recommended to develop a less intensive subsurface testing strategy of 60-meter-spaced transects, as outlined for Site #1 above.

### *Site #3*

Based on the background research and walkover of this location, Site #3 does not appear to have any direct or indirect impacts on any historic resources.

One Office of State Archaeology listed site, Site 131-5 discussed above, is located approximately 0.75 miles south of Site #3. No other archaeological sites have been reported from within one mile of the site’s boundaries. The primary difference between Site #1 and Site #3 appears to be drainage characteristics, as evidenced by present vegetation patterns. Although the lack of surface water was likely a significant limitation on prehistoric use of the area, the potential concentration of tree nuts, most notably acorns (an important food resource to Native people in southern New England), may well have encouraged sporadic visits from people throughout the prehistoric period.

Twenty-one test pits were placed throughout Site #3 to refine the estimation of relative archaeological potential (Pits EJ1 through EJ21; Figure 2-6). Based on the findings of the test pits, approximately 14% of Site #3 has low archaeological potential and warrants no further testing. Virtually all of the central and eastern portions of Site #3, and a small area on the western project border, met the criteria for designation as low to moderately sensitive for archaeological resources (i.e., well drained, relatively level, undisturbed and less than 50 meters from a wetland); these areas comprise approximately 85% of the site. Two very small areas, totaling approximately 1% of the area of the site, have moderate archaeological potential; they are in the southeast and southwest corners and are within 50 meters of a wetland.

As with Sites #1 and #2, additional 15-meter-interval testing would need to be performed in the moderate-potential areas. In the low to moderate potential area, approximately 85% of the parcel, consultation with the CHC is recommended to develop a less intensive testing strategy of 15-meter-interval testing along transects placed 60 meters, rather than 15 meters,

apart.

## 2.2 Natural Resources

### 2.2.1 Geology, Topography, and Soils

The study area is located in the Connecticut Valley Lowland section of the New England physiographic province. The topography of the area is characterized by broad valleys and smooth north-trending hills. Figure 2-7 depicts the topography of the study area. The Eightmile River valley is bordered by the steep scarp of South Mountain to the west and the gentler slopes of Redstone Hill to the east. The Quinnipiac River is located east of the gentle hills and is bordered on the east by a highland area (LaSala). The valleys are composed mostly of stratified glacial deposits with some wetland areas, and the hills follow bedrock elevation contours with a surficial layer of glacial deposits. Wetland soils typically consist of poorly drained upland wetland soils on the hilltops and steeper slopes, and very poorly drained silt and mucky soils in the valley bottoms. The surficial geology and soils in the study area are shown in Figures 2-8 and 2-9, respectively.

#### *Site #1*

The majority of the site is located along the southern slope of a ridge known as Redstone Hill, and very small portions of the site in the northwest corner are located on an east-facing slope (USGS, 1966). The western portion of the site is relatively flat, whereas the eastern portion of the site slopes much more steeply to the east toward the Quinnipiac River. The elevation at this site ranges between 180 feet and 330 feet above sea level.

Surficial geology at Site #1 is mapped primarily as Quaternary ground moraine deposits. A small deposit of glacial ice-channel filling is located on the northern portion of the site (Simpson, 1989). Bedrock beneath Site #1 is mapped as the New Haven Arkose of Newark Supergroup, which consists of a poorly bedded red micaceous, feldspathic to arkosic conglomerate with rounded and subrounded stones. Depth to bedrock is estimated to be within 50 feet of the ground surface, based on field observations of possible outcrops and the Bristol Quadrangle Bedrock Contour Map (Handman, 1975).

Soils in the western half of the site consist of Watchaug fine sandy loam and Cheshire fine sandy loam, both of which are relatively flat (0-8%), non-wetland and non-hydric soils. A section of Cheshire soils in the center of the site is slightly steeper (8-15%). Wetland soils on the site consist entirely of Wilbraham and Menlo soils, which are extremely stony, poorly and very poorly drained, hydric, upland wetland soils. Wetland soils occur scattered throughout the site, and there is a large section of wetland soils in the center portion of the site. Additional wetland soils are present to the east of the site as alluvial and floodplain soils and mucky loamy sand.

Figure 2-7. Topography

Figure 2-8. Surficial Geology and Aquifer Protection Areas

Figure 2-9. Soils

### *Site #2*

Site #2 is located in the valley of the Eightmile River. The topography throughout a majority of the site is relatively flat and slopes gradually toward the southwest (USGS, 1966). An area of steeper slopes (>12%) exists on the southern portion of the site. The northwestern corner of the site slopes up to slightly higher ground. The elevation at the site ranges from 180 feet to 230 feet above sea level.

Surficial geology at Site #2 is mapped as sand and gravel kame-terrace deposits in the western portion of the site, red clayey and sandy ground-moraine deposits in the eastern portion, and swamp deposits in the large central wetland area (La Sala, 1961). Bedrock beneath Site #2 is mapped as New Haven Arkose, which consists of reddish, poorly sorted and poorly bedded micaceous, feldspathic to arkosic conglomeratic sandstone and siltstone (Fritts, 1963). Depth to bedrock is estimated to be 0 to 30 feet, based on the Bristol Bedrock Contour Map (Mazzaferro, 1975) and possible bedrock outcrops observed in the southern portion of the site during the site inspection.

Soils on the site include Merrimac sandy loam in the north and southwest of the site, Hartford sandy loam in the north, Cheshire fine sandy loam in the east, and Watchaug fine sandy loam also in the east, all of which consist of relatively flat (0-8%), non-wetland, non-hydric soils. Additional soils on the site include Wilbraham silt loam in the southeast portion of the site, Rippowam fine sandy loam in the southwest, Hinckley gravelly sandy loam in the north, and Raypol silt loam also in the north. The Hinckley gravelly sandy loam is a non-wetland, non-hydric soil with slopes of 3 to 15%. Wetland soils include Raypol silt loam, Wilbraham silt loam, Rippowam fine sandy loam along the Eightmile River, Adrian and Palms soils in the large wetland area in the central portion of the site, and Scarboro mucky loamy sand also in the large wetland area. Raypol silt loam and Wilbraham silt loam consist of poorly drained, hydric, upland wetland soils. Rippowam fine sandy loam consists of hydric alluvial and floodplain soils. Adrian and Palms soils consist of very poorly drained hydric muck. Scarboro mucky loamy sand consists of very poorly drained hydric upland wetland soils.

### *Site #3*

Site #3 is located near the top of Redstone Hill on the east, south, and west-facing slopes. The topography is relatively flat on the southern slope, slopes gently on the eastern slope, and slopes more steeply on the far western slope (USGS, 1966). The elevation at the site ranges between 310 feet and 360 feet above sea level.

Surficial geology at Site #3 is mapped primarily as Quaternary ground moraine deposits (Simpson, 1989). Bedrock beneath Site #1 is mapped as the New Haven Arkose of Newark Supergroup, which consists of a poorly bedded red micaceous, feldspathic to arkosic conglomerate with rounded and subrounded stones. Depth to bedrock is estimated to be within 50 feet of the ground surface, based on field observations of possible outcrops and the Bristol Quadrangle Bedrock Contour Map (Handman, 1975).

The Natural Resources Conservation Service Soil Survey of Hartford County does not depict wetland soils on the site. Soils along the margins of the site include Cheshire fine

sandy loam and Watchaug fine sandy loam, both of which consist of non-wetland, non-hydric soils. Nearby wetland soils, Wilbraham and Menlo soils, consist of extremely stony, poorly and very poorly drained, hydric upland wetland soils.

During site inspections, two wetland areas were identified in the northern extremity and on the West Street right of way.

### 2.2.2 Farmland Soils

The main objective of the Connecticut Department of Agriculture Farmland Preservation Program is to secure a food and fiber producing land resource base, consisting primarily of designated farmland soils, for the future of agriculture in Connecticut. This is accomplished by preserving active farms that are clustered with other farms to stabilize viable farming regions (Connecticut Dept. of Agriculture, 2003).

Farmland soils are classified by the U.S. Department of Agriculture, Natural Resources Conservation Service based on the physical and chemical characteristics of the soil for supporting cropland, pastureland, rangeland, forestland, or other land for agricultural purposes. Farmland soils are classified as either Prime Farmland or Additional Farmland of Statewide Importance.

Prime Farmland is characterized by soil that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also viable for these uses. In addition to soil quality, prime farmland also has the growing season and moisture supply needed to economically produce sustained yields of crops when treated and managed in accordance with modern farming practices (NRCS, 2003).

Additional Farmland of Statewide Importance is land that, in addition to prime farmland, is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to modern farming methods. Some may produce as high a yield as prime farmland if conditions are favorable (NRCS, 2003).

Farmland soils are scattered throughout the project area in the northern portion of Southington, but are primarily concentrated in the valleys ([Figure 2-10](#)). Farmland soils in the vicinity of the proposed project sites are described below.

#### *Site #1*

Farmland soils occur primarily in the western half of Site #1. These soils consist of Watchaug fine sandy loam and Cheshire fine sandy loam, both of which are relatively flat (0-8%), non-wetland, non-hydric, and Prime Farmland soils. Approximately 33 contiguous acres of Prime Farmland soils are located on Site #1. A section of Cheshire soils in the center of the site is slightly steeper (8-15%) and is classified as Additional Statewide Important Farmland. Several fields on the western portion of the site are mowed regularly. No other farming or agricultural activities are known to occur on the site.

Figure 2-10. Farmland Soils

*Site #2*

Prime Farmland soils (approximately 18 non-contiguous acres) on the site include Merrimac sandy loam in the north and southwest of the site, Hartford sandy loam in the north, Cheshire fine sandy loam in the east, and Watchaug fine sandy loam also in the east, all of which consist of relatively flat (0-8%), non-wetland, non-hydric soils. Additional Statewide Important Farmland soils on the site include Wilbraham silt loam in the southeast portion of the site, Rippowam fine sandy loam in the southwest, Hinckley gravelly sandy loam in the north, and Raypol silt loam also in the north. Several fields on the site are mowed regularly. No other farming or agricultural activities are known to occur on the site.

*Site #3*

Farmland soils are located along the southwest border of the site. These include Cheshire fine sandy loam and Watchaug fine sandy loam, both of which consist of non-wetland, non-hydric, Prime Farmland soils. The vast majority of the site contains non-farmland soils. No active farming occurs on the site.

2.2.3 Hydrology and Water Quality

The three potential project sites are located within the Quinnipiac River drainage basin (DEP Regional basin number 5200), which drains south to Long Island Sound. All of the sites are also located partially or entirely within the Eightmile River drainage basin (DEP Subregional basin number 5201). Figure 2-11 depicts the major surface water bodies in the vicinity of the project sites, as well as flood zones established by the Federal Emergency Management Agency (FEMA) in the vicinity of the proposed project sites. Figure 2-8 illustrates groundwater resources in the project area, including surficial materials (i.e., potential groundwater aquifers) and aquifer protection areas. The three project sites are located outside DEP-established aquifer protection areas.

*Site #1*

Surface water in wetland areas and streams on the majority of Site #1 are in the Quinnipiac River drainage basin and drain down the southeast-facing slope of Redstone Hill into the Quinnipiac River, which is approximately 500 feet east of the site. A small portion of the site is located on the west-facing slope of Redstone Hill, in the Eightmile River drainage basin (USGS, 1966). Surface water was observed in a pond and wet field in the southern portion of the site, and a large wetland area in the central portion of the site. A man-made canal is present at the bottom of the site's eastern slope and runs parallel to the Quinnipiac River. The canal was observed to be dry at the time of inspection. Based on USGS mapping and field observations of the local topography and surface water hydrology, the inferred groundwater flow direction is to the southeast toward the Quinnipiac River. Due to the presence of wetland areas on the site, it is probable that depth to groundwater is relatively shallow at the site. Site #1 is located outside the 100-year flood zone associated with the Quinnipiac River, according to the Flood Insurance Rate Map, Community Panel Number 0900370002E (FEMA, April 15, 2002).

Figure 2-11. Surface Water Resources and FEMA Flood Zones

The Quinnipiac River is classified by the State of Connecticut as C/B (DEP, 1998). Inland surface waters classified by the DEP as C/B are those that, due to point or nonpoint sources of pollution, currently do not meet certain Class B Water Quality Criteria or one or more designated uses. The water quality goal is achievement of Class B criteria and attainment of Class B designated uses. Class B waters are those known or presumed to meet Class B Water Quality Criteria that support the following designated uses: recreational use; fish and wildlife habitat; agricultural and industrial supply and other legitimate uses, including navigation (DEP, 2002).

The quality of groundwater beneath Site #1 is classified by the Connecticut Department of Environmental Protection as GA (DEP, 1998). Groundwater classified as GA is defined by DEP as groundwater within the area of existing private water-supply wells or an area with the potential to provide water to public or private water-supply wells. The DEP presumes that groundwater in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment. The designated uses for Class GA groundwater are as existing private and potential public or private supplies of water suitable for drinking without treatment and as baseflow for hydraulically-connected surface water bodies (DEP, 1996).

#### *Site #2*

Surface drainage patterns on Site #2 are to the southwest and the Eightmile River, which flows adjacent to the southwestern portion of the site. The Eightmile River is located in the Quinnipiac River drainage basin (USGS, 1968). A large palustrine, deciduous forested, seasonally saturated wetland area is located in the central portion of the project site (NWI, 1980). A man-made canal, which runs the length of the wetland and to the Eightmile River, drains surface water from the wetland area into the river. Based on USGS mapping, field observations of the local topography, and surface water hydrology, the inferred groundwater flow direction is to the southwest, toward the Eightmile River. Depth to groundwater is estimated to be shallow, based on the proximity of the river and the presence of wetlands at Site #2. Areas of the site directly adjacent to the river are within the 100-year flood zone associated with the Eightmile River, according to the Flood Insurance Rate Map, Community Panel Number 0900370007E (FEMA, April 15, 2002).

The Eightmile River is classified by the State of Connecticut as Class B (DEP, 1998). Inland surface waters classified by the DEP as B are those known or presumed to meet Class B Water Quality Criteria that support the following designated uses: recreational use; fish and wildlife habitat; agricultural and industrial supply and other legitimate uses, including navigation (DEP, 2002).

The quality of groundwater beneath Site #2 is classified by the Connecticut Department of Environmental Protection as GA (DEP, 1998). Groundwater classified as GA is defined by DEP as groundwater within the area of existing private water-supply wells or an area with the potential to provide water to public or private water-supply wells. The DEP presumes that groundwater in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment. The designated uses for Class GA groundwater are as existing private and potential public or private supplies of water suitable for drinking without treatment and as baseflow for hydraulically-connected surface water bodies (DEP, 1996).

*Site #3*

Site #3 is situated along a drainage divide between the drainage basins of the Eightmile and Quinnipiac Rivers. Surface water on the eastern portion of the site is directed east to the Quinnipiac River and surface water on the western portion of the site is directed west to the Eightmile River, which flows into the Quinnipiac River. Small wooded wetland areas were observed in the eastern portion of the site. Based on USGS mapping and field observations of the local topography, the inferred groundwater flow direction on the western portion of Site #3 is to the west, and to the east on the eastern portion of the site. Site #3 is located outside the 100-year flood zone associated with the Quinnipiac River, according to the Flood Insurance Rate Map, Community Panel Number 0900370002E (April 15, 2002).

The nearest surface water body, the Eightmile River, is located approximately 1600 feet west of Site #3. The Quinnipiac River is located approximately 1800 feet west of the site (USGS, 1966). The Quinnipiac and Eightmile Rivers are classified by the State of Connecticut as Class C/B. Inland surface waters classified by the DEP as C/B are those that, due to point or nonpoint sources or pollution, currently do not meet certain Class B Water Quality Criteria or one or more designated uses. The water quality goal is achievement of Class B criteria and attainment of Class B designated uses. Class B waters are those known or presumed to meet Class B Water Quality Criteria that support the following designated uses: recreational use; fish and wildlife habitat; agricultural and industrial supply and other legitimate uses, including navigation (DEP, 2002).

Primarily, the quality of groundwater beneath Site #3 is classified by the Connecticut Department of Environmental Protection as GA (DEP, 1998). However, on the section of the property that extends to West Street, the quality of groundwater is classified by the Connecticut Department of Environmental Protection as "GA, GAA may not meet current standards" (DEP, 1998). Although DEP's goal is to restore all groundwater in GA and GAA areas to natural (background) quality, the groundwater in this area may not meet the current GA or GAA standards.

Groundwater classified as GA is defined by DEP as groundwater within the area of existing private water-supply wells or an area with the potential to provide water to public or private water-supply wells. The DEP presumes that groundwater in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment. The designated uses for Class GA groundwater are as existing private and potential public or private supplies of water suitable for drinking without treatment and as baseflow for hydraulically-connected surface water bodies (DEP, 1996).

Groundwater classified as GAA is groundwater used or which may be used for public supplies of water suitable for drinking without treatment, groundwater in the area that contributes to a public drinking-water supply well, and groundwater in areas that have been designated as a future water supply in an individual water-utility supply plan or in the Area-wide Supplement prepared by a Water Utility Coordinating Committee pursuant to Title 25 of the Connecticut General Statutes. The designated uses for Class GAA groundwater are as an existing or potential public supply of water suitable for drinking without treatment and as baseflow for hydraulically-connected surface water bodies (DEP, 1996).

2.2.3 Ecological Resources

A number of field investigations were conducted during August and September of 2003. The objectives of the investigations were: (1) to identify and delineate plant communities and their dominant species, (2) to locate and document occurrences of any floral or faunal species listed or protected by the Connecticut Department of Environmental Protection and/or the U.S. Fish & Wildlife Service (USFWS), (3) to document the functions and values of wetlands noted at the three sites, and (4) to field verify approximate wetland boundaries as shown on Town of Southington inland wetlands mapping. A copy of the ecological investigation report is provided in Appendix G. Table 2-7 provides a summary of ecological resources on each site in terms of area of wetland resources and presence of listed species. In addition to the areas of wetlands and watercourses, regulated areas in Southington include setbacks of 40 to 80 feet from the resource area boundaries.

**Table 2-7. Summary of Ecological Resources**

| Site    | Acres of Wetland (Percent of Total Site Area) | Natural Diversity Database Listing?    | State or Federal Listed Species Observed On-site? | Potential for State or Federal Listed Species? |
|---------|---|--|---|--|
| Site #1 | 15.4 (14%)                                    | No                                     | No  | Yes<br>eastern box turtle                      |
| Site #2 | 22.0 (27%)                                    | Yes<br>wood turtle<br>tufted hairgrass | No  | Yes  |
| Site #3 | 2.6 (4%)                                      | No                                     | No  | No   |

Percent of total site area based on site acreage as reported in the Town of Southington GIS parcel database.

2.2.3.1 Wetland Habitat

*Site #1*

There are several wetland areas on the site, primarily situated within the central section of the property and along the eastern boundary (Figure 2-12). Approximately 1,200 feet east of West Street at the southern portion of the property there is a wetland that is both a wet meadow and a forested wetland. Also included within this wetland is a small excavated pond. Two other wet meadows occur within the central section of the site. A small wetland occurs adjacent to the east side of the power line right-of-way. Beginning at the section of property that fronts on West Queen Street (northwest corner), there are hillside wetlands that slope toward the south and east. It appears that these wetlands have reverted from former agricultural use and were once open fields. Although now palustrine forested habitats, the trees are small and the dominant species within portions of the wetland is oriental bittersweet, an invasive vine. At the eastern boundary of the property, there is a watercourse and associated wetlands that separate this parcel from the neighboring trailer park. The wetland habitats on this property vary in their functional attributes. On balance, the wetlands on Site #1 are moderate to low with respect to wetland functions and values.

*Site #2*

Site #2 contains several wetland areas (Figure 2-12). On the northeastern quadrant of the property, there is a broad band of wetlands that is crossed in two places by culverts under farm roads. Another wetland occurs along the western property boundary. The easterly wetlands flow into the wetland on the western boundary via a watercourse that passes under one of the farm roads. The western wetland is associated with the Eightmile River, and portions of the river channel cross onto the property in places. At its southern end, a part of the wetland extends into the open field.

A small wetland, not mapped on the town wetland resource maps, occurs in the northwest quadrant of the property at the toe of the east-facing slope. Another wetland is situated at the southeast section of the parcel.

On balance, the wetlands on Site #2 are highly functional wetlands. They are characterized by a high diversity of species and capable of performing important functions and values such as pollutant attenuation, floodwater storage, wildlife habitat, aesthetic attributes, and educational/scientific values. The wetlands associated with the Eightmile River are part of a riparian corridor and thus have particular importance as wildlife habitat.

*Site #3*

Although no wetlands are indicated on the Town of Southington maps, there are two areas of wetlands that were noted during the field inspections. The observed wetlands are confined to the northern extremity of the property and the western end of the parcel within the right-of-way off of West Street (Figure 2-12).

The wetland area at the northern end of the property is a wet meadow/palustrine forested wetland, seasonally saturated. The wet meadow appears to contain a diverse mix of species and therefore may have aesthetic value. Taken together with the forested portion of this wetland, it offers limited habitat for small mammals and birds. It is also capable of nutrient removal and sediment trapping. The wetland has low to moderate ecological integrity and floodwater storage capacity.

The wetland on the right-of-way is wooded with small trees present. This wetland may have been cut off from a larger wetland to its north by the construction of Westwood Drive, a relatively new subdivision road. At present, it is a small area occupying the western end of the right-of-way into Site #3. The wetland is a groundwater discharge wetland and also functions as wildlife habitat. Although small in size, it offers limited food and cover opportunities for small mammals and bird species. The wetland is also capable of sediment trapping and pollutant attenuation although it is small in size and does not at present receive sediment loads. The wetland has low functional values for floodwater storage and ecological integrity due to its small size and disturbed condition.

Figure 2-12. Wetlands and Ecological Resources

### 2.2.3.2 Upland Habitat

#### *Site #1*

Upland habitats on the property include open fields, hedgerows, and forest. There is a relatively undisturbed woodland habitat at the north-central section of Site #1.

#### *Site #2*

Historically, the site has been in agricultural use and much of it remains as open field. There are small patches of upland forest on the property.

#### *Site #3*

With the exception of the cleared areas adjacent to the power lines, Site #3 is entirely forested.

### 2.2.3.3 Wildlife and Listed Species

#### *Site #1*

A number of wildlife species can be expected to utilize the site. As stated previously, the wetlands provide wildlife habitat, but some of this habitat, particularly on the eastern slopes, is compromised by the presence of invasive species and some of the wetlands are too small to provide significant wildlife habitat. Information from the DEP Natural Diversity Data Base has indicated that there are no State or Federal listed species on or adjacent to this parcel. During the site investigation, no listed species were observed. There is the possibility that the eastern box turtle (*Terrapene c. carolina*) (State Species of Special Concern) is present at the site due to the fact that the preferred habitat is "old field" and deciduous forest ecotones, including power line cuts. Although a terrestrial species, box turtles utilize wetlands, including wet meadows. They are seldom found far from water, and therefore could be present on the site. In 1994, the box turtle was listed by the Convention on International Trade in Endangered Species (CITES); therefore it is now covered by the U.S. Fish and Wildlife Service's regulations regarding import or export of wildlife. Conservation of this turtle is a concern of wildlife biologists throughout its range.

#### *Site #2*

The various on-site habitats provide food and cover opportunities for a variety of animal species. Amphibians and reptiles, although not observed directly, are likely to occur at the site. Portions of the eastern palustrine forested wetlands contain pockets of standing water indicative of potential vernal pool habitat within the wetlands. The wetlands on this property are extensive and provide broad corridors for wildlife species. Many of the plants found within the wetlands provide food and cover opportunities.

Information from the DEP Natural Diversity Data Base has indicated that there are historic records of the wood turtle (*Clemmys insculpta*), a State Species of Special Concern, in the downstream riparian habitat. Although the wood turtle was not seen during the various field

investigations, the habitat for wood turtles is present at the site, thus there is the possibility that the turtle is present at the site.

According to the DEP records, a plant species, tufted hairgrass (*Deschampsia caespitosa*), has been identified in the area. During the recent field investigations, no listed species were found. Furthermore, the potential of listed plant species occurring on the site is extremely low as all of this property has been previously disturbed by agricultural activities. Nevertheless, the possibility of an occurrence of a listed plant species within the Site #2 cannot be categorically ruled out.

### *Site #3*

The upland habitats on this site are likely to be attractive to a number of faunal species. No listed floral or faunal species were noted at the site, and none are expected to be present. The forested habitat, while a relatively undisturbed and attractive woodland, is not unique in terms of its floral composition.

## 2.3 Socioeconomic Resources

### 2.3.1 Land Use and Zoning

#### 2.3.1.1 Land Use

Land use in the vicinity of the proposed project sites is shown in Figure 2-13. As shown in the figure, the land use of the three sites is predominantly undeveloped open space, consisting of a mixture of forest, fields, and wetlands. Portions of the western half of Site #1 are characterized by agricultural land use, consisting of open fields that are mowed regularly. As described previously, a Northeast Utilities easement traverses the western portions of Site #1 and Site #3.

The land use surrounding the three sites is mixed. Site #1 is bordered to the east and west by residential and commercial properties along West Queen Street and West Street. Several industrial facilities are located north of the eastern portion of the site, along the northern side of West Queen Street. The area to the southeast of Site #1 is primarily forested open space.

Site #2 is bordered to the north and south primarily by forested land, while a large office park complex that houses The Hartford insurance company is situated adjacent to the eastern portion of the site. Residential land is adjacent to the northwest corner of the site, as well as on the opposite side of the Eightmile River, which borders the site to the west.

Land use surrounding the northernmost site, Site #3, consists of a mixture of open space (forest and open fields) and developed (residential, commercial, and industrial) land. An existing industrial park is located adjacent to the southeastern portion of Site #3 along Captain Lewis Drive and Robert Porter Road. A residential subdivision is adjacent to the northern portion of the site. Commercial, industrial, and residential properties are located along West Street near the western end of Site #3.

### 2.3.1.2 Zoning

As shown in Figure 2-14, each of the project sites is within the Industrial 1 (I-1) Zone, with the exception of the westernmost portion of Site #3, which is located in a Business Limited (BL) Zone. Permitted uses within the I-1 Zone include:

- The manufacture, processing or assembly of goods, which do not produce objectionable noise, glare, air pollution fire or safety hazards
- Farm or construction equipment sales and services
- Greenhouses and nurseries
- Research laboratories
- Warehouses for finished goods
- Health clubs and gymnasiums
- Scientific research and manufacture of bio-medical products
- Communication industry
- Manufacture and/or assembly of electronic, computer or robotic goods
- Accessory uses such as:
  - garages for commercial and other vehicles in connection with the principal use
  - off-street parking, restaurants, cafeterias and health facilities in connection with the principal use
  - outside storage
  - living quarters for caretakers within the principal structure
  - satellite receiving antennas
- Any other uses which are of the same general character as those listed above and will not be detrimental to the zone (in the opinion of the Southington Planning and Zoning Commission).

The Planning and Zoning Commission may, by special permit, allow the following uses within the I-1 Zone:

- Government uses
- Public utility lines, stations and buildings
- Conference center
- Professional offices
- Executive parks
- Dinner Theatres and movie houses
- Mixed uses within existing industrial buildings in existence prior to 1957.

Permitted uses within the BL Zone include those uses permitted in the Central Business (CB) Zone, except for retail buildings with a gross floor area in excess of 20,000 square feet, department stores, movie houses, theaters, sexually oriented businesses, and eating and drinking establishments providing drive-through window or counter take-out service. Industrial facilities are typically not allowed in the CB Zone, except for mixed uses within existing industrial buildings in existence prior to 1957. Any building or use allowed by Special Permit in the Residential Office (RO) Zone may also be allowed by Special Permit within the BL Zone.

A small portion of the westernmost section of Site #1 is within the Business Overlay Zone (BOZ), which is an overlay zoning district enacted to authorize the establishment of alternative uses in addition to those allowed in the underlying zone. The BOZ allows for alternative uses consistent with those allowed in the BL Zone, including uses allowed by Special Permit in the BL Zone.

Sites #1 and #3 are primarily surrounded by parcels within the I-1 Zone, as well as parcels zoned for single-family dwellings (Residential Zone R-40). Site #1 is bordered to the north and southeast by industrially-zoned (I-1 Zone) land. The southernmost portion of Site #1 is bordered by single-family residential land within the Residential Zone R-40. Site #3 is bordered to the south and east by the existing industrial park and other industrially-zoned (I-1 Zone) land. The properties north of Site #3 consist of single-family residences within the Residential Zone R-40.

Site #2 is bordered to the south and east by other industrially-zoned (I-1 Zone) land. The site is bordered to the northeast by land within the Industrial (I-2) Zone and to the northwest by land within the Residential Zone R-40. The Eightmile River forms the site's western boundary, with additional residential-zoned land west of the Eightmile River.

The Southington zoning regulations appear to be sufficiently detailed yet flexible enough to allow for the potential growth anticipated in the region. The shift away from large "heavy" manufacturing to smaller, more R&D oriented activities requires that zoning be flexible enough to allow for a wide range of uses while effectively maintaining the ability to protect against non-compatible ones.

Southington also has one of the larger Enterprise Zones in Connecticut, which provides for a range of state and local incentives to be initiated in order to assist companies locate, grow and prosper. Enterprise zones have become an important incentive tool for attracting new companies to the area as well as for targeting specific aid to growing firms.

Figure 2-13. Land Use

Figure 2-14. Zoning

## 2.3.2 Long Range State and Local Planning

### 2.3.2.1 Statewide Planning

The draft *Conservation and Development Policies Plan for Connecticut 2004-2009* (OPM, 2004), referred to as the draft “C&D Plan,” is a planning and policy document intended to assist state agencies in capital and operational investment decision-making and administrative and programmatic actions. State Agencies are required by Public Act 91-395 to abide by the draft C&D Plan when they commence any actions or authorize any grant involving the acquisition, development, or improvement of property if the costs exceed \$100,000. The draft C&D Plan outlines six broad-based growth management principles designed to encourage “smart growth,” sustainable development that balances human needs with conservation of environmental and socioeconomic resources. Those principles are:

- Redevelop and revitalize regional centers and areas with existing or currently planned physical resources
- Expand housing opportunities and design choices to accommodate a variety of household types and needs
- Concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options
- Conserve and restore the natural environment, cultural and historic resources, and traditional rural lands
- Protect and ensure the integrity of environmental assets critical to public health and safety
- Promote integrated planning across all levels of government to address issues on a Statewide, Regional and Local basis.

The growth management principles reflect a desire to avoid land use trends that encourage sprawl and the subsequent disproportionate consumption of land and resources that results. These principles encourage the revitalization of areas with existing infrastructure and capacity to support growth and the development of currently undeveloped areas that is consistent with long-term sustainability of the state’s resources.

In addition to the growth management principles, the draft C&D Plan provides a Location Guide that identifies eight land categories. Each category has its own development and conservation strategies and priorities based on the area’s character of development, social structure, economic base, natural conditions, and public service facilities (OPM, 2004). The three alternative locations considered for development of an industrial park in Southington area all located in a Growth Area, which is one of the three Urban Areas in the Location Guide. A Growth Area is defined as an area near other Urban Areas that provides “the opportunity for staged urban expansion” on land with “vacant, developable lands, existing or planned water or sewer services, and the potential for future mixed use and intensive development of area wide significance”. These areas are appropriate for development of public transportation systems, energy conservation, and air quality programs (OPM, 2004). Growth Areas have the third highest development priority of the land categories, with Regional Centers and Neighborhood Conservation Areas having the highest development priority.

The state action strategy for Growth Areas is to provide “support toward concentration of new urban growth which occurs outside of Regional Centers into specified areas capable of supporting large-scale, mixed uses and densities in close relationship to the Regional Centers” (OPM, 2004).

The draft C&D Plan also recognizes Areas of Environmental Concern, which include Existing Preserved Open Space, Preservation Areas, and Conservation Areas (OPM, 2004). Preservation Areas encompass a wide variety of natural and cultural resources including Class I water supply watershed land, inland wetlands, water bodies, locations of State listed species and their habitats, designated natural or archaeological areas of regional or statewide significance. Areas defined as Conservation Areas are those that contribute to Connecticut’s need for food, fiber, water and other resources, open space, recreation, and environmental quality.

The inland wetland soils on all three sites are designated as Preservation Areas, as are the water bodies on Site #1 and Site #2. The established action strategy for Preservation Areas is to affirmatively preserve and manage them for their resource value and to not promote or cause development within the areas. Pursuit of development that is incompatible with Preservation Area resource values should demonstrate an overriding public benefit and a lack of available alternative sites. Development within or adjacent to Protection Areas should also use appropriate design elements and development restrictions to protect and manage the identified resource area (OPM, 2004).

The floodplain area on Site #2 is designated as a Conservation Area, as is the over 25 contiguous acres of prime farmland soils on Site #1. Guidelines for Conservation Areas direct state agencies to support uses that are compatible with the resource, or in the case of floodplains, hazard of concern. As with Preservation Areas, development that is incompatible with resource conservation should demonstrate lack of alternative sites, overriding social or economic concerns, and lack of reasonable alternative public or private uses. Should development occur, appropriate mitigation measures should be included.

### 2.3.2.2 Regional Planning

Southington is part of the Central Connecticut Regional Planning Agency (CCRPA) area which also includes the municipalities of Berlin, Bristol, Burlington, New Britain, Plainville and Plymouth. The *Central Connecticut Regional Development Plan* outlines policies and an action plan for future growth and includes a future land use map through the year 2010 (CCRPA, 1993). The map was generated by combining information available in the early 1990’s on existing land use, zoning maps, environmental constraints, policies of the Regional Development Plan and other state, local, and regional plans including the draft C&D Plan and the Southington Plan of Development, which is discussed below. The general goal of the plan is improvement of the quality of life in the regional planning area. In addition, goals and actions are identified for social and housing policy, economic policy, environmental policy, land use policy and transportation policy.

The future land use map identifies Site #1 as an area of agricultural and open space/undeveloped, with the agricultural use identified as the western portion of the site and

the open space/undeveloped as the eastern portion of the site. Site #2 is identified on the map as a combination of industrial land use on the southern portion and office/technology park on the northern portions adjacent to the existing office park. Site #3 is identified as open space/undeveloped.

Open space/undeveloped areas in the future land use plan are those areas that may be suitable for development only where environmental constraints and concerns do not suggest otherwise. Generally, it is recommended that these areas remain undeveloped. Agricultural lands are areas in agricultural use at the time of the plan development and preservation of these areas is recommended. Industrial areas in the plan are those that have significant capacity for growth. According to the *Central Connecticut Regional Development Plan*, most industrially zoned areas are identified in the future land use map as industrial. However, both Site #1 and Site #3, which are currently entirely or mostly zoned industrial, are not identified as such in the future land use map.

The *Central Connecticut Regional Economic Development Action Agenda* (CCREDAA, 1997) was developed by the Central Connecticut Economic Development Alliance (CCEDA) to identify specific strategic directions and subsequent initiatives for their implementation. The strategic directions consist of:

- Supporting and expanding training and transportation opportunities to assist persons seeking work and expand the skills of the existing labor force.
- Chambers of Commerce assisting manufacturing entrepreneurs
- Implementing the 1997 CCEDA marketing plan, which gives high priority to retaining and expanding existing industries in the central Connecticut area
- Creating more vibrant and culturally rich core urban areas in New Britain and Bristol.

The *Central Connecticut Regional Economic Development Action Agenda* also identifies development priority proposals for each municipality in the Central Connecticut Regional Planning Area. In 1997, the four development priorities identified consisted of:

1. Expanding programs for reuse of major vacant manufacturing facilities
2. Implementing a flexible manufacturing center at a vacant industrial site
3. Expanding the capacity of the Central Connecticut business outreach center
4. Creating an import/export center.

The Agenda also identified vacant industrial/commercial sites and buildings in each of the Central Connecticut Regional Planning Area towns. A total of 16 parcels were identified in Southington. The northeastern portion of Site #1 (adjacent to West Queen Street), the entire Site #2, and the eastern portion of Site #3 were all identified as available industrial sites.

A large percentage of the vacant industrial building space in Southington is attributable to the 1996 closure of the Pratt & Whitney plants located in the northern edge of the community off of Queen Street. These facilities, which contained a reported total of approximately 1.3 million square feet, subsequently were sold and have been partially re-occupied by several smaller businesses. Approximately 9 percent of the plant's floor space is presently occupied.

### 2.3.2.3 Local Planning

Together with local zoning ordinances, which are discussed in Section 2.3.1, the *Town of Southington Plan of Development* (Southington, 1991) is the primary planning document guiding development within the town. The Plan of Development, which has not been updated since 1991, provides information on population, existing land use, natural and cultural resources, housing, community services and facilities, transportation and circulation, and the local economy. It identifies goals, policies, and recommendations in many of these areas and describes a future land use plan.

The Plan of Development generally supports the pattern of land use established by the existing Southington zoning, which is reflected in the Plan of Development's future land use plan map. Recommendations for future land use in the Plan of Development that are relevant to the development of the proposed project include the following:

- Development of West Street north of Interstate 84 as a moderate density residential and professional office corridor
- Development of an office overlay district at selected interchanges of I-84, including the I-84/West Street interchange just south of Site #2
- Expansion of opportunities for industrial development
- Establishment of a West Street Traffic Management District as a zoning overlay district.

To date, neither of the suggested overlay districts has been incorporated into the Town of Southington zoning ordinance.

The Plan of Development also lists siting considerations for commercial and industrial facilities. In addition to general considerations such as opportunities for employment, diversification of the tax base, visual impacts and expanded consumer opportunities, the Plan of Development contains the following specific considerations for the siting of industrial development (Table 2-8).

An optimal buildout for the town, one that balances the costs and benefits of development, was recommended in the Plan of Development. The buildout analysis found that of the 1,812 acres of industrially-zoned land identified in the future land use plan, approximately 68% or 1,238 acres was undeveloped. Of that undeveloped land, approximately 664 acres (321 acres zoned I-1 and 343 acres zoned I-2) was developable due to environmental constraints such as wetlands, steep slopes, soil characteristics, and flood zones. The optimal buildout estimated that of the 321 acres of I-1 zoned land available for development in 1991, 29 acres would be developed by 2001, a total of 40 acres by 2014, and a total of 50 acres by 2011.

**Table 2-8. Industrial Siting Considerations from the Southington Plan of Development**

| <b>Favorable Conditions</b>   | <b>Unfavorable Conditions</b>   |
|---|---|
| Favorable topography – no steep slopes  | Slopes greater than 10-15 percent   |
| Good soil conditions relative to ability to support building and road construction, suitable percolation, low potential for erosion | Poor soil conditions – high water tables, erosion-prone, unsuitable for construction purposes, etc.       |
| No or limited wetland areas   | Presence of wetlands  |
| Depth to water table of 10’+  | Depth to water table less than 10’  |
| Depth to bedrock of 10’+  | Depth to bedrock less than 10’, outcroppings  |
| Absence of floodplain   | Presence of floodplain  |
| Absence of surface water, e.g. streams, ponds   | Presence of surface water bodies  |
| Removed from groundwater reservoir and recharge areas   | Location within groundwater reservoir or recharge areas   |
| Good access to major roads, proximity to highway interchange, strong system-wide connections  | Location away from major roadways travel on local roads, multiple curb cuts, poor system-wide connections |
| Availability of parking   | Limited area for parking  |
| Available, adequate public sewer lines/treatment capacity   | Lack of sewer tie-in  |
| Available, adequate water lines   | Lack of water service   |
| Compatibility with surrounding land uses  | Surrounding area includes residential or other low intensity land uses                                    |

Economic goals for the plan implementation included promoting office and light industrial development in existing zones, west of I-84 and east of West Street, which includes the areas where Site #1 and Site #3 are located. Encouraging existing executive office park expansion in the areas that includes Site #2 between West Street, Churchill Street and Florian Pond as well as the establishment of a professional office zone along West Street, north of I-84 were also cited as economic goals for the Plan of Development.

The Town of Southington is beginning the process of updating this plan and creating a Plan of Conservation and Development. As of January 2004, Southington is seeking a consultant to assist in the creation of the updated Plan of Conservation and Development.

2.3.3 Community Facilities and Services

Information regarding Southington education, health care, public safety, and parks and recreation facilities and services was obtained from the 2003 Southington Community Guide Membership and Business Directory, the 2001 Plainville and Southington Mail-a-Map<sup>®</sup> Street Map, the Southington Town website ([www.southington.org](http://www.southington.org)), and the Southington Public Schools website ([www.southingtonschools.org](http://www.southingtonschools.org)). This information serves as the basis for evaluation of potential impacts.

### 2.3.3.1 Education

Southington currently has one of Connecticut's largest public school systems, with approximately 6,750 students in grades Pre-K through 12. Students attend one of nine public elementary schools, two public middle schools, and one public high school, as listed below:

#### *Elementary Schools:*

- Walter Derynoski Elementary School, Main Street, Southington
- Flanders Elementary School, Victoria Drive, Southington
- Hatton Elementary School, Spring Lake Road, Southington
- Urbin T. Kelley Elementary School, Ridgewood Road, Southington
- North Center School, North Main Street, Southington
- Plantsville Elementary School, Church Street, Plantsville
- South End Elementary School, Maxwell Noble Drive, Plantsville
- William Strong Elementary School, Marion Avenue, Plantsville
- Reuben E. Thalberg School, Dunham Road, Southington

#### *Middle Schools:*

- John F. Kennedy Middle School, South Main Street, Plantsville
- Joseph A. DePaolo Middle School, Pleasant Street, Southington

#### *High School:*

- Southington High School, Pleasant Street, Southington

Southington also provides an alternative education program for at-risk students in grades 8-12 at a separate facility. The program is a school of choice and is guided by ideals of pride, discipline, trust, respect, and family. Adult continuing education classes are also available through the public school system. Basic education classes are offered in ABE and GED programs, literacy, English as a Second Language, and Americanization.

### 2.3.3.2 Health Care

The Southington Health Department inspects restaurants, daycare centers, convalescent homes, schools, water supply systems, septic systems, residential additions, barbershops, and hair salons. The Health Department also investigates disease outbreaks, organizes a flu clinic for senior citizens every fall, and coordinates the annual Household Hazardous Waste Collection Day.

The Bradley Memorial Hospital and Health Center is a full-service health care facility located on Meriden Avenue in Southington. The hospital provides inpatient and outpatient services in cardiology, dermatology, gynecology, internal medicine, neurology, psychiatry, radiology, and urology. In addition, hospital services include ambulatory surgery, full service laboratory, mammography, occupational and health promotion programs, nutritional educational services, physical therapy, and a cardiac rehabilitation program.

The Southington Care Center is a 130-bed long term health care facility, which specializes in skilled nursing care and rehabilitation services. The facility is located on Meriden

Avenue and is affiliated with the Bradley Memorial Hospital and The Orchards at Southington, an assisted living facility.

The Summit at Plantsville is a 150-bed facility, which provides services including long-term and short-term nursing care, rehabilitation and therapeutic care, respite care, and hospice care ([www.athenahealthcare.com](http://www.athenahealthcare.com)). The Visiting Nurse Association of Central Connecticut (VNACC) is based out of New Britain, CT and serves the Southington community. The VNACC provides intermittent skilled nursing and rehab home healthcare services including cardiac, diabetic, mental health, maternal/child health, personal care, public health/wellness, and hospice care.

#### 2.3.3.3 Public Safety and Emergency Services

The Southington Police Department consists of a chief, 2 captains, 4 lieutenants, 9 sergeants, 36 patrolmen, 8 civilians, and a 7 member detective division. The Police Department provides a variety of services including investigations into criminal matters and motor vehicle accidents, responses to medical emergencies, and normal proactive police patrol in the community. The Department also conducts Drug Abuse Resistance Education classes at local schools, and a series of seminars and workshops including crime prevention, block watch, and violence in the workplace.

The Southington Fire Department is comprised of 30 paid career firefighters and 65 volunteer firefighters providing fire and rescue services to all of Southington including Plantsville, Marion, and Milldale. Emergency medical services are provided by American Medical Response (AMR) Ambulance under town contract.

#### 2.3.3.4 Parks and Recreation

The Southington Parks and Recreation Department offers a variety of programs for all ages in sports and the arts. Programs include a wide variety of men's, women's and youth athletics, swimming lessons, camps, open gym and fitness. Non-athletic programming includes youth theater, line dancing, ballroom dancing, arts & crafts, and planned day and overnight trips.

The Southington Parks and Recreation Department land holdings include:

- The Southington Town Green is located on Main Street and hosts the "Music on the Green" series.
- Recreation Park is located on Maxwell Noble Drive and supports the Southern Little League ball fields, tennis courts, an ice rink, swimming pool, comfort stations, bocce, picnic groves, basketball court, concession stand, warming shed, playground, duck pond, batting cage, and passive recreation.
- Memorial Park is located on Woodruff Street and supports the Northern Little League ball fields, swimming pool / bath house, fishing pond, tennis courts, warming shed, playground, basketball court, and batting cage.
- Panthorn Park is located on Burritt Street, and hosts a picnic area, fishing pond, tennis courts, softball fields, lacrosse fields, basketball court, playground, comfort

stations, cross country ski trail, toboggan/sled run, jogging trail, and passive recreation.

- Crescent Lake is located off of Ledge Road and provides a setting for activities such as boating, fishing, hiking, and picnicking.
- The Western Little League ball fields are located on Spring Street.
- Central and Centennial Parks are located on Main Street and both support playgrounds and passive recreation.
- Jaycee Park is located on Pine Street and supports a tennis court and passive recreation.

Other parks and recreation areas in Southington include:

- Lake Compounce Theme Park is located on Lake Avenue on the Bristol-Southington town line. The park offers family entertainment, amusement rides, a picnic area, sandy beach, and water park.
- The Quinnipiac River Canoe Trail is a self-guided river tour. A guidebook is available with details on wildlife and natural sites marked along the route.
- Mount Southington ski resort is located on Mount Vernon Road and offers trails for alpine skiers of all levels.
- There are several hiking and rock climbing trails such as the Great Unconformity trail, which runs along Roaring Brook and exhibits rare geological formations, the Tunxis Trail, which offers many loops and scenic viewpoints, and Ragged Mountain, which features sandstone cliffs for trap rock climbing.

### 2.3.4 Population, Demographics and Environmental Justice

#### 2.3.4.1 Population

According to data from the 2000 U.S. Census, the Southington population is approximately 39,700. The population is 48.5% male and 51.5% female, with 45% of the population between the ages of 25 and 55. Nearly 30% of Southington's population is below age 25, with 25% age 55 or older. Table 2-9 summarizes information on population trends and projections. According to the U.S. Census Bureau, between 1990 and 2000 the town population increased by 1,210 residents, representing an increase of about 3%. Comparatively over the same time period, Hartford County's population remained relatively stagnant with an increase of only 5,400 residents, or less than 1%. The state's population growth rate was comparable to Southington's at 3.6% throughout the 1990s, representing an increase of almost 118,500 residents

Population projections from 2000 to 2007 provided by the Connecticut Economic Research Council indicate that both the population of both the town and county should remain relatively stagnant – with an increase of 84 residents (0.2%) and a decline of about 4,700 residents (-0.5%) respectively.

**Table 2-9. Population Trends and Projections (1990-2007)**

|   | <b>Southington</b> | <b>Hartford<br/>County</b> | <b>State of<br/>Connecticut</b> |
|---|--------------------|----------------------------|---------------------------------|
| 1990  | 38,518             | 851,783                    | 3,287,116                       |
| 2000  | 39,728             | 857,183                    | 3,405,565                       |
| 2002  | 39,731             | 854,994                    | 3,416,172                       |
| 2007  | 39,812             | 852,491                    | 3,454,708                       |
| # Change 1990-2000                            | 1,210              | 5,400                      | 118,449                         |
| % Change 1990-2000                            | 3.1%               | 0.6%                       | 3.6%                            |
| # Change 2000-2007                            | 84                 | -4,692                     | 49,143                          |
| % Change 2000-2007                            | 0.2%               | -0.5%                      | 1.4%                            |
| Source: Connecticut Economic Research Council |                    |                            |                                 |

Southington is divided into several census tracts as shown in [Figure 2-15](#). All three alternative sites considered for the proposed industrial park development are located in census tract 4306.01. Approximately 4,454 persons or 11.2% of the town population is located in tract 4306.01.

2.3.4.2 Demographics and Environmental Justice

Discussion of demographics is provided in this section of the environmental assessment in order to assess potential issues related to environmental justice. In accordance with Connecticut Department of Environmental Protection Environmental Equity Policy, proposed state actions should not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Racial demographics in Southington as reported in Census 2000 shows that nearly 96% of the population is white, 1.0% Asian, 0.9% black or African American, 0.1% American Indian/Alaska Native and 0.6% reporting some other race. 2.0% of the population also reported being Hispanic or Latino, regardless of race.

Although all sites area located in a single census tract (4306.01), they are within different census blocks and racial demographics vary slightly among the blocks. Census 2000 data shows an entirely white population in block 3024, which contains Site #1. Site #2 is located in a block (9015) that is 90.8% white and 97.8% of the population in block 3004, where Site #3 is located, is reported as white according to Census 2000.

The Census 2000 information on poverty status showed that 3.3% of individuals in Southington were below the poverty level in 1999. Within the census tract containing all three alternative sites for the proposed industrial park, 5.1% of the individuals were living below the poverty level in 1999. This represents 18% of the total number of persons living below the poverty level in Southington in 1999.

Figure 2-15. 2000 U.S. Census Data

The New England regional office of the U.S. Environmental Protection Agency (EPA) has developed mapping of areas with large low-income and/or minority populations. Specifically designed to address environmental justice issues, the maps define a “large population” as one for which a given census block group ranks in the top 15% of the region for percentage minority and/or low-income, where low-income is defined as twice the federal poverty level. No large low-income and/or minority populations are identified in Southington in the U.S. EPA mapping (USEPA New England GIS Center, 2003).

2.3.5 Economy, Employment, and Income

The total number of employed Southington residents in 2002 is estimated by the Connecticut Department of Labor at 20,628 (the latest annual employment data available). As shown in Table 2-10 and based on selected communities, Southington is the eleventh largest source of employees in central Connecticut, based on 2002 total employment estimates, with approximately 3.8% of the total employment base.

**Table 2-10. Total Employment: 2002**

| Community                               | Employment    | % of Total  | Community   | Employment | % of Total |
|---|---------------|-------------|-------------|------------|------------|
| New Haven                               | 55,897        | 10.4%       | Cheshire    | 13,702     | 2.5%       |
| Hartford                                | 49,746        | 9.2%        | North Haven | 12,410     | 2.3%       |
| Waterbury                               | 48,917        | 9.1%        | Farmington  | 11,031     | 2.0%       |
| New Britain                             | 32,393        | 6.0%        | Rocky Hill  | 9,496      | 1.8%       |
| Bristol                                 | 30,753        | 5.7%        | Plainville  | 9,021      | 1.7%       |
| Meriden                                 | 29,503        | 5.5%        | Berlin      | 8,845      | 1.6%       |
| Hamden                                  | 29,091        | 5.4%        | N. Branford | 8,176      | 1.5%       |
| E. Hartford                             | 24,436        | 4.5%        | Seymour     | 7,565      | 1.4%       |
| Middletown                              | 23,440        | 4.3%        | Cromwell    | 6,730      | 1.2%       |
| Wallingford                             | 22,794        | 4.2%        | E. Hampton  | 6,062      | 1.1%       |
| <i>Southington</i>                      | <i>20,628</i> | <i>3.8%</i> | Oxford      | 4,733      | 0.9%       |
| Torrington                              | 17,503        | 3.2%        | Woodbridge  | 4,369      | 0.8%       |
| Naugatuck                               | 15,805        | 2.9%        | Thomaston   | 3,969      | 0.7%       |
| Newington                               | 15,171        | 2.8%        | Middlebury  | 3,250      | 0.6%       |
| New Milford                             | 14,088        | 2.6%        |             |            |            |
| Total                                   | 539,524       |             |             |            |            |
| Source: Connecticut Department of Labor |               |             |             |            |            |

In terms of total employment trends, between 1995 and 2002, Southington’s resident employment base increased modestly by 2.8%, or 556 jobs. Conversely, the resident employment base in the Hartford Labor Market Area (LMA) outperformed Southington with an increase of 3.5% (19,405) respectively over the same time period. Table 2-11 shows total employment growth trends for Southington and the Hartford LMA between 1995 and 2002.

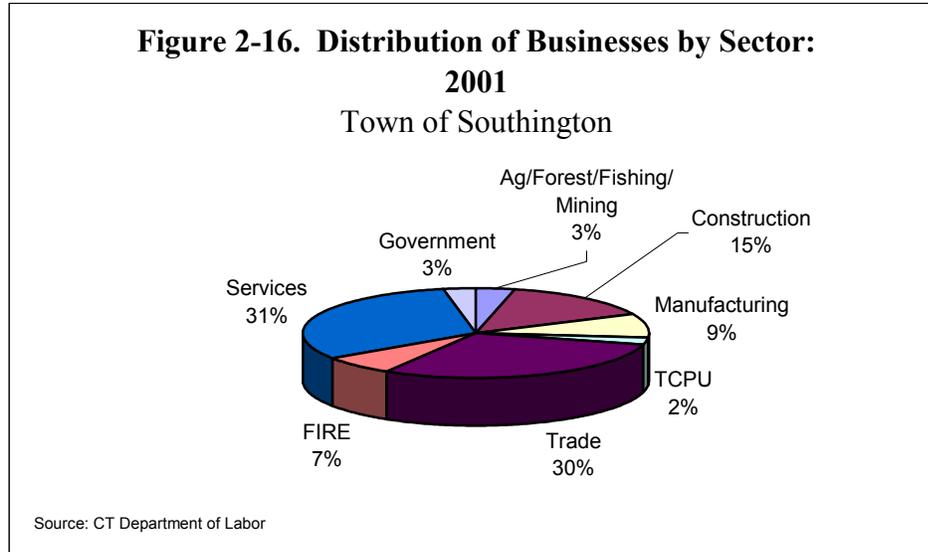
**Table 2-11. Labor Force\* and Resident Employment\* Trends: 1995-2002**

| <b>Labor Force</b>                      |             |             |                 |                 |
|---|-------------|-------------|-----------------|-----------------|
|   | <b>1995</b> | <b>2002</b> | <b># Change</b> | <b>% Change</b> |
| Southington                             | 21,146      | 21,442      | 296             | 1.4%            |
| Hartford LMA                            | 592,808     | 603,676     | 10,868          | 1.8%            |
| <b>Employment</b>                       |             |             |                 |                 |
|   | <b>1995</b> | <b>2002</b> | <b># Change</b> | <b>% Change</b> |
| Southington                             | 20,072      | 20,628      | 556             | 2.8%            |
| Hartford LMA                            | 557,295     | 576,700     | 19,405          | 3.5%            |
| *Note: By place of Residence            |             |             |                 |                 |
| Source: Connecticut Department of Labor |             |             |                 |                 |

According to latest available information provided by the Connecticut Department of Labor, Southington’s employment base in 2001 by place of work totaled 15,448 jobs, a decrease of almost 1,800 jobs, or 10.4%, since 1996. Employment in Southington is heavily concentrated in the trade sector with 4,569 jobs or approximately 30% of the total employment base. This is followed closely by the service sector with 3,596 jobs (23%).

Between 1996 and 2001, job growth by industry is varied in Southington with all industry sectors adding jobs with the exception of the manufacturing (loss of 2,178 jobs or almost 47%), Finance Insurance and Real Estate or FIRE (loss of 225 jobs or 10%) and Transportation, Communications and Public Utilities or TCPU (197 jobs or 38%) sectors. The service sector experienced the greatest job growth over the period with 427 jobs added representing an increase of almost 14%, followed by the government (122 jobs or 10%) and trade (119 jobs or 3%) sectors. The loss of manufacturing jobs in Southington is largely attributed to the 1996 closure of the Pratt & Whitney plants located in the northern edge of the community off of Queen Street. These facilities, which contained a reported total of approximately 1.3 million square feet and employed some 3,300 workers, subsequently were sold and have been partially re-occupied by several smaller businesses.

Based on 2001 business establishment data (the most current available), the majority of Southington’s business establishment base is concentrated in the service (332 businesses or 31%) and trade (313 businesses or 30%) sectors. Figure 2-16 shows the distribution of business establishments in Southington in 2001. Interestingly, only 9% of Southington’s establishment base is within the manufacturing sector.



The total number of business establishments in Southington has remained stable over the past few years, decreasing from 1,062 in 1996 to 1,061 in 2001. Similar to Southington, the number of businesses in the Hartford LMA declined only slightly during this period, losing 88 firms or 0.3%.

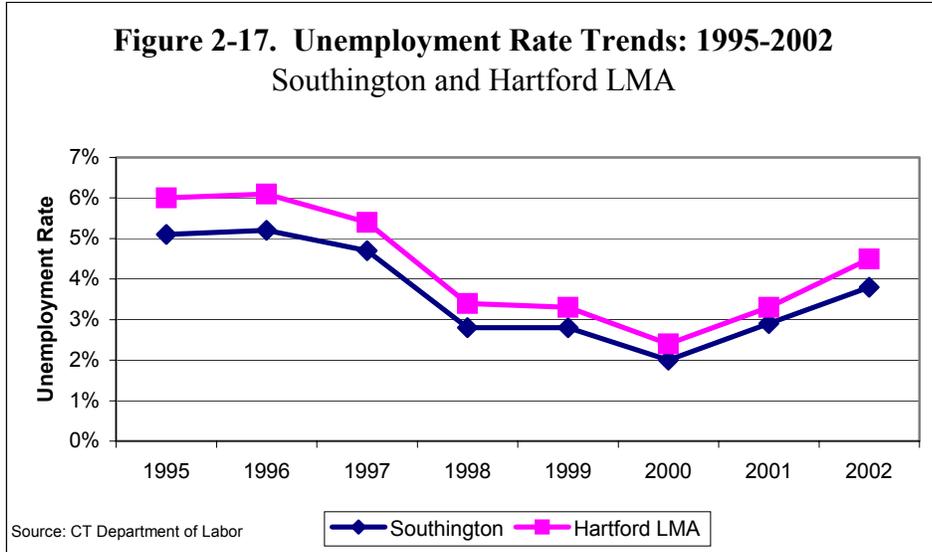
Table 2-12 illustrates the change in business establishments by major industry sector between 1996 and 2001 for Southington and the Hartford LMA. Based on the available business establishment data, during the period all industry sectors in Southington lost firms with the exception of the FIRE (20 firms or 36%), service (11 firms or 3.4%) and agriculture, forestry, fishing and mining (8 firms or almost 28%). The trade and construction sectors experienced the largest decline in firms, losing 23 (7%) and 8 (5%) firms respectively. It is interesting to note that although the number of establishments in the FIRE sector increased, total employment in this sector decreased by 10%, or 225 jobs. As a result of these shifts, the average employment per manufacturing establishment in Southington decreased from 47.7 in 1996 (slightly larger than the Hartford LMA average) to 27.1 in 2001. In the trade sector, the opposite occurred with the number of firms shrinking by 10% but employment rising by 2.7%, or 119 jobs, reflecting the shift towards larger “big-box” retail outlets.

Although the Hartford LMA also experienced negative business establishment growth between 1996 and 2001, both the service (421 businesses or 3.7%) and agriculture/forestry/fishing and mining (118 businesses or 15.4%) sectors experienced significant firm growth over the period, while manufacturing added 19 firms, or just under 1%. The trade sector experienced the heaviest loss at 643 businesses representing a decline of over 7% over the same time period.

**Table 2-12. Business Establishment Change by Sector: 1996-2001**

| <i>Southington</i>             |        |        |          |          |
|--------------------------------|--------|--------|----------|----------|
|                                | 1996   | 2001   | # Change | % Change |
| Ag/Forest/Fishing/Mining       | 29     | 37     | 8        | 27.6%    |
| Construction                   | 162    | 154    | -8       | -4.9%    |
| Manufacturing                  | 98     | 92     | -6       | -6.1%    |
| TCPU                           | 28     | 25     | -3       | -10.7%   |
| Trade                          | 336    | 313    | -23      | -6.8%    |
| FIRE                           | 56     | 76     | 20       | 35.7%    |
| Services                       | 321    | 332    | 11       | 3.4%     |
| Government                     | 32     | 32     | 0        | 0.0%     |
| Non-Classifiable               | N/A    | N/A    | N/A      | N/A      |
| Total                          | 1,062  | 1,061  | -1       | -0.1%    |
| <i>Hartford LMA</i>            |        |        |          |          |
| Ag/Forest/Fishing/Mining       | 768    | 886    | 118      | 15.4%    |
| Construction                   | 3,243  | 3,181  | -62      | -1.9%    |
| Manufacturing                  | 2,027  | 2,046  | 19       | 0.9%     |
| TCPU                           | 978    | 960    | -18      | -1.8%    |
| Trade                          | 8,797  | 8,154  | -643     | -7.3%    |
| FIRE                           | 2,763  | 2,866  | 103      | 3.7%     |
| Services                       | 11,403 | 11,824 | 421      | 3.7%     |
| Government                     | 1,440  | 1,390  | -50      | -3.5%    |
| Non-Classifiable               | 53     | 77     | 24       | 45.3%    |
| Total                          | 31,472 | 31,384 | -88      | -0.3%    |
| Source: CT Department of Labor |        |        |          |          |

Using 1995 as a benchmark (the earliest unemployment data available), the unemployment rate in Southington hit a high of 5.2% in 1996 and then experienced a gradual decline through 2000 sinking to 2.4% in that respective year. With the decline in the economy after 2000, Southington’s unemployment rate increased to 3.3% in 2001 and 4.5% in 2002. Although following similar trend lines, unemployment rates in the Hartford LMA have been, on average, 0.6% higher than the rates experienced in Southington between 1995 and 2002. Figure 2-17 shows unemployment rate trends for Southington and the Hartford LMA between 1995 and 2002.



Based on household income data provided by the U.S. Census, Southington’s median household income was \$60,538 in 1999 – about \$9,800 more than the median household income estimate for Hartford County. As shown in Table 2-13, almost one quarter (3,664 households) of Southington’s households earned between \$50,000 and \$74,999 in 1999. Using the Hartford County median household income estimate of \$50,756, a larger proportion of households in Southington fell within the middle (up to 150% of the area wide median household income) and high-income (over 150% of the area wide median household income) cohorts as compared to Hartford County. For example, approximately 9,200 households (61%) in Southington fell within the middle and upper income cohorts in 1999 as compared to about 170,300 (about 51%) households in Hartford County.

**Table 2-13. Distribution of Households by Income: 1999**

|                         | <i>Southington</i> |            | <i>Hartford County</i> |            |
|-------------------------|--------------------|------------|------------------------|------------|
|                         | # Households       | % of Total | # Households           | % of Total |
| Less than \$10,000      | 536                | 3.6%       | 26,637                 | 7.9%       |
| \$10,000 to \$14,999    | 564                | 3.7%       | 17,737                 | 5.3%       |
| \$15,000 to \$24,999    | 1,299              | 8.6%       | 34,323                 | 10.2%      |
| \$25,000 to \$34,999    | 1,356              | 9.0%       | 36,472                 | 10.9%      |
| \$35,000 to \$49,999    | 2,105              | 14.0%      | 49,722                 | 14.8%      |
| \$50,000 to \$74,999    | 3,664              | 24.3%      | 68,803                 | 20.5%      |
| \$75,000 to \$99,999    | 2,454              | 16.3%      | 44,110                 | 13.2%      |
| \$100,000 to \$149,999  | 2,371              | 15.7%      | 36,182                 | 10.8%      |
| \$150,000 to \$199,999  | 483                | 3.2%       | 10,562                 | 3.2%       |
| \$200,000 or more       | 257                | 1.7%       | 10,636                 | 3.2%       |
| Total                   | 15,089             | 100.0%     | 335,184                | 100.0%     |
| Median household income | \$60,538           |            | \$50,756               |            |

Source: U.S. Census

### 3.0 ALTERNATIVES ANALYSIS

The Connecticut Environmental Policy Act (CEPA) requires every state agency undertaking an action which may result in potentially significant effects on the environment to consider alternatives to the proposed action. Under both the CEPA statute (Section 22a-1 through 22a-1h CGS) and the implementing regulations found at Sections 22a-1a-1 to 22a-1a-12 of the Regulations of Connecticut State Agencies (RCSA), the alternatives considered should include taking no action and substituting an action of a significantly different nature that would provide similar benefits with different environmental impacts.

In addition to the “No Build” or “No Action” Alternative, DECD considered development of the proposed industrial park at three alternative locations in the Town of Southington. In the selection of the preferred alternative, DECD considered many factors addressed in this document such as the economic development goals of the Town of Southington, the mission of the DECD Industrial Parks Program, the statewide draft Plan of Conservation and Development, and the goal of avoiding or minimizing potential environmental impacts.

#### 3.1 The No Action Alternative

This alternative assumes that no action is taken to develop a municipally-owned industrial park in the Town of Southington. If an industrial park is not developed by the town, the land identified for industrial park development may remain vacant, be privately developed, or may be rezoned and converted to other non-industrial use. The Town of Southington is seeking to manage growth properly in an effort to reverse the trend of a declining manufacturing job base in the Town and region. The No Action Alternative would have the following negative consequences, which are inconsistent with the Town’s efforts to recover lost manufacturing jobs and businesses and the desire for responsible, controlled growth:

- Industrial development in Southington will occur in a piece-meal fashion, subject to private market forces. This would result in industrial development that is more diffuse than would result from an industrial park development. Such a pattern of development is likely to place a greater burden on infrastructure and potentially result in growth patterns that result in greater cumulative impacts to the environment.
- If existing vacant industrial facilities available for reuse do not fulfill the needs of businesses looking to expand or locate in the area, those businesses may leave the central Connecticut region or the State, leading to negative environmental consequences.

For these reasons, the No Action Alternative is not considered the most feasible and prudent alternative. While the No Action Alternative may reduce potential short-term impacts to the natural and built environment, the long-term and cumulative impacts are likely to be greater due to hindered economic development and more diffuse industrial growth.

### 3.2 Alternative Industrial Sites

The project area includes three alternative sites, all located north of Interchange 31 of Interstate 84 (I-84), along the State Route 229 (West Street) corridor in Southington, Connecticut. The alternative site locations are depicted in Figure 1-1.

Site #1 is located approximately 1.25 miles north of the I-84 Interchange 31. The site is bordered by West Street to the west and West Queen Street to the north. Its northern boundary has approximately 2,400 feet of frontage along the south side of West Queen Street, while only several hundred feet of frontage exist along West Street. The site slopes eastward toward the Farmington Canal and an adjacent trailer park along the Quinnipiac River. A power transmission line crosses the western portion of the property. Site #1 consists of a single 102± acre parcel, according to the Town of Southington Residential Property Record Card.

Site #2 is situated just north of Interchange 31 and is partially bordered by I-84. It lies to the west side of West Street and is also west of Executive Boulevard North and Executive Boulevard South. The site consists of two contiguous parcels, which comprise approximately 62 acres of land, and is situated adjacent to an office park that houses The Hartford insurance company.

Site #3 is the northernmost site located approximately 2 miles north of Interchange 31. The site is located on the east side of West Street, west of Captain Lewis Drive, and north of West Queen Street. Site #3 encompasses two contiguous parcels and approximately 68 acres of land. Site #3 is adjacent to an existing industrial park on Captain Lewis Drive and Robert Porter Road. The power transmission line that crosses Site #1 also traverses the western and northern sections of this site.

### 3.3 Selection of Preferred Alternative

The three alternative sites were evaluated for overall development constraints (see Table 2-7) and potential environmental impacts based on the existing conditions at each site. A table summarizing the existing conditions at each site is provided in Appendix H. An analysis was performed to estimate the total area available for development on each site by excluding those areas where development is precluded by the presence of steep slopes (slopes exceeding 12 percent), wetlands/watercourses and associated regulated areas, and utility easements. For the purpose of this evaluation, the upland review area associated with the mapped wetlands was assumed to have an average width of 50 feet, although the Southington inland wetlands regulations contain a variable-width regulated area depending on the type of wetland resource. Additionally, based on discussions with Northeast Utilities representatives, it was assumed that no development (i.e., buildings or structures) could occur within the overhead power line easement that traverses Sites #1 and #3. The results of the evaluation are summarized in Table 3-1 and are presented graphically in Figure 3-1 to Figure 3-3.

**Table 3-1. Summary of Total Site Area Available for Development**

| Site ID | Total Site Area (acres) | Steep Slopes |                  | Wetlands & Watercourse |                  | Wetland Buffer |                  | Utility Easement |                  | Net Site Area                              |                            |
|---------|-------------------------|--------------|------------------|------------------------|------------------|----------------|------------------|------------------|------------------|--|----------------------------|
|         |                         | Area (acres) | Percent of Total | Area (acres)           | Percent of Total | Area (acres)   | Percent of Total | Area (acres)     | Percent of Total | Net Area Available for Development (acres) | Percent of Total Site Area |
| 1       | 109.9                   | 13.6         | 12.4%            | 12.4                   | 11.3%            | 11.6           | 10.6%            | 2.5              | 2.3%             | 69.8                                       | 63.5%                      |
| 2       | 81.8                    | 9.4          | 11.5%            | 21.7                   | 26.5%            | 10.8           | 13.2%            | 0                | 0%               | 39.9                                       | 48.8%                      |
| 3       | 69.5                    | 1.7          | 2.4%             | 2.5                    | 3.6%             | 1.8            | 2.6%             | 2.6              | 3.7%             | 60.9                                       | 87.6%                      |

As shown in [Table 3-1](#), Sites #1 and #3 have similar acreage available for development, at approximately 60 to 70 acres. In contrast, Site #2 has slightly less than 40 acres of developable area due to the presence of significant wetlands in the central and western portions of the site. In addition, relatively large areas of steep slopes are present on both Sites #1 and #2.

As shown in [Figure 3-1](#), several extensive wetland areas and a large area of steep slopes are distributed throughout the northern portion of Site #1 that borders West Queen Street. These features preclude most development on this portion of the site and make access from West Queen Street to the more viable central and southwest portions of Site #1 less feasible and more costly. Similarly, the distribution of steep slopes and wetlands near the most likely access points to Site #2 (Executive Boulevards North and South) makes access difficult and costly to the limited developable areas on this site. Unlike Sites #1 and #2, Site #3 has significantly fewer constraints, with only isolated areas of steep slopes and isolated wetlands at the margins of the site. Furthermore, Captain Lewis Drive and Robert Porter Road, which serve the adjacent existing industrial park, provide multiple points of access to Site #3 and these areas are relatively free of physical development constraints.

In addition to these basic siting considerations, other potential environmental constraints and impacts for each site were evaluated on a comparative basis. [Table 3-2](#) presents a summary of potential environmental constraints and screening level impacts for the alternative sites. As shown in the table, all three sites were assigned a qualitative ranking (low, moderate, and high potential constraints/impacts) and corresponding numeric score (low=1, moderate=2, high=3) for each of the physical, natural, and socioeconomic resources evaluated in the EIE.

Overall, all three sites are similar in terms of physical and socioeconomic resources. Minor differences between each site are anticipated relative to potential impacts on traffic, utilities, noise and light, and aesthetics. Due to their relatively close proximity to one another and similar land use and zoning, the three sites are virtually identical in terms of potential socioeconomic impacts, including environmental justice and consistency with long range state and local planning.

The major differences between the three sites are related to potential constraints and impacts on natural resources. Sites #1 and #2 have significantly more moderate and high value wetland resources and associated wetland and upland habitat than Site #3. These wetland areas also correspond to areas of moderate to high archaeological sensitivity, since wetlands

and the surrounding uplands were often focal points for prehistoric settlements. As described previously, the presence of steep topography near potential site access locations on Sites #1 and #2 is a significant constraint that either precludes development on large portions of these sites or substantially increases the site development costs as compared to Site #3. Sites #1 and #2 also contain relatively larger contiguous tracts of farmland soils. The vast majority of Site #3 contains non-farmland soils. Furthermore, Sites #1 and #2 are situated in relatively close proximity to the downgradient receiving water bodies, while Site #3 is located near a topographic high point along the drainage divide between the Quinnipiac and Eightmile River basins.

Overall, Site #3 was selected as the preferred alternative site for the proposed industrial park development based on the significantly lower development constraints and potential impacts to natural resources as compared to the other potential sites that were evaluated.

Figure 3-1. Development Constraints Summary: Site #1

Figure 3-2. Development Constraints Summary: Site #2

Figure 3-3. Development Constraints Summary: Site #3

**Table 3-2. Comparison of Potential Environmental Constraints and Impacts for Alternative Industrial Park Sites**

| Resources                           | Site #1   | Site #2   | Site #3   |
|-------------------------------------|-----------|-----------|-----------|
| <b>Physical</b>                     |           |           |           |
| Air Quality                         | ○         | ○         | ○         |
| Noise and Light                     | ◐         | ●         | ●         |
| Traffic and Roadways                | ●         | ◐         | ●         |
| Utilities and Services              | ○         | ◐         | ◐         |
| Hazardous Materials                 | ◐         | ◐         | ○         |
| Solid Waste and Recycling           | ○         | ○         | ○         |
| Aesthetics and Viewsheds            | ◐         | ●         | ●         |
| Cultural Resources                  | ◐         | ◐         | ○         |
| <b>Natural</b>                      |           |           |           |
| Geology, Topography, Soils          | ●         | ◐         | ○         |
| Farmland Soils                      | ●         | ◐         | ○         |
| Hydrology and Water Quality         | ◐         | ●         | ○         |
| Ecological Resources                | ◐         | ●         | ○         |
| <b>Socioeconomic</b>                |           |           |           |
| Land Use and Zoning                 | ◐         | ◐         | ◐         |
| Long Range State and Local Planning | ●         | ◐         | ○         |
| Demographics and EJ                 | ○         | ○         | ○         |
| Economy, Employment and Income      | ○         | ○         | ○         |
| <b>Numeric Score</b>                | <b>31</b> | <b>32</b> | <b>24</b> |

- Greatest Constraints/Potential Impact (3 points)
- ◐ Moderate Constraints/Potential Impact (2 points)
- Least Constraints/Potential Impact (1 point)

## 4.0 ANALYSIS OF IMPACT

Potential impacts were further evaluated for development of the proposed industrial park at Site #3, the preferred alternative site location. Potential impacts to physical resources, natural resources, and socioeconomic resources are discussed in the following sections, which are organized consistent with the existing conditions described in Section 2.0.

### 4.1 Buildout Analysis

A buildout analysis was performed to evaluate potential maximum impacts associated with several development scenarios for Site #3. The analysis considered the site's developable area, which was determined based on the total site area (69.5 acres) minus areas designated as wetlands and associated upland review areas, steep slopes, and utility easements, as described in Section 3.3. The developable area (60.9 acres) of Site #3 was further reduced by 20 percent to account for on-site roads, utilities, and setbacks/buffers. Lastly, the maximum allowable building coverage of 25% (per the Southington Zoning Regulations within the I-1 Zone) was assumed, resulting in a maximum building floor area of 12.2 acres or approximately 530,000 square feet for the entire development.

Assuming lot sizes ranging from 1 to 5 acres for small and medium manufacturing facilities (10,000 to 50,00 square feet), which is consistent with the market study findings (see Appendix C), the site's estimated lot yield for an average lot size of 2.5 acres is approximately 20 lots. This is consistent with the anticipated number of facilities (21) that would occupy the site under a buildout scenario, based on a total floor area of approximately 530,000 square feet and an average facility size of 25,000 square feet.

A conceptual layout of the proposed industrial park was developed for Site #3 to further evaluate the maximum lot yield for the site, considering the physical site constraints described previously and specific bulk and lot requirements for executive parks in the I-1 Zone. The proposed development concept involves a loop road through the site, with access from Captain Lewis Drive and an extension of the existing cul-de-sac at the end of Robert Porter Road. The extreme northern and western limits of the site would remain undeveloped, and a minimum 50-foot wooded buffer would be preserved along the adjacent residential land use. Under this development scenario, the site can support 18 to 20 lots ranging in size from 2 to 9 acres, which would allow sufficient flexibility to combine smaller lots to accommodate larger facilities (e.g., up to 10 acres and between 80,000 and 100,000 square feet of building space), as necessary.

Consistent with the findings of the market study, the facilities that are anticipated to occupy the proposed industrial park will likely consist of a combination of light manufacturing, office, and warehouse or distribution space. The actual percentage breakdown and corresponding floor area within each use will determine the total number of employees/occupants in the industrial park and associated impacts on job creation, tax revenue, traffic, and utilities. Three development scenarios were considered to evaluate a range of potential impacts, as summarized in Table 4-1.

**Table 4-1. Alternative Development Scenarios**

| Scenario | Use                 | Percentage | Area (square feet) |
|----------|---------------------|------------|--------------------|
| 1        | Office              | 50%        | 265,186            |
|          | Light Manufacturing | 30%        | 159,118            |
|          | Distribution        | 20%        | 106,079            |
| 2        | Office              | 30%        | 159,118            |
|          | Light Manufacturing | 50%        | 265,196            |
|          | Distribution        | 20%        | 106,079            |
| 3        | Office              | 10%        | 53,039             |
|          | Light Manufacturing | 20%        | 106,079            |
|          | Distribution        | 70%        | 371,275            |

Scenario 2 reflects the most likely distribution of uses within the industrial park facilities, with approximately half of the total building space occupied by light manufacturing uses and between 20 and 30 percent allocated for both office and distribution space. This is consistent with the market study findings. Scenarios 1 and 3 reflect less likely, although plausible scenarios in terms of potential maximum socioeconomic impacts (jobs, income, tax base, etc.) and potential maximum impacts on traffic and utilities. The mix of uses under Scenario 1 is weighted more heavily towards office space, which is anticipated to result in a larger workforce, greater job creation, and higher utility and traffic demands. Conversely, Scenario 3 consists of a larger percentage of distribution/warehouse space, which would likely result in fewer employees per unit area of building space, fewer jobs and smaller economic benefit, and smaller utility and traffic demands. All three scenarios were considered in the impact evaluation, as described in the following sections.

## 4.2 Physical Resources

### 4.2.1 Air Quality

Possible air quality impacts resulting from the proposed project consist of emissions from stationary and mobile sources and from pollutants emitted from construction-related activities. Stationary sources of air pollutants are associated with the firms that would occupy the completed industrial park buildings. Mobile sources consist of existing and increased vehicular traffic. Construction-related air quality impacts are typically associated with emissions from equipment and fugitive dust.

Given the I-1 zoning of the proposed project site and the market demand for new industrial space, light manufacturing operations generally occupying 10,000 to 50,000 square foot areas are expected to locate in the industrial park. Given their size, businesses occupying the available space will not likely have the capacity to be Title V emitters of air pollution. Within individual facilities, installation of new fuel burning equipment (i.e., a boiler) or other possible sources of emissions that exceed specified thresholds will be subject to New Source Review or other review and approval by the DEP Bureau of Air Management.

Mobile sources of air pollutants are associated with emissions of CO, NO<sub>x</sub>, and VOCs from automobiles. NO<sub>x</sub> and VOC emissions can contribute to the creation of ozone and are typically of most concern when warmer summer weather favours ozone formation. CO emissions are usually of most concern in the winter when colder temperatures often result in the incomplete combustion of gasoline in automobile engines. The impact of CO on air quality is usually assessed on a local or microscale basis since the effects of CO are greatest immediately adjacent to traffic corridors.

Table 2-4 describes the existing Level of Service (LOS) in the vicinity of the proposed industrial park for weekday AM and PM peak hours. In the build-out year 2014, when it is anticipated that the industrial park will be fully occupied, the traffic analysis described in Section 4.1.3.4 indicates that the LOS at the intersections in the project area will be as shown in Table 4-3 in the absence of any mitigation measures. However, traffic improvements to three intersections (West Street and West Queen Street, West Street and I-84 Westbound Ramps, and West Street and I-84 Eastbound Ramps) are recommended in Section 4.1.3.5 to maintain the LOS with the proposed industrial park at or better than the LOS without the proposed industrial park for the 2014 AM and PM peak hours. Final traffic improvements will be identified for implementation as part of the State Traffic Commission Major Traffic Generator Certificate review and approval process.

EPA guidance for microscale modeling of intersections (EPA-454/R-92-005) suggests that modeling be considered for intersections at a LOS D, E, or F. However, given that the proposed project, with traffic mitigation measures in place, will not result in a significant drop in the LOS during peak morning and afternoon hours and will not experience a significant change in the traffic volume to capacity ratio at key intersections, no air quality analysis is proposed at this time. As a result, no modeling of these intersections is recommended at this time. If during the course of the State Traffic Commission Major Traffic Generator Certificate review process it is determined that the LOS or v/c ratio cannot be maintained with the mitigation options proposed, then microscale air quality analysis should be conducted to assess potential impacts and identify alternative or additional mitigation options.

Construction activities can result in short-term impacts on ambient air quality. These potential impacts include direct emissions from construction equipment and trucks, fugitive dust emissions, and increased emissions from motor vehicles on the streets due to disruption of traffic flow. These impacts will be temporary, and will affect only the immediate vicinity of the construction sites and their access routes.

Emissions from project-related construction equipment and trucks will be much less than the total emissions from other industrial and transportation sources in the region, and therefore, are expected to be insignificant with respect to compliance with the NAAQS. Direct emissions from construction equipment are not expected to produce adverse effects on air quality, provided that all equipment is properly operated and maintained. Appropriate mitigation requirements could consist of assurance of proper operation and maintenance, and prohibition of excessive idling of engines. Section 22a-174-18(a)(5) of the Regulations of Connecticut State Agencies (RCSA) prohibits excessive idling. DECD also encourages the use of construction equipment with air pollution control devices where practicable. However, the use of control devices such as oxidation catalysts and particulate filters for

diesel-powered equipment is typically only necessary in circumstances where the site is located immediately adjacent to residential areas or in confined spaces. Although construction activities would potentially occur on Site #3 near residential areas, the activities would not be immediately adjacent to the existing residential lots as a result of the wooded buffer along the perimeter of the site and the setbacks required by the Town zoning regulations. Therefore, the use of emission control devices on project-related construction equipment such as oxidation catalysts and particulate filters is not recommended

Roadway traffic disruption due to lane closures, detours, and construction vehicles accessing the site can cause congestion which can increase motor vehicle exhaust emissions. These impacts can be mitigated by implementing appropriate traffic management techniques during the construction period.

Fugitive dust emissions can occur during ground excavation, material handling and storage, movement of equipment at the site, and transport of material to and from the site. Fugitive dust is most likely to be a problem during periods of intense activity and would be accentuated by windy and/or dry weather conditions. Fugitive dust impacts can be mitigated through good "housekeeping" practices such as wetting, paving, landscaping, or chemically treating exposed earth areas, covering dust-producing materials during transport, limiting dust-producing construction activities during high wind conditions, and providing street sweeping or tire washes for trucks leaving the site. RCOSA Section 22a-174-23(b)(1) requires mitigation of fugitive dust emissions.

## 4.2.2 Noise and Light

### 4.2.2.1 Noise

The primary short-term noise impacts are associated with construction activities. It is difficult to reliably predict the sound levels that may occur at a particular receptor or group of receptors as a result of construction activity. Heavy construction equipment is the principal source of noise during construction activity, and the pattern of heavy equipment use is constantly changing as a construction project progresses. For the most part, construction activity occurs during daytime hours when higher sound levels are generally more tolerable at nearby receptors. In addition, any adverse noise impacts due to construction activities would be temporary in nature, and no one receptor is expected to be exposed to high sound levels due to construction for an extended period of time.

Provisions should be made in the plans and specifications that the construction contractors make every reasonable effort to limit the impacts that construction noise may have on sensitive receptors. These efforts could include restriction of work to daytime hours, proper maintenance of equipment, and advance notification of nearby receptors of any activities that may produce excessive sound levels.

The primary long-term noise impacts are associated with the industrial activity and traffic associated with the industrial park facilities. Generally, the types of facilities that are expected to occupy the industrial park are light manufacturing facilities including associated offices and distribution operations, which are not likely to produce significant noise impacts. Since the proposed project site is currently undeveloped, new sources of noise will be

created as a result of development. The type of level of the noise created by activity at an industrial park will depend on the number and type of facilities that are located there and the proximity of those facilities (emitters) to adjacent land uses (receptors). The exact nature of the traffic noise generated by the proposed project will depend on the number and type of facilities that are located in the industrial park at full buildout. However, given that the volume to capacity ratios at signalized intersections in the area will remain essentially unchanged compared to the No Action scenario, significant change in mobile noise is not anticipated.

The area of residential development north of Site #3 is an area of Class A Noise Zone adjacent to Site #3. Industrially-zoned or developed land is located to the east and south, with commercial and industrial land use present or intended along West Street to the west of Site #3. The presence of the residential area (Class A Noise Zone) would impose a limit on the maximum allowable noise levels at the noise zone boundary with the adjacent industrial development. Final design considerations for the industrial park will include buffer areas to protect the more sensitive residential areas from noise impacts.

#### 4.2.2.2 Light

The lighting for an industrial park development will be designed to meet Town zoning requirements to provide adequate vehicle and pedestrian safety. Southington zoning regulations relative to industrial development (Section 5.00.4(C) and signage (Section 13-09) and site plan review (Section 9-0.4) generally require that objectionable light not be transmitted outside the property from which it illuminates. The placement and selection of lighting can make a significant difference in terms of the impact on receptors. Fixtures that minimize spill lighting and utilize lighting only when and where needed will reduce potential impact to off-site receptors. A minimum 50-foot wooded buffer between the proposed industrial park and the adjacent residential areas is recommended to minimize impacts of lighting on the adjacent residences.

#### 4.2.3 Traffic and Roadways

##### 4.2.3.1 Background Traffic

Average daily traffic counts performed by the Connecticut Department of Transportation over the past 6 years were reviewed to determine the average growth throughout the study area. It was determined that 1.5 percent per year was the average growth throughout the corridor. The existing traffic volumes were projected to the 2014 anticipated completion year of the industrial park using a 1.5 percent per year growth rate to yield 2014 Background Conditions.

As indicated in [Section 2.1.3](#), the State Traffic Commission (STC) and the Town of Southington Planning and Zoning office were contacted to identify pending or approved developments having site related traffic in the study area. Two projects were identified as follows:

- **Baptist Church College** – This development is located at the intersection of West Street and Spring Street. The project will consist of academic, residential, and administrative buildings and is currently under review with the Town of Southington.
- **Mixed-use development** – This development consists of commercial buildings and age restricted housing located north of the SR229 (West Street) and West Queen Street intersection

Traffic from these developments was identified based on the respective traffic studies submitted to the Town of Southington. The site generated traffic for each development was added to the existing conditions traffic counts to be included in the Background Conditions traffic volumes, which are equivalent to the No Action Alternative. The results of the Background Conditions can be found in Figures 4 and 5 of Appendix E.

#### 4.2.3.2 Site-Generated Traffic

The site-generated traffic anticipated for the three development scenarios for Site #3 was calculated using existing empirical data from the Institute of Transportation Engineers (ITE) publication *Trip Generation, 7th Edition, 2003*. This publication is an industry-accepted resource for determining trip generation.

Table 4-2 summarizes the trip generation for each alternative industrial park development scenario at Site #3.

**Table 4-2. Estimated Trip Generation for Alternative Development Scenarios**

| Scenario | Total Trips Generated |      |       |              |      |       |
|----------|-----------------------|------|-------|--------------|------|-------|
|          | AM Peak Hour          |      |       | PM Peak Hour |      |       |
|          | Enter                 | Exit | Total | Enter        | Exit | Total |
| 1        | 496                   | 128  | 624   | 145          | 444  | 589   |
| 2        | 436                   | 140  | 576   | 167          | 383  | 550   |
| 3        | 269                   | 120  | 389   | 109          | 315  | 424   |

The distribution of traffic entering and exiting the proposed site was applied to the road network based on the existing traffic distributions in the study area. A regional arrival/departure distribution for the new site-generated traffic traveling to and from the project site is shown in Figure 6 of Appendix E.

#### 4.2.3.3 Combined Volumes

The site-generated traffic was distributed to the roadway system based on the arrival/departure distributions with the results shown in Figures 7 and 8 (Scenario 1), Figures 11 and 12 (Scenario 2) and Figures 15 and 16 (Scenario 3) of Appendix E. These volumes were then added to the background volumes (without the proposed industrial park) to yield the year 2014 peak hour combined traffic volumes (with the proposed industrial

park) shown in Figures 9 and 10 (Scenario 1), Figures 13 and 14 (Scenario 2) and Figures 17 and 18 (Scenario 3) of Appendix E.

#### 4.2.3.4 Analysis

As discussed in Section 2.1.3, weekday AM and PM peak hour capacity analyses for both signalized and unsignalized intersections in the study area were conducted (using Synchro Professional Software, version 5.0) for the three alternative development scenarios for Site #3. Section 2.1.3 also describes the procedure and terminology (i.e., volume/capacity ratio or v/c ratio and Level of Service or LOS) used in the analyses.

The determination of the traffic impacts from the proposed development scenarios is made through a comparison of the Background Conditions LOS (without the proposed development) versus the Combined Conditions LOS (with the development). Table 4-3 summarizes the LOS at the unsignalized and signalized intersections, for both Background and Combined Conditions traffic volumes. Copies of the analysis worksheets can be found in Appendix E.

As shown in Table 4-3, the majority of the intersections in the study area have a slight decrease in LOS from existing to background conditions due to normal anticipated growth over the ten years prior to the anticipated buildout date of the industrial park. Some of the intersections in the study area will have a change in LOS associated with the development of the industrial park. These intersections are discussed in the following section.

**Table 4-3. Level of Service (LOS) for Alternative Development Scenarios**

| Int. | Name  | Existing                   |                            | 2014 Background             |                             | 2014 Combined               |                            |                             |                            |                             |                            |
|------|---|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|
|      |   |                            |                            |                             |                             | Scenario 1                  |                            | Scenario 2                  |                            | Scenario 3                  |                            |
|      |   | AM                         | PM                         | AM                          | PM                          | AM                          | PM                         | AM                          | PM                         | AM                          | PM                         |
| 1    | SR 229 (West St./Middle St.) and West St.           | A/0.52                     | A/0.51                     | A/0.64                      | A/0.62                      | A/0.71                      | B/0.67                     | A/0.71                      | B/0.67                     | A/.68                       | B/0.66                     |
| 2    | SR 229 (West St.) and West Queen St.                | B/0.90                     | C/0.79                     | E/1.15                      | D/0.99                      | E/1.16                      | E/1.13                     | E/1.15                      | E/1.11                     | E/1.13                      | E/1.08                     |
| 3    | SR 229 (West St.) and Welch Rd.                     | B/0.82                     | C/0.90                     | D/1.04                      | D/1.03                      | D/1.08                      | E/1.09                     | E/1.08                      | E/1.08                     | D/1.07                      | D/1.08                     |
| 4    | SR 229 (West St.) and Spring St.                    | A/0.73                     | A/0.64                     | B/0.89                      | B/0.80                      | B/0.93                      | B/0.87                     | B/0.93                      | B/0.86                     | B/.93                       | B/0.85                     |
| 5    | SR 229 (West St.) and Corporate Dr. Unsignalized +  | EB<br>F/53<br>NBL<br>A/0.1 | EB<br>D/30<br>NBL<br>A/0.1 | EB<br>F/117<br>NBL<br>A/0.1 | EB<br>F/67<br>NBL<br>A/0.1  | EB<br>F/159<br>NBL<br>A/0.1 | EB<br>F/97<br>NBL<br>A/0.1 | EB<br>F/156<br>NBL<br>A/0.1 | EB<br>F/94<br>NBL<br>A/0.1 | EB<br>F/142<br>NBL<br>A/0.1 | EB<br>F/87<br>NBL<br>A/0.1 |
| 6    | SR 229 (West St.) and Executive Blvd. North         | A/0.45                     | A/0.41                     | A/0.58                      | A/0.48                      | A/0.62                      | A/0.53                     | A/0.62                      | A/0.52                     | A/.60                       | A/0.52                     |
| 7    | SR 229 (West St.) and Executive Blvd. South         | A/0.53                     | C/0.64                     | A/0.67                      | C/0.79                      | A/.69                       | D/0.84                     | A/0.69                      | D/0.83                     | A/.69                       | C/0.82                     |
| 8    | SR 229 (West St.) and I-84 Westbound Ramps          | B/0.81                     | B/0.77                     | E/1.11                      | C/1.00                      | F/1.22                      | D/1.04                     | F/1.21                      | D/1.04                     | F/1.17                      | D/0.97                     |
| 9    | SR 229 (West St.) and I-84 Eastbound Ramps          | C/0.79                     | C/0.83                     | D/0.96                      | D/.99                       | E/1.0                       | D/1.01                     | E/1.0                       | D/1.01                     | E/0.99                      | D/1.00                     |
| 10   | West Queen St. and Captain Lewis Dr. Unsignalized + | EB<br>A/1.5<br>SB<br>B/12  | EB<br>A/0.2<br>SB<br>B/11  | EB<br>A/1.5<br>SB<br>B/14   | EB<br>A/3.7<br>SB<br>B/12.9 | EB A/9<br>SB<br>F/343       | EB<br>A/2.8<br>SB<br>F/250 | EB A/8<br>SB<br>F/243       | EB<br>A/3.1<br>SB<br>F/203 | EB A/5<br>SB<br>E/41        | EB<br>A/2.2<br>SB<br>F/78  |
| 11   | SR 10 (Queen St.) and West Queen St.                | B/0.35                     | B/0.61                     | B/0.42                      | C/0.77                      | C/0.71                      | D/0.89                     | C/0.68                      | D/0.88                     | B/0.59                      | D/0.91                     |

Values indicated are intersection LOS/Volume to Capacity Ratio  
 +Values indicated are LOS/Control delay for Unsignalized Intersection  
 EB – eastbound  
 SB – southbound  
 NBL – northbound lane

#### 4.2.3.5 Mitigation Improvements

Table 4-4 summarizes the intersections where improvements have been recommended to mitigate the traffic impacts of the proposed industrial park at Site #3, as well as the resulting LOS changes with the future improvements. Mitigation was identified at these intersections due to an anticipated drop to LOS E or below. The recommended traffic mitigation measures are designed to offset the largest anticipated increases in LOS based upon the three development scenarios considered. Mitigation is not recommended at several of the study intersections that experience a drop to LOS D or better, as allowed by ConnDOT.

##### *West Queen Street and Captain Lewis Drive*

A peak hour signal warrant analysis was performed in accordance with the requirements of the *Manual on Uniform Traffic Control Devices (MUTCD)*, Millennium Edition. Based on the Combined Conditions traffic volumes this intersection will warrant a traffic signal.

Access to the proposed industrial park from Captain Lewis Drive will require a traffic signal at the intersection of West Queen Street and Captain Lewis Drive for safe access and egress to/from the existing and proposed industrial parks.

It is recommended that the pavement conditions be improved along the entire length of Captain Lewis Drive. It was noted during several site visits that there are many patches, dips and bumps along the roadway as well as manhole covers that were raised above the pavement elevations. The entire road should be reconstructed to accommodate the increased traffic for the proposed development. Curbing should be added to the roadway cross section. If right of way is available, sidewalks should be added to the entire length of Captain Lewis Drive.

##### *SR 229 (West Street) and West Queen Street*

The site-generated traffic from the proposed industrial park increases westbound left and right movements, northbound right movements, and southbound left movements at the intersection during the AM and PM peak hours. The traffic signal operates at LOS E during the AM peak period and LOS D during the PM peak period of the Background Conditions. With the addition of the proposed industrial park's site-generated traffic, the LOS remains the same with a slight increase in delay during the AM peak hour and decreases to LOS E during the PM period.

The addition of site-generated traffic will exacerbate poor operations at this intersection during the background AM peak period. Various mitigation schemes were investigated to reduce the impact of the industrial park traffic and improve operations for the existing traffic. It is recommended that the westbound approach be re-stripped to provide a shared left/through and an exclusive right turn lane. It is also recommended that the signal phasing be modified to include a right turn overlap for the westbound right turns during the southbound left turn advance phase. With these improvements, the traffic signal operation during the Combined Conditions for each of the development scenarios evaluated will improve to LOS D during AM peak hour and LOS D during the PM peak hour.

*SR 229 (West Street) and Welch Road*

The site-generated traffic associated with the development of the industrial park will increase the north and southbound through movements during the AM and PM peak periods. The operation of the traffic signal under Background Conditions is LOS D during the AM and PM peak periods. With the addition of the site-generated traffic, the operation of the traffic signal is LOS D during the AM peak period and LOS E during the PM peak period with a slight increase in delay for each development scenario under the Combined Conditions. Since the intersection experiences only a slight increase in delay from Background Conditions to Combined Conditions, the intersection will continue to operate safely and the impact of the industrial park is anticipated to be negligible. Welch Road traffic is the significant contributing factor to the delay at this intersection and improvements to the through movements will not significantly improve the overall capacity or operation of this intersection.

*I-84 East Bound Ramps with SR 229 (West Street)*

The site-generated traffic from the proposed industrial park will increase the northbound through movements, the southbound through and left movements, and the eastbound left movements. The operation of the intersection during Background Conditions is LOS D during both AM and PM peak periods. With the addition of site-generated traffic, the operations of the traffic signal is LOS E during the AM peak period and LOS D during the PM peak period. The delay at this intersection during the AM peak period can be reduced by increasing the cycle length at this intersection during the AM peak period from 70 seconds to 90 seconds. This will improve the through movement delay in the north bound and south bound directions and improve the operation of the traffic signal for the Combined Conditions for all options to LOS D during the AM peak period.

*I-84 West Bound Ramps with SR 229 (West Street)*

Site-generated traffic from the proposed industrial park will increase the north bound through movements, south bound right and through movements, and west bound right movements. The operation of the traffic signal during the Background conditions is LOS E during the AM peak period and LOS C during the PM peak period. With the addition of the site generated traffic, the operation of the traffic signal is LOS F during the AM Peak period and LOS D in the PM peak period. The delay at this intersection during the AM peak period can be reduced by increasing the cycle length at this intersection during the AM peak period from 70 seconds to 90 seconds. This will improve the through movement delay in the north and south bound directions and improve the Level of Service for the Combined Conditions for all options to LOS E or better during the AM peak period.

**Table 4-4. Level of Service (LOS) With Future Improvements**

| Int. | Name   | Existing |        | 2014 Background |        | 2014 Combined |               |               |               |               |               |
|------|--|----------|--------|-----------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|
|      |  |          |        |                 |        | Scenario 1    |               | Scenario 2    |               | Scenario 3    |               |
|      |  | AM       | PM     | AM              | PM     | AM            | PM            | AM            | PM            | AM            | PM            |
| 2    | SR 229 (West St.) and West Queen St.   | B/0.90   | C/0.79 | E/1.15          | D/0.99 | E/1.16        | E/1.13        | E/1.15        | E/1.11        | E/1.13        | E/1.08        |
|      | <b>With Improvements - Re-stripe westbound approach (shared left/through and exclusive right) Provide westbound overlap with southbound left and other signal timing modifications</b> |          |        |                 |        | <b>D/1.00</b> | <b>D/1.02</b> | <b>D/1.03</b> | <b>D/1.01</b> | <b>C/1.01</b> | <b>D/0.97</b> |
| 8    | SR 229 (West St.) and I-84 Westbound Ramps   | B/0.81   | B/0.77 | E/1.11          | C/1.00 | F/1.22        | D/1.04        | F/1.21        | D/1.04        | F/1.17        | D/0.97        |
|      | <b>With Improvements – Change cycle length to 90 seconds during the AM Peak Hour</b>   |          |        |                 |        | <b>E/1.15</b> |               | <b>E/1.15</b> |               | <b>D/1.11</b> |               |
| 9    | SR 229 (West St.) and I-84 Eastbound Ramps   | C/0.79   | C/0.83 | D/0.96          | D/0.99 | E/1.0         | D/1.01        | E/1.0         | D/1.01        | E/0.99        | D/1.00        |
|      | <b>With Improvements – Change cycle length to 90 seconds during the AM Peak Hour</b>   |          |        |                 |        | <b>D/0.97</b> |               | <b>D/0.97</b> |               | <b>D/0.96</b> |               |

\*Values indicated are intersection LOS/Volume to Capacity Ratio

#### 4.2.4 Utilities and Services

##### 4.2.4.1 Water (Domestic and Fire Protection)

The margin of safety is defined as the dimensionless ratio of available supply over demand. The following calculations represent the existing margin of safety for the Southington Water Company (SWC). The average daily and peak day demands for the year 2005 are projected to be 4.18 and 7.86 million gallons per day (MGD) respectively, which includes 132,500 gallons per day (GPD) of flows allocated for future industrial development. According to discussions with the Southington Water Department, none of the 132,500 GPD has been allocated. However, several pending projects may require some of this allocation.

The estimated daily demand for the industrial park is expected to be between 70,000 and 150,000 GPD. The upper range of flows exceeds the 132,500 GPD previously allocated for industrial expansion. SWC indicated that reallocation of flow from other uses (e.g., residential or commercial) may be necessary if the 132,500 available for industrial use is exceeded. The margin of safety calculations below were based on the year 2010 projections.

1. Margin of Safety (MOS) to Meet Average Day Demand for 2010

$$MOS = \frac{Supply}{Demand} = \frac{10.0MGD}{4.38MGD} = 2.28$$

2. Margin of Safety to Meet Peak Day Demand for 2010

$$MOS = \frac{Supply}{Demand} = \frac{10.0MGD}{8.23MGD} = 1.22$$

The Southington Water Company system provides a margin of safety of 22 percent for peak day conditions. The State of Connecticut Department of Public Utilities recommends a 15 percent margin of safety (i.e. 1.15) for average day conditions. The margin of safety for average day conditions (2.28) exceeds this recommendation for the year 2010 projections.

##### 4.2.4.2 Sanitary Sewer

The development scenarios for Site #3 presented in [Section 4.1](#) are evaluated below to determine the range of potential impacts on the Southington sanitary sewer system.

The projected sewer flows were calculated based on the square footage of each type of use within the three development scenarios. Office space within the proposed facilities was assumed to consist of up to three stories, which is the maximum building height allowed by the Southington zoning regulations within the I-1 zone. Manufacturing and distribution space were assumed to consist of one story. The maximum number of building occupants was estimated based on the BOCA 1996 building code unit occupancy values (1 person per 100 SF) and total building floor area within each use. Average daily sewer flow rates were

estimated as 15, 7.4, and 11 gallons per day per employee for office space, light manufacturing, and distribution space, respectively (Metcalf and Eddy, 1981). Table 4-5 summarizes the anticipated daily sanitary sewer flows for the range of development scenarios considered.

**Table 4-5. Projected Average Daily Sanitary Sewer Flows**

| Scenario | Use                 | Percentage | Area       | Average Daily Flow (GPD) |
|----------|---------------------|------------|------------|--------------------------|
| 1        | Office              | 50%        | 265,196 SF | 119,338                  |
|          | Light Manufacturing | 30%        | 159,118 SF | 11,759                   |
|          | Distribution        | 20%        | 106,079 SF | <u>11,753</u>            |
|          |                     |            |            | <b>142,850</b>           |
| 2        | Office              | 30%        | 159,118 SF | 71,603                   |
|          | Light Manufacturing | 50%        | 265,196 SF | 19,598                   |
|          | Distribution        | 20%        | 106,079 SF | <u>11,759</u>            |
|          |                     |            |            | <b>102,960</b>           |
| 3        | Office              | 10%        | 53,039 SF  | 23,878                   |
|          | Light Manufacturing | 20%        | 106,079 SF | 7,845                    |
|          | Distribution        | 70%        | 371,275 SF | <u>41,137</u>            |
|          |                     |            |            | <b>72,860</b>            |

Scenario 1 results in the largest average daily flow due to the greater percentage of office space, which has proportionally higher sewer flows per occupant than either manufacturing or distribution uses. This increase in average daily flow (0.142 MGD) is a small fraction of the available reserve capacity (3 to 4 MGD) of the Southington wastewater treatment plant.

A peak factor of 5.1 was applied to the average daily flows to estimate peak daily flows (New England Interstate Water Pollution Control Commission, 1998). The resulting range of estimated peak daily sewer flows is 265 and 500 GPM. Based on discussions with the Southington Engineering Department, there is currently no flow data to fully evaluate the effects of these peak flows on the existing sewer system in the vicinity of the site. However, the grade of the existing sewer along Captain Lewis Drive is believed to be too shallow to accommodate significant increases in peak flows, such as the total peak flows anticipated from the proposed industrial park. The sewer along Captain Lewis Drive may be able to accommodate a fraction of the peak flows anticipated from the entire development, such as the sewer flows from the northern portion of Site #3. If the Captain Lewis sewer line cannot accommodate flows from the northern portion of the site, pumping would likely be required to direct sewer flows from the northern portion of the site to the existing sanitary line on West Queen Street or the proposed sanitary line on West Street. Metering of existing sewer flows in the sanitary line on West Queen Street is recommended to confirm the remaining capacity of this line and the ability to accommodate flow increases from the proposed development.

The western portion of the site is lower in elevation than Robert Porter Road and Captain Lewis Drive. Sewage from this portion of the site would require a gravity connection to the proposed sewer line on West Street. The Town has indicated that the proposed 8 to 10-inch sewer line in West Street and proposed pump station near the Bristol town line that are

currently under design would have adequate capacity to handle peak flows from the entire industrial park development.

#### 4.2.4.3 Storm Drainage

Development of the proposed industrial park will result in the conversion of existing undeveloped land (forest and meadow) to roadway and developed industrial lots. This change in land use and increase in impervious cover will result in a number of hydrologic changes at the site including an increase in the stormwater runoff volume and peak discharge and a decrease in runoff travel time and groundwater recharge. Development of the site will also introduce new sources of stormwater pollutants and provide impervious surfaces that accumulate pollutants between storms and quickly wash off during storm events and discharge to downstream receiving waters.

The stormwater runoff from the site will ultimately tie into the existing storm drainage systems associated with the adjacent roadways, including Robert Porter Road and Captain Lewis Drive to the south and east and West Street and West Queen Street to the south and west. Both the initial development of the industrial park and subsequent development of individual lots and facilities will be subject to local, state, and federal stormwater quantity and quality control requirements. The Town of Southington regulations require zero net increase in peak flow rates off-site, which will require on-site stormwater detention or retention/infiltration. In addition, DEP's forthcoming stormwater quality manual (*Connecticut Stormwater Quality Manual*, draft) requires new development projects to meet stormwater performance criteria for runoff volume reduction and groundwater recharge, peak flow control and stream channel protection, and pollutant reduction. These local and state requirements will apply to this project.

The site design for the project should incorporate design elements that reduce the potential for adverse impacts and address the root causes of potential stormwater impacts. The site layout should seek to preserve pre-development hydrologic conditions to the extent possible by incorporating the following principles:

- Designing the development to fit the terrain
- Limiting land disturbance activities
- Reducing or disconnecting impervious areas
- Preserving and utilizing natural drainage systems
- Providing setbacks and vegetated buffers
- Minimizing the creation of steep slopes
- Maintaining pre-development vegetation

The proposed project should incorporate alternative site design practices, to the extent that local land development regulations will allow, for development of the proposed roadways and lots to minimize impervious surfaces, reduce the hydraulic connectivity of impervious surfaces, and encourage infiltration and stormwater renovation. Other Low Impact Development (LID) stormwater management practices should be considered to promote a decentralized approach for managing the full range of hydrologic and water quality issues at the site. Such strategies may include the use of water quality swales in place of traditional

storm drainage piping, infiltration of runoff near the source of generation using bioretention or rain gardens, and the use of multi-purpose constructed wetlands or similar stormwater ponds/infiltration for stormwater quantity and quality management.

Downstream impacts could occur due to the timing of peak flows from multiple detention facilities within the watershed. The peak discharge from on-site detention facilities for the proposed industrial park development could potentially coincide with the peak discharge from the detention facilities in the existing industrial park, resulting in increases in peak flows at critical downstream locations such as road culverts and areas prone to flooding. A downstream hydrograph analysis should be performed, consistent with guidance contained in the draft DEP stormwater manual, to ensure that the proposed development does not increase post-development peak flows and velocities at downstream locations within the watershed.

#### 4.2.4.4 Electrical, Emergency Power, and Energy

Power is available in the area and will be extended into the proposed development.

#### 4.2.4.5 Natural Gas

Natural gas with adequate capacity is available in the area and will be extended into the proposed development.

#### 4.2.4.6 Telecommunications & Cable

Telecommunications and cable service are already available in the area and will be extended into the proposed industrial park. No impact on these utilities is anticipated as a result of this project.

#### 4.2.5 Hazardous Materials

Hazardous materials and waste generated at the industrial park facilities will be appropriately and temporarily stored for removal by a certified contractor and disposed or treated at a certified and regulated site. Similar to the existing adjacent industrial park, the types of facilities (i.e., light industrial, office space, and warehouse/distribution) that will occupy the proposed industrial park are unlikely to generate large amounts of hazardous waste. Therefore possible hazardous releases or accidents are less likely.

As part of a Phase I ESA conducted on the site, identified RECs related to historical agricultural use, existing debris, and nearby petroleum releases are not expected to significantly impact the proposed project site. The site is located at a higher elevation in relation to the surrounding properties. Therefore, impacts to groundwater and soil on adjacent properties are not likely to impact soil and groundwater on the proposed project site.

Any remaining debris (i.e., residential construction debris, road construction debris, abandoned vehicles, old tires, abandoned appliances) on the site should be removed, and if any evidence of a release (including staining, stressed or dead vegetation, or odors) is found,

soil sampling is recommended. The proposed site is believed to contain some historical agricultural use such as dairy farming, pastureland, hayfields, etc. Agricultural crops with typically high applications of pesticides and herbicides (e.g., tobacco and strawberries) are not believed to have been cultivated on the subject sites. However, as with any site that has been used agriculturally, residual concentrations of pesticides and herbicides may exist in the soil. If public exposure to the soils at the site is anticipated, soil sampling is recommended.

4.2.6 Solid Waste and Recycling

Solid waste and recyclables generated within the industrial park will be collected and appropriately stored for removal by a private waste hauler and disposed at a certified and regulated facility in accordance with applicable regulations.

4.2.7 Aesthetics and Viewsheds

The project area currently supports industrial development. However, a significant portion of the proposed project site is bordered by residential property. The development of an industrial park has the potential to impact the aesthetic and viewshed quality of adjoining residential land. Final design considerations will include preservation of a minimum 50-foot wooded buffer to screen the industrial park from the adjacent residential land use.

4.2.8 Cultural Resources

The majority of the proposed project site has low to moderate sensitivity for archaeological resources. Based on investigations conducted, there appears to be no potential direct or indirect impacts to historical or cultural resources at this site. Table 4-6 summarizes the results of the Phase Ia and Partial Phase Ib Archaeological Reconnaissance Survey of the site and the additional required testing for areas of low to moderate and moderate archaeological sensitivity. Additional field testing will be performed in the moderate potential areas before the final design is completed.

**Table 4-6. Summary of Archaeological Reconnaissance Survey Findings**

| <b>Archaeological Sensitivity</b>         |                                  |                                  |
|---|----------------------------------|----------------------------------|
| <b>Low</b>                                | <b>Low to Moderate</b>           | <b>Moderate</b>                  |
| 14%<br>(10 acres)                         | 85%<br>(59 acres)                | 1%<br>(1 acres)                  |
| <b><i>Additional Required Testing</i></b> |                                  |                                  |
| No further testing                        | 15-m intervals on 60-m transects | 15-m intervals on 15-m transects |

The areas of low to moderate sensitivity are those on well-drained, relatively level soils that show no evidence of disturbance and are greater than 50 meters from a wetland or water source. Areas of moderate archaeological sensitivity are defined as undisturbed, well-drained, relatively level and within 50 meters of a wetland or water source. In order to

conclusively determine the presence of prehistoric sites at the preferred alternative location, additional subsurface testing of the moderate-potential area at 15-meter intervals, the minimum testing intensity recommended by the Connecticut Historical Commission (CHC), will be performed prior to development of the site. According to CHC standards, set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*, 15-meter-interval subsurface testing would also be required in the areas of low to moderate sensitivity unless an argument for less intensive testing can be made. However, less intensive testing is appropriate in these areas, and coordination with the staff archaeologist of the CHC is recommended to develop a mutually acceptable testing design. Specifically, test pits could be excavated at 15-meter-intervals along transects spaced 60 meters apart in these areas, rather than 15 meters apart.

#### 4.3 Natural Resources

##### 4.3.1 Geology, Topography, and Soils

Existing topsoil in the areas of new construction is expected to be stripped away, and some site grading will be required as part of this project. However, the site is relatively flat, and no significant alteration of the site topography is anticipated as a result of the project. Two small wetland areas are identified on the project site in the western and northern extremities. The western wetland is outside of the proposed development area. The northern wetland may experience impacts related to an adjacent proposed access road. The road will not be constructed within the wetland area or the wetland buffer areas, however mitigation may be required as a result of grading and drainage structures.

##### 4.3.2 Farmland Soils

Significant impacts to farmland soils are not anticipated at the proposed project site because the vast majority of the site consists of non-farmland soils. Farmland soils along the southwest border of the site are not currently used for agricultural purposes, and are not located adjacent to active agricultural properties. Based on the development plans for the project site, impacts to these soils are not expected.

##### 4.3.3 Hydrology and Water Quality

As described in Section 4.1.4.3 (Storm Drainage), stormwater runoff from the construction and operation of the proposed industrial park poses the greatest potential for hydrologic and water quality impacts at the site.

Construction activity associated with the initial development of the industrial park and subsequent development of the individual lots and facilities has the potential for stormwater and water quality impacts from erosion and sedimentation. The construction phase of the project will be subject to local erosion and sediment control requirements and the DEP *General Permit for the Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activity*. Construction-related stormwater management activities will be subject to review under local site plan review and the DEP General Permit. An erosion and sedimentation control plan will be implemented for the construction phase of the project. This will follow the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*.

The construction of roadways, buildings, and parking areas within the industrial park will create areas of impervious surfaces with subsequent increases in runoff quantity and reduction in groundwater recharge. Additionally, vehicle traffic, landscaping activities, and industrial activities associated with the proposed development will introduce new potential sources of stormwater pollutants and increase the potential for pollutant loadings as compared to the existing undeveloped land use at the site. The proposed project will incorporate stormwater Best Management Practices (BMPs) to offset these potential impacts, including site design principles to minimize increases in impervious cover and runoff flow rate and volume, stormwater treatment practices to mitigate increases in pollutant loadings and water quality impacts, and pollution prevention and source controls to further address water quality impacts associated with industrial activities. The selection, design, installation, and operation of these BMPs will be consistent with guidance contained in the forthcoming *Connecticut Stormwater Quality Manual* (DEP, draft).

Stormwater treatment practices that should be considered include stormwater ponds and wetlands, infiltration practices, filtering practices, water quality swales, and other proprietary treatment systems. Low Impact Development (LID) strategies should also be integrated into the roadway and lot-level site design to promote a decentralized approach for managing the full range of hydrologic and water quality issues at the site. Recommended LID management practices include the use of water quality swales in place of traditional storm drainage piping, infiltration of runoff near the source of generation using bioretention or rain gardens, and the use of multi-purpose stormwater basins for combined stormwater quantity and quality management.

An Operation and Maintenance (O&M) Plan will also be required for the proposed stormwater management facilities. The O&M Plan will identify recommended inspection and maintenance tasks, including routine and non-routine maintenance, for each of the major types of stormwater management facilities at the site, including the stormwater collection and conveyance system. The O&M Plan will also identify responsible parties and financing provisions for maintenance activities. Street sweeping of the industrial park roads, the use of alternative lawn care and landscaping practices, the judicious use of fertilizers and pesticides, xeriscaping (landscaping to reduce water usage) techniques, and other source control practices should be considered for the industrial park development.

Rehabilitation of Captain Lewis Drive and associated drainage improvements provide an opportunity for stormwater retrofits and water quality mitigation. The stormwater retrofit concepts described in the draft DEP stormwater quality manual should be incorporated into any improvements made to Captain Lewis Drive.

Stormwater discharges from individual industrial facilities that will eventually occupy the industrial park will also be potentially subject to the DEP *General Permit for Stormwater Discharges Associated with Industrial Activity* if specific permit applicability thresholds are triggered. Under this permit, regulated facilities are required to develop and maintain a site-specific Stormwater Pollution Prevention Plan (SWPPP) that outlines specific BMPs for reducing potential stormwater pollution from the site.

No significant impacts to groundwater quality are anticipated as a result of the proposed development. The entire site will be served by sewers, and only clean stormwater runoff (i.e., runoff from non-metal roofs and roofs without industrial air emission sources) or stormwater runoff that receives pretreatment for oil/hydrocarbons and soluble pollutants will be infiltrated into the ground. Additionally, no impacts to groundwater flow patterns within the project site are expected to result from the site development.

The proposed industrial park will not be located in the 100-year floodplain. Therefore, the project is not anticipated to result in flood hazard impacts.

#### 4.3.4 Ecological Resources

The proposed project would require the removal of trees to accommodate the buildings, roads, and parking areas associated with the industrial park. An exact determination of the area of disturbance will depend on the exact footprints of the proposed industrial facilities. Construction would result in the displacement of small mammal and bird species that inhabit the area. The project area, although primarily forested, is partially isolated from other natural areas by residential and industrial development, possibly resulting in the observed absence of larger species such as deer which would otherwise be expected to utilize this type of habitat. The development of this site would further prevent the use of certain species that have larger home ranges and are therefore more sensitive to human disturbance.

The site is not listed in the Natural Diversity Database, there are no State or Federally Listed Species observed, and there is no potential for State or Federally Listed Species to exist on the site. Therefore, no development impacts are anticipated in relation to these ecological resources.

Small wetland areas are located in the northern extremity of the property and in the West Street right of way. The West Street wetland is outside the proposed area of development and is not expected to be impacted based on the development plans for the project site. The northern wetland, which was not previously identified on the Town wetlands mapping but was field-verified by a soil scientist, may be impacted by a potential access road to the industrial park from Captain Lewis Drive. An approximately 50-foot segment of unimproved Town road currently extends westward into the site from near the end of the Captain Lewis Drive cul-de-sac. This road would likely encroach upon the northern edge of the identified wetland and associated regulated area if it were to be extended into the site from its current location. Site access north of the wetland area is potentially restricted by the existing residences of the property owners on the northern portion of the property. According to discussions with the Town Economic Development Office, the property owners have indicated their willingness to sell their homes and vacate the site, if necessary, to provide access from the adjacent industrial park and additional developable area. In addition, the Town Economic Development Office has also indicated that another small undeveloped parcel along Captain Lewis Drive recently came onto the market and could be purchased by the Town to provide access from Captain Lewis Drive.

Although the exact configuration of the site access from Captain Lewis Drive is unknown, efforts will be made to avoid the northern wetland or regulated area. Construction activities in nearby upland areas will be controlled to avoid or minimize impacts to this wetland.

However, wetland mitigation will likely be required depending on the degree of impacts to this wetland. Coordination with the Connecticut DEP and Southington Inland Wetlands and Watercourses Agency will be necessary to determine the type and extent of wetland mitigation that will be required.

#### 4.4 Socioeconomic Resources

##### 4.4.1 Land Use and Zoning

The construction of the industrial park is consistent with the permitted uses of the Industrial I-1 Zone. However, a change in zoning to Industrial I-1 is recommended for the western portion of site, which is currently zoned as Business Limited (BL), to create uniform zoning throughout the entire site and allow for maximum use of the site by industrial facilities consistent with the I-1 zone. The existing Southington zoning regulations will continue to place controls on future development. Industrial land use currently exists to the east and south of the site. In order to be compatible with residential land use to the north and west and create a transition between industrial and residential development, a minimum 50-foot wooded buffer will be preserved between the industrial park and the adjacent residential lots.

##### 4.4.2 Long Range State and Local Planning

###### 4.4.2.1 Statewide Planning

The proposed industrial park construction is consistent with the policies and principles of the draft C&D Plan in terms of both specific goals for Growth Areas and more general goals and strategies for conservation and development in the state. In keeping with the draft C&D Plan guidelines, the project helps to concentrate development along major transportation corridors (i.e., I-84), thereby indirectly conserving more traditional rural lands outside these areas. The project is grouped with similar development in a Growth Area with existing infrastructure and the capacity to support growth and is not located in a Regional Center or Neighborhood Conservation Area. There are no Conservation Areas on the site and Preservation Areas are small and located in areas where development may be avoided or restricted to minimize impacts to the resource areas. Also consistent with the draft C&D Plan, the project seeks compliance with all levels of government and promotes integrated planning on a Statewide, Regional, and Local basis.

###### 4.4.2.2 Regional Planning

The proposed project supports the general goal of the *Central Connecticut Regional Development Plan* (CCRDP) in that it will assist in improving the quality of life in the regional planning area. The project site is located in an open space/undeveloped area, which is available for development. The loss of open space will be minimized as much as possible in the final design considerations. Due to limited environmental constraints and concerns and no currently active agricultural use, the project site is consistent with the development recommendations of the CCRDP. Though the site is not identified as an industrial area in the CCRDP, it is zoned industrial and therefore supports the growth of an industrial area. The intent of the project is believed to be in accordance with the goals of the CCRDP.

Discussions with the Central Connecticut Regional Planning Agency staff indicate that there is no apparent inconsistency with the CCRDP at this stage in the planning process. However, additional review of the project by the CCRDP will be necessary during the MDP process.

The Central Connecticut Regional Economic Development Action Agenda (CCREDAA) identifies the project site as an available industrial site. The project will also expand the skills and training opportunities currently available to the local work force, which is consistent with the Agenda.

#### 4.4.2.3 Local Planning

The proposed project site supports recommendations for future land use in the Southington Plan of Development. The project site satisfies siting considerations (Table 2-8) for the expansion of industrial development, with the exception of a partially residential surrounding land use. Mitigation measures, including preservation of a wooded buffer between the proposed industrial park and adjacent residential land use, will be implemented to address potential construction and operational impacts to nearby residential areas. Light industrial development is also consistent with the economic goals of the town.

#### 4.4.3 Community Facilities and Services

The proposed industrial park is not anticipated to negatively impact educational, health care, public safety, emergency services, or parks and recreational facilities.

#### 4.4.4 Demographics and Environmental Justice

The proposed project will not result in any disproportionately high and adverse human health or environmental effects on minority and low-income populations. As discussed in Section 2.3.4, the local area is not characterized by a minority or low-income population.

In general, the proposed project will address the significant loss of manufacturing jobs in Southington and the region. Based on the development scenarios presented, the proposed project will also present employment opportunities for unskilled, semi-skilled and highly skilled workers from within Southington as well as the surrounding region. It is anticipated that minority or low-income residents from within the greater Southington region may fill a portion of the employment opportunities created as a result of the proposed project.

#### 4.4.5 Economy, Employment, and Income

Based on generally accepted employee density estimates<sup>1</sup> and the development scenarios as presented in Table 4-7, the proposed development could provide between approximately 450 and 1,050 jobs at full buildout.

---

<sup>1</sup> Employee density estimates provided by Gruen, Gruen and Associates, *Employee and Parking in Suburban Business Parks: A Pilot Study*. Washington DC: Urban Land Institute, 1986.

**Table 4-7. Estimated Employment Impact**

| Scenario | Use                 | Percentage | Square Feet | Estimated Employment |
|----------|---------------------|------------|-------------|----------------------|
| 1        | Office              | 50%        | 265,196     | 764                  |
|          | Light Manufacturing | 30%        | 159,118     | 256                  |
|          | Distribution        | 20%        | 106,079     | 38                   |
|          | <i>Total</i>        |            |             | <i>1,058</i>         |
| 2        | Office              | 30%        | 159,118     | 458                  |
|          | Light Manufacturing | 50%        | 265,196     | 427                  |
|          | Distribution        | 20%        | 106,079     | 38                   |
|          | <i>Total</i>        |            |             | <i>923</i>           |
| 3        | Office              | 10%        | 53,039      | 153                  |
|          | Light Manufacturing | 20%        | 106,079     | 171                  |
|          | Distribution        | 70%        | 371,275     | 134                  |
|          | <i>Total</i>        |            |             | <i>457</i>           |

Based on average annual wage estimates provided by the Connecticut Department of Labor and employment estimates as presented in Table 4-7, the proposed development could generate between \$16.2 and \$37.4 million annually in wages at full buildout.

**Table 4-8. Estimated Earnings from Employment**

| Scenario  | Use          | Estimated Employment | Average Annual Wage | Est. Total Earnings |
|---|--------------|----------------------|---------------------|---------------------|
| 1   | Office       | 764                  | \$26,389            | \$20,155,012        |
|   | Light Man.   | 256                  | \$45,261            | \$11,594,951        |
|   | Distribution | 38                   | \$34,391            | \$1,313,333         |
|   | <i>Total</i> | <i>1,058</i>         | <i>\$35,347</i>     | <i>\$37,401,850</i> |
| 2   | Office       | 458                  | \$26,389            | \$12,093,007        |
|   | Light Man.   | 427                  | \$45,261            | \$19,324,918        |
|   | Distribution | 38                   | \$34,391            | \$1,313,333         |
|   | <i>Total</i> | <i>923</i>           | <i>\$35,347</i>     | <i>\$32,639,910</i> |
| 3   | Office       | 153                  | \$26,389            | \$4,031,002         |
|   | Light Man.   | 171                  | \$45,261            | \$7,729,967         |
|   | Distribution | 134                  | \$34,391            | \$4,596,666         |
|   | <i>Total</i> | <i>457</i>           | <i>\$35,347</i>     | <i>\$16,160,599</i> |
| Note:   |              |                      |                     |                     |
| Average annual wage estimates (most recent - 2002) for the Hartford Labor Market Area provided by the Connecticut Department of Labor |              |                      |                     |                     |

Based on per square foot construction costs for each of the respective uses, it is estimated that the development could increase Southington's property tax base from between \$31.9 and \$44.6 million at full buildout.

**Table 4-9. Estimated Property Tax Base Impact**

| Scenario  | Use          | Square Feet | Estimated Value/SF | Est. Total Value    |
|---|--------------|-------------|--------------------|---------------------|
| 1   | Office       | 265,196     | \$113              | \$29,967,194        |
|   | Light Man.   | 159,118     | \$56               | \$8,910,599         |
|   | Distribution | 106,079     | \$54               | \$5,728,242         |
|   | <i>Total</i> |             |                    | <i>\$44,606,035</i> |
| 2   | Office       | 159,118     | \$113              | \$17,980,316        |
|   | Light Man.   | 265,196     | \$56               | \$14,850,999        |
|   | Distribution | 106,079     | \$54               | \$5,728,242         |
|   | <i>Total</i> |             |                    | <i>\$38,559,557</i> |
| 3   | Office       | 53,039      | \$113              | \$5,993,439         |
|   | Light Man.   | 106,079     | \$56               | \$5,940,399         |
|   | Distribution | 371,275     | \$54               | \$20,048,848        |
|   | <i>Total</i> |             |                    | <i>\$31,982,686</i> |
| Note:   |              |             |                    |                     |
| Values based on estimated construction cost provided by <i>Marshall and Swift</i> |              |             |                    |                     |

In addition to the direct economic impacts described above, the proposed project will also have indirect impacts on employment, wages, and tax revenue as a result of economic spin-off activity. Assuming that the estimated job creation in Table 4-7 represents new jobs (rather than transfers from elsewhere in Connecticut), then a portion of the wages that are paid to these employees will support additional *indirect* jobs in other sectors of the local economy. This spin-off activity is estimated using published data provided by the U.S. Department of Commerce, Bureau of Economic Analysis in the Regional Input-Output Modeling System (RIMS II), utilizing average industry multiplier factors. This approach suggests that an additional 559 to 1,478 jobs would be supported in the Connecticut economy as a result of the build-out development scenarios.

Applying average annual wage estimates to the direct employment estimates results in a range of total potential wages of \$16 million to \$37 million per year, depending on the development scenario. These wages in turn would generate approximately \$517,000 to \$988,000 per year in state income tax. In addition, the indirect jobs supported by the project would generate another \$19 million to \$41 million in wages, resulting in additional income taxes to the State of Connecticut.

Other taxes that might accrue to the state would include any sales taxes paid by firms providing taxable goods or services and any special use taxes that apply to individual firms or industries. Similarly, individual businesses would be liable for Connecticut's corporate income tax (or personal income taxes for sole proprietorships and partnerships). It is not possible to estimate these sources of state revenues without further information on the nature of the businesses locating in the proposed Southington Industrial Park.

## 5.0 COSTS AND BENEFITS

Costs and benefits associated with a project may be both quantifiable (tangible) and non-quantifiable (intangible). In this case, quantifiable costs are those associated with acquisition and infrastructure improvements in order to prepare the project site for sale as individual lots within a municipal industrial park. Benefits are the jobs and income generated as a result of the development, as well as the potential for retention/expansion of manufacturing jobs in the region. The discussion of costs and benefits is based on the project description as presented in Sections 3.3 and 4.1 of this EIE.

### 5.1 Costs

Although actual acquisition costs will be determined by appraisal, based on current market value in the central Connecticut area, acquisition costs for the proposed project are estimated at \$2.9 million.

Infrastructure improvements and land development costs are estimated to be approximately \$1.93 million. This estimated cost includes \$480,000 for land clearing and excavation, \$520,000 for roadways and sidewalks, \$930,000 for drainage improvements, utility installation, and maintenance and protection of traffic during construction. Engineering design and permitting costs for the project, including the required additional archaeological field investigation, are estimated at \$170,000.

Mitigation costs associated with the project consist primarily of the traffic-related improvements described in Section 4.2.3.5. Total traffic-related mitigation costs are estimated at \$1.56 million, with the majority of the cost (\$1.48 million) associated with improvements to Captain Lewis Drive and the installation of a new traffic signal at the intersection of Captain Lewis Drive and West Queen Street. Pavement marking and signal modification at the intersection of West Queen Street and West Street is estimated at \$50,000, and signal timing and phasing modifications at the I-84 ramps are estimated at \$30,000. Depending on the final site layout, any impact to inland wetland resource areas may require mitigation, which is estimated at approximately \$20,000.

Total estimated project costs can be summarized as follows:

- Land Acquisition – \$2.9 million
- Site Development – \$1.93 million
- Engineering and Permitting – \$0.17 million
- Mitigation – \$1.58 million

Inclusion of a 20% contingency applied to the development cost (excluding land acquisition) would bring the total project cost to approximately \$7.3 million. It should be noted that these are order of magnitude cost estimates; while they represent a reasonable estimate of costs to develop the project as described in Sections 3.3 and 4.1 of the EIE, actual costs will depend on the final site design and timing of the industrial park.

## 5.2 Benefits

Benefits associated with the proposed industrial park development include jobs created by the development, earnings associated with those jobs, potential expenditures in the community, and tax revenue gained as a result of the development. As presented in Section 4.4.5 of the EIE, the development of an industrial park is anticipated to provide between approximately 450 and 1,050 jobs at full buildout, resulting in approximately \$16 to \$37 million in wages on an annual basis. An additional 559 to 1,478 indirect new jobs would be supported in the Connecticut economy as a result of economic spin-off activity, resulting in between \$19 and \$41 million per year in additional potential wages. It is also anticipated that workers in the industrial park will increase potential expenditures in the community through consumption of goods and services. Based on a per square foot construction cost, the development of an industrial park is estimated to increase the Southington property tax base by an additional \$31.9 to \$44.6 million at full buildout. As described in Section 4.4.5 of the EIE, the actual economic benefits associated with the project will depend on the mix of use types (i.e., office, light manufacturing, and distribution) present at full buildout. However, this provides an estimate of the benefits that could reasonably be anticipated as a result of the proposed project.

In addition to the quantifiable benefits associated with the project, the proposed project is anticipated to provide less tangible benefits to the quality of the life in the region by retaining and facilitating creation of manufacturing jobs, providing employment opportunities for workers with a range of skills and training, and generating additional tax revenue to support capital improvement projects benefiting the residents of Southington.

## **6.0 IMPACT ANALYSIS SUMMARY**

Based upon the findings presented in Section 4.0, Analysis of Impact, this section summarizes unavoidable adverse impacts associated with the proposed project, irreversible and irretrievable commitments of resources that will occur, cumulative impacts, and potential mitigation measures to reduce or minimize impacts associated with the construction and operation phases of the proposed industrial park project.

### 6.1 Unavoidable Adverse Impacts

Unavoidable adverse impacts related to the proposed project are those associated with the conversion of undeveloped land, regardless of consistency with zoning and local and regional plans of development. These include increases in traffic generation, utility and energy consumption and solid waste generation, as well as temporary impacts associated with the construction phase of the project. Mitigation measures identified to offset impacts are presented in Section 6.4.

#### ***Construction Phase***

Unavoidable adverse impacts resulting from the construction phase of the project include the following:

- Air Quality – Construction activities may result in short-term impacts on ambient air quality due to direct emissions from construction equipment and trucks and fugitive dust emissions. These emissions will be temporary and will affect only the immediate vicinity of the construction sites and the access routes for construction equipment. Emissions from project-related construction equipment and trucks are expected to be insignificant with respect to compliance with the NAAQS.
- Noise – Heavy construction equipment associated with site development may result in temporary increases in noise levels in the immediate area of construction.
- Solid Waste and Recycling – The construction of the project will result in the one-time generation of the construction-related waste and debris.
- Hydrology and Water Quality – Conversion of existing undeveloped land to roadways and other impervious or less pervious surfaces will result in increases in stormwater runoff volume, peak flow rate, and stormwater pollutant loads, as well as a decrease in groundwater recharge. Site design elements and post-construction stormwater quantity and quality controls will be implemented to mitigate these impacts.
- Ecological Resources – The construction of the proposed project will result in the removal of vegetation and trees from the currently undeveloped project site. The vegetation of site does not provide habitat for any threatened or endangered species or species of special concern. It appears that impacts to wetlands resources can be avoided through site layout. However, if impacts to a small area of wetlands cannot be avoided in order to provide access to the site, appropriate permitting and mitigation will be performed.

### ***Operational Phase***

Unavoidable adverse impacts associated with operation of the industrial park consist of the following:

- Noise – Operation of the industrial park will result in an increase in noise over the existing undeveloped conditions on the project site. However, a minimum 50-foot wooded buffer will be preserved between the industrial and adjacent residential land use, and all industrial operations will be required to conform to Connecticut noise regulations.
- Utilities and Services – The proposed project will result in an increase in utility use associated with the operation of industrial facilities in the industrial park, although existing utility capacity is available to support the industrial development.
- Solid Waste and Recycling – The operation of industrial facilities at the proposed site will result in additional generation of solid waste and recyclable materials.

- Traffic – The operation of an industrial park will result in additional traffic generation. Off-site mitigation measures have been identified to maintain acceptable Levels of Service at key intersections in the affected area.
- Energy – Additional energy will be consumed due to the operation of the industrial park. Although this increase in consumption is unavoidable, the use of new facilities may result in additional conservation compared to existing facilities.

## 6.2 Irreversible and Irretrievable Commitments of Resources

Irreversible and irretrievable commitment of resources associated with the proposed project consist of resources that remain committed to a project through its lifespan (i.e., irreversible commitment) or those that are consumed or permanently impacted as a result of the proposed project (i.e., irretrievable commitment). The following irreversible and irretrievable commitment of resources would result from the proposed project:

- Utilities and Services – The proposed project will result in an increase in utility consumption.
- Energy – The proposed project will result in consumption of non-renewable energy sources such as natural gas and oil.
- Economic Resources – The estimated project construction cost is approximately \$7.2 million dollars. Use of these funds for the industrial park will preclude their utilization for other purposes.
- Construction Resources – Various construction materials will be consumed as a result of the project development.
- Human Labor – An irretrievable commitment of human labor will result from the construction and operation of the industrial park.

## 6.3 Cumulative Impacts

CEPA regulations require that the sponsoring agency for a project consider the cumulative impacts of its actions. Cumulative impacts are those that result from the incremental impact of the proposed action when added to other past, present or reasonably foreseeable future actions. Potential cumulative impacts associated with the construction and operation of the proposed industrial park include:

- Traffic – The impact analysis presented in Section 4.2.3 incorporates existing traffic as well as future traffic generation associated with the proposed project, anticipated background growth in traffic, and traffic generating projects that have recently or are currently being reviewed by the Town Planning and Zoning Commission. As a result, the impacts described in Section 4.2.3 are cumulative in nature and can be offset by the mitigation measures identified.

- Utilities and Services – Like all new development, the proposed project will result in additional demand for utilities and services. While a cumulative impact to utilities will result from the combination of existing and future actions, those providing utilities in Southington indicate adequate capacity to accommodate foreseeable development.
- Solid Waste and Recycling – The proposed project, combined with other projects aimed at increasing manufacturing in Connecticut, will result in increased generation of solid waste.
- Hydrology and Water Quality – The peak discharge from on-site detention facilities for the proposed project could potentially coincide with the peak discharge from detention facilities in the existing industrial park, resulting in increases in peak flows at critical downstream locations such as culverts and areas prone to flooding. The potential downstream impacts will be offset by proper design of the stormwater detention facilities for the proposed industrial park, which will include a downstream hydrograph analysis.
- Long-Range Planning – The proposed project is consistent with state, regional, and local plans to retain and promote manufacturing businesses and locate those businesses in areas zoned for industrial development. As such, it is anticipated to have a beneficial cumulative impact on planning efforts at the local, regional and state level.
- Economy, Employment, and Income – The proposed project is consistent with DECD's efforts to attract and retain manufacturing businesses in Connecticut. This project, in combination with other planned and programmed projects throughout the state, is anticipated to have a beneficial impact on economic conditions and employment in Connecticut.

#### 6.4 Mitigating Measures and Considerations that Offset Adverse Environmental Impacts

Mitigation measures have been identified to reduce or offset adverse impacts associated with the proposed project. These are summarized in Table 6-1 by resource category as described in Sections 2 and 4 of this EIE. For resource categories for which no mitigation is proposed, the impact evaluation has determined that either the impacts are insignificant, requiring no mitigation, or that there will be no adverse impacts resulting from the proposed project.

#### 6.5 Certificates, Permits and Approvals

Permits, certificates and approvals associated with the proposed industrial park project can be divided into those required for the development of the industrial park to accept tenants (Table 6-2) and those associated with the construction and operation of businesses within the park (Table 6-3). The permits identified below are a preliminary list that may change based upon the actual engineering site design of the park and the activities of the individual facilities that locate within the park.

**Table 6-1. Mitigation Measures Summary**

| Resource Category                                    | Proposed Mitigation  |
|--|--|
| Air Quality  | <ul style="list-style-type: none"> <li>• Construction best management practices to limit fugitive dust impacts</li> <li>• Prohibition of excessive construction equipment idling</li> </ul>  |
| Noise and Light                                      | <ul style="list-style-type: none"> <li>• Conformance with Connecticut noise regulations</li> <li>• Limiting construction to daytime hours</li> <li>• Proper maintenance of construction equipment</li> <li>• Advance notification to nearby receptors if construction activities may produce temporary excessive noise levels</li> <li>• Minimum 50-foot wooded buffer to transition from industrial to residential land use</li> </ul>  |
| Traffic and Roadways                                 | <ul style="list-style-type: none"> <li>• A new traffic signal at the intersection of Captain Lewis Drive and West Queen Street</li> <li>• Rehabilitation of Captain Lewis Drive to accommodate increased traffic</li> <li>• Re-striping of westbound approach and signal phasing modifications at the intersection of West Street and West Queen Street</li> <li>• Cycle length modifications at the intersection of the I-84 eastbound and westbound ramps and West Street</li> </ul>   |
| Utilities and Services                               | <ul style="list-style-type: none"> <li>• Proposed connection to water, sewer, and storm systems should be coordinated with appropriate Town departments prior to construction</li> <li>• Confirmation of sewer line capacity through metering of existing sanitary flows</li> <li>• A new pump station may be required to direct sewer flows from the northern portion of the site to the existing sewer line on West Queen Street or the proposed sewer line on West St.</li> <li>• Post-development stormwater treatment practices to address local and state stormwater quantity and quality control requirements</li> <li>• Design of stormwater management system should include a downstream hydrograph analysis to evaluate and mitigate potential increases in peak flows at downstream locations</li> </ul> |
| Hazardous Materials                                  | <ul style="list-style-type: none"> <li>• Removal of any remaining debris on-site; soil sampling is recommended if evidence of a release is found.</li> <li>• If public exposure to the soils on-site is anticipated, soil sampling for residual pesticides and herbicides is recommended.</li> </ul>   |
| Solid Waste and Recycling                            | <ul style="list-style-type: none"> <li>• None</li> </ul>   |
| Aesthetics and Viewsheds                             | <ul style="list-style-type: none"> <li>• Minimum 50 foot wooded buffer to transition from industrial to residential land use</li> </ul>  |
| Cultural Resources                                   | <ul style="list-style-type: none"> <li>• Additional field testing required for archaeological resources</li> </ul>   |
| Geology, Topography and Soils                        | <ul style="list-style-type: none"> <li>• Construction sediment and erosion controls</li> </ul>   |
| Farmland Soils                                       | <ul style="list-style-type: none"> <li>• None</li> </ul>   |
| Hydrology and Water Quality                          | <ul style="list-style-type: none"> <li>• Construction sediment and erosion controls</li> <li>• Post-development stormwater treatment practices to address local and state stormwater quantity and quality control requirements, including runoff volume reduction, groundwater recharge, peak flow control, and pollutant reduction</li> <li>• Site design elements to minimize impervious cover and runoff peak flow rate and volume</li> <li>• An operation and maintenance plan for the stormwater management system</li> <li>• Stormwater retrofits associated with rehabilitation of Captain Lewis Drive to enhance water quality</li> <li>• Facilities to implement industrial pollution prevention programs</li> </ul>  |
| Ecological Resources                                 | <ul style="list-style-type: none"> <li>• Construction sediment and erosion controls</li> <li>• Wetland mitigation to address potential impacts associated with a proposed access road near the northern wetland; coordination with DEP and local inland wetlands commission is required to determine the type and extent of wetland mitigation</li> </ul>  |
| Land Use and Zoning                                  | <ul style="list-style-type: none"> <li>• Zone change recommended (BL to I-1) for western portion of site</li> <li>• Minimum 50-foot wooded buffer to transition from industrial to residential land use</li> </ul>   |
| Long Range State and Local Planning                  | <ul style="list-style-type: none"> <li>• None</li> </ul>   |
| Community Facilities and Services                    | <ul style="list-style-type: none"> <li>• None</li> </ul>   |
| Populations, Demographics and Environmental Services | <ul style="list-style-type: none"> <li>• None</li> </ul>   |
| Economy, Employment and Income                       | <ul style="list-style-type: none"> <li>• None</li> </ul>   |

**Table 6-2. Certificates, Permits, and Approvals Potentially Required for Initial Development of Industrial Park Site**

| <b>Permit/Approval</b>  | <b>Threshold</b>  | <b>Issuing Authority</b>                            | <b>Comments</b>  |
|---|---|---|--|
| Local Inland Wetlands and Watercourses Permit   | Work within wetland or associated resource area   | Southington Inland Wetlands and Watercourses Agency | Alternately, requires DEP Inland Wetlands Permit if project involves state funding or is considered a state action   |
| Site Plan Review and Approval   | Required for site development and issuance of building permits  | Southington Planning and Zoning Commission          |  |
| Sewer Construction/Connection Permit  | Required for construction of new municipal sewer system and connection to existing sewer system   | Southington Water Pollution Control Authority       |  |
| Other Utility Approvals   | Connection to existing natural gas line and development within existing overhead utility ROW  | Northeast Utilities, Yankee Gas                     |  |
| Dept. of the Army Programmatic General Permit   | Category I – less than 5,000 SF of wetland impacts<br>Category II – 5000 SF to 1 acre of wetland impacts  | U.S. Army Corps of Engineers, DEP                   | If wetland impacts are below 1 acre  |
| Section 404 Permit and Section 401 Water Quality Certification  | Greater than 1 acre of wetland impacts<br>401 WQC required for federal permit   | U.S. Army Corps of Engineers, DEP                   | If wetland impacts exceed 1 acre   |
| DEP Inland Water Resources Division General Permits <ul style="list-style-type: none"> <li>• Minor Grading</li> <li>• Utilities &amp; Drainage</li> </ul> | Grading for temporary access; placement of organic soils and wetland plantings in a regulated area for wetland creation or enhancement; placement, repair, or replacement of cables, conduits and pipelines located underground | DEP   |  |
| Flood Management Certification  | State actions in or affecting floodplains or natural or man-made storm drainage facilities  | DEP   | May be required for state-funded projects, or at the discretion of DEP   |
| General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities  | Required if total site disturbance exceeds 5 acres  | DEP   | Disturbance of less than 5 acres potentially regulated through the local Planning and Zoning approval process  |
| State Traffic Commission Major Traffic Generator Certificate  | Development >100,000 SF or 200 parking spaces   | State Traffic Commission                            | Prior to obtaining a Major Traffic Generator Certificate it is suggested that the development receive all local permits required by the Town of Southington. |
| State Traffic Commission Traffic Signal Permit  | Installation of a traffic signal at intersection of West Queen Street and Captain Lewis Drive   | State Traffic Commission                            |  |

**Table 6-3. Certificates, Permits, and Approvals Potentially Required for Development of Individual Industrial Lots and Operation of Facilities Within the Industrial Park**

| Permit/Approval  | Threshold   | Issuing Authority                                   | Comments  |
|--|---|---|---|
| Local Inland Wetlands and Watercourses Permit  | Work within wetland or associated resource area   | Southington Inland Wetlands and Watercourses Agency |   |
| Site Plan Review and Approval  | Required for site development and issuance of building permits  | Southington Planning and Zoning Commission          |   |
| Sewer Connection Permit  | Required for connection to existing sewer system  | Southington Water Pollution Control Authority       |   |
| Dept. of the Army Programmatic General Permit  | Category I – less than 5,000 SF of wetland impacts<br>Category II – 5000 SF to 1 acre of wetland impacts  | U.S. Army Corps of Engineers, DEP                   | If wetland impacts are below 1 acre   |
| Section 404 Permit and Section 401 Water Quality Certification   | Greater than 1 acre of wetland impacts<br>401 WQC required for federal permit   | U.S. Army Corps of Engineers, DEP                   | If wetland impacts exceed 1 acre  |
| General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities | Required if total site disturbance exceeds 5 acres  | DEP   | Disturbance of less than 5 acres potentially regulated through the local Planning and Zoning approval process |
| General Permit for the Discharge of Stormwater Associated with Industrial Activities                   | Discharge of stormwater associated with industrial activities at facilities having specific SIC codes   | DEP   |   |
| New Source Review  | Required for emissions released to the air from new and modified stationary sources of air pollution  | DEP   | Applicability will depend upon specific facility operations   |
| General Permit to Construct and/or Operate a New or Existing Emergency Engine                          | Engines having a maximum rated heat input $\geq 5$ MMBTU per hour using liquid fuel or $\geq 11$ MMBTU per hour using gaseous fuel or potential emissions of any air pollutant $\geq 5$ tons per year | DEP   | Applicability will depend upon specific facility operations   |
| General Permit to Construct and/or Operate a New or Existing Distributed Generation Engine             | Engines used to generate electricity for an emergency or demand response program with a maximum output value $\geq 50$ hp   | DEP   | Applicability will depend upon specific facility operations   |
| General Permit to Construct and/or Operate a New or Existing Surface Coating Operation                 | Surface coating operations with the potential to emit $> 15$ tons/year  | DEP   | Applicability will depend upon specific facility operations   |
| Individual Permit for Wastewater Discharge   | Wastewater discharges not eligible for coverage under a DEP General Permit  | DEP   | Applicability will depend upon specific facility operations   |
| General Permit for Discharge of Domestic Sewage  | Discharges of domestic sewage that are $>50,000$ GPD or $>5\%$ of receiving POTW design flow  | DEP   | Applicability will depend upon specific facility operations   |

| <b>Permit/Approval</b>   | <b>Threshold</b>  | <b>Issuing Authority</b> | <b>Comments</b>   |
|--|---|--------------------------|---|
| General Permit for Discharge of Minor Boiler Blowdown Wastewater                   | Discharges of wastewater from bleed off or draining of water from a boiler during boiler operation for the purpose of eliminating solids; cannot exceed 5000 GPD per boiler | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for Discharge of Minor Non-contact Cooling and Heat Pump Water      | Discharges of non-contact cooling water and heat pump water; discharges must not exceed 50,000 GPD or 1% of POTW design capacity  | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for the Discharge of Minor Photographic Processing Wastewater       | Discharge of no more than 5000 GPD to a municipal sanitary sewer  | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for the Discharge of Minor Printing and Publishing Wastewater       | Discharge of no more than 1000 GPD of minor printing and publishing to a municipal sanitary sewer and no more than 25,000 GPD or 1% of POTW design capacity                 | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for the Discharge of Minor Tumbling or Cleaning of Parts Wastewater | Discharge of no more than 50,000 GPD or 5% of POTW design capacity of wastewater created from the minor tumbling or cleaning of parts to a municipal sanitary sewer         | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater  | Discharge of various forms of wastewater including building maintenance wastewater and sprinkler system testwater   | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for the Discharge of Vehicle Maintenance Wastewaters                | Discharge of no more than 15,000 GPD of wastewaters generated by vehicle maintenance  | DEP                      | Applicability will depend upon specific facility operations |
| General Permit for the Discharge of Water Treatment Wastewaters                    | Required for the initiation, creation, origination or maintenance of any water treatment wastewater discharge   | DEP                      | Applicability will depend upon specific facility operations |

## **APPENDIX A**

### **DECD Stage One Environmental Assessment Findings**

**APPENDIX B**

**Notice of Scoping and Comments**

**APPENDIX C**

**Market Analysis**

**APPENDIX D**  
**Public Information Meeting**

**APPENDIX E**  
**Traffic Evaluation Data**

## **APPENDIX F**

### **Phase Ia/Partial Phase Ib Archaeological Reconnaissance Survey Report**

**APPENDIX G**

**Ecological Resources Evaluation Report**

**APPENDIX H**  
**Existing Conditions Summary**

**APPENDIX I**

**List of Preparers**

**APPENDIX J**  
**Persons Contacted**

## **APPENDIX K**

### **References**