

Connecticut Siting Council Docket No. 272

Development & Management Planfor the

Middletown-Norwalk 345-kV Transmission Line Project

Crossings of Watercourses and Railroads in Segments 3, 4a and 4b

Volume 3 of 3

April 2007





TRAFFIC INVENTORY REPORT FOR MAINTENANCE AND PROTECTION OF TRAFFIC

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT

CROSSINGS OF WATERCOURSES AND RAILROADS IN SEGMENTS 3, 4A AND 4B

TOWN OF WESTPORT, CONNECTICUT TOWN OF FAIRFIELD, CONNECTICUT AND CITY OF BRIDGEPORT, CONNECTICUT

Prepared For:



Prepared By:
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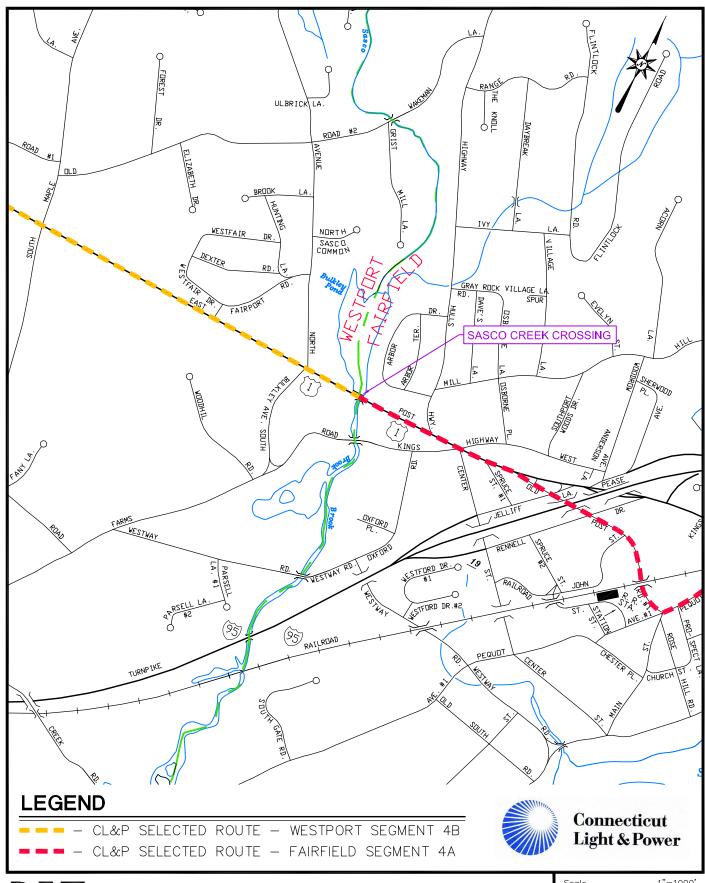
I. INTRODUCTION

Connecticut Light and Power (CL&P) in conjunction with the United Illuminating Company will be constructing approximately 23 miles of a 345-kV underground transmission line through Norwalk, Westport, Fairfield, Bridgeport, Stratford, and Milford. As approved by the Connecticut Siting Council, most of the route is in the public right-of-way, primarily along the State Highway System.

This report, prepared for CL&P, focuses on portions of the selected transmission line route that cross watercourses. Specifically, this report concentrates on three crossings located in the Towns of Westport and Fairfield and also in the City of Bridgeport. Figures A.1, A.2, and A.3 show the crossing locations for Sasco Creek, Mill River (Southport Harbor), and Ash Creek, respectively. The site location for the Sasco Creek Crossing is located at the intersection of U.S. Route 1 (Post Road) and CDOT Bridge No. 00320 at the Town Line for Westport and Fairfield. The site location for the Mill River (Southport Harbor) Crossing is located at the intersection of U.S. Route 1 (Post Road) and CDOT Bridge No. 05858. This location is approximately 380 feet west of the intersection with Sasco Hill Road in the Town of Fairfield. The Ash Creek Crossing is located at the intersection of Route 130 (Post Road and Fairfield Avenue) and CDOT Bridge No. 01668 at the Town/City Line for Fairfield and Bridgeport. The remaining portion of the entire selected route in Norwalk, Westport, Fairfield, Bridgeport, Stratford, and Milford is covered in separate documents.

This report provides a recommended strategy for maintenance and protection of traffic. The strategy includes the locations where typical Connecticut Department of Transportation (ConnDOT) Maintenance Traffic Control Plans will be utilized; the locations where more specific maintenance and protection of traffic plans will be developed; and the recommended hours of operation. Recommendations are based on a detailed field inventory of the selected routes, traffic volumes, the type and duration of construction, and the data compiled from local and state agencies. Specifically, local and state agencies

were contacted for pertinent traffic data, roadway improvement projects, development projects, yearly local events, transit and bus routes and other data that may affect protection of traffic planning. maintenance and This report discusses traffic/transportation environment along the route, the proposed construction, other construction projects such as public roadway improvement projects and major traffic generators, key locations, and traffic issues. Traffic issues include hours of operation, lane closures, need for detours, and areas where on-street parking will be affected. This report forms the basis for the development of detailed Traffic Control Plans (TCP) and a detailed maintenance and protection of traffic report to be implemented for construction of the underground transmission line segments crossing Sasco Creek, Mill River (Southport Harbor), and Ash Creek in the Towns of Westport and Fairfield and also in the City of Bridgeport.





WATERCOURSE CROSSING LOCATION

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT WESTPORT/FAIRFIELD, CONNECTICUT
 Scale
 1"=1000'

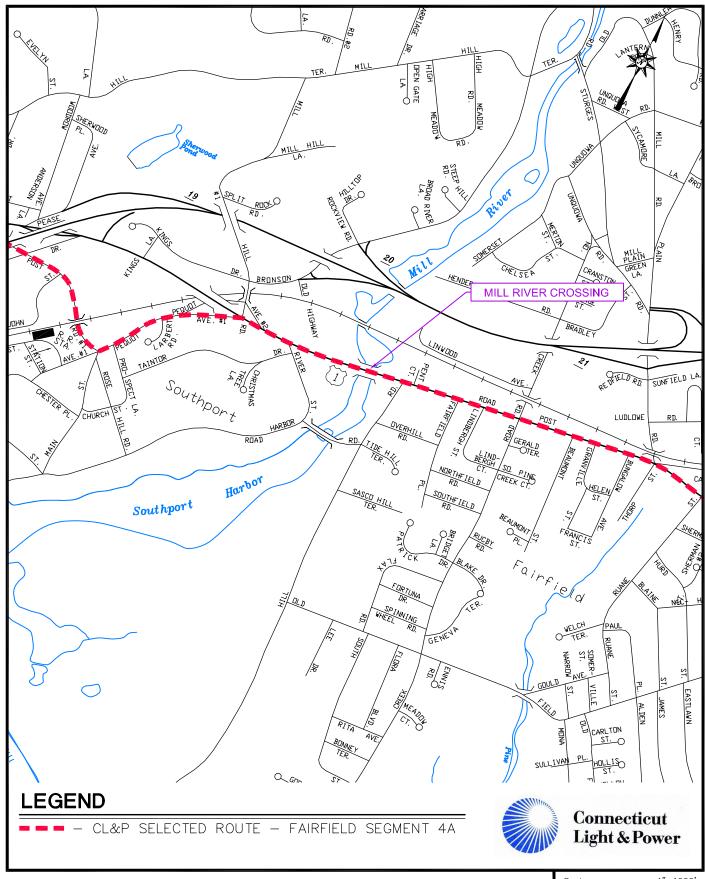
 Project No.
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 Date
 2/06/07

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 CAD File
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FIG. A.1

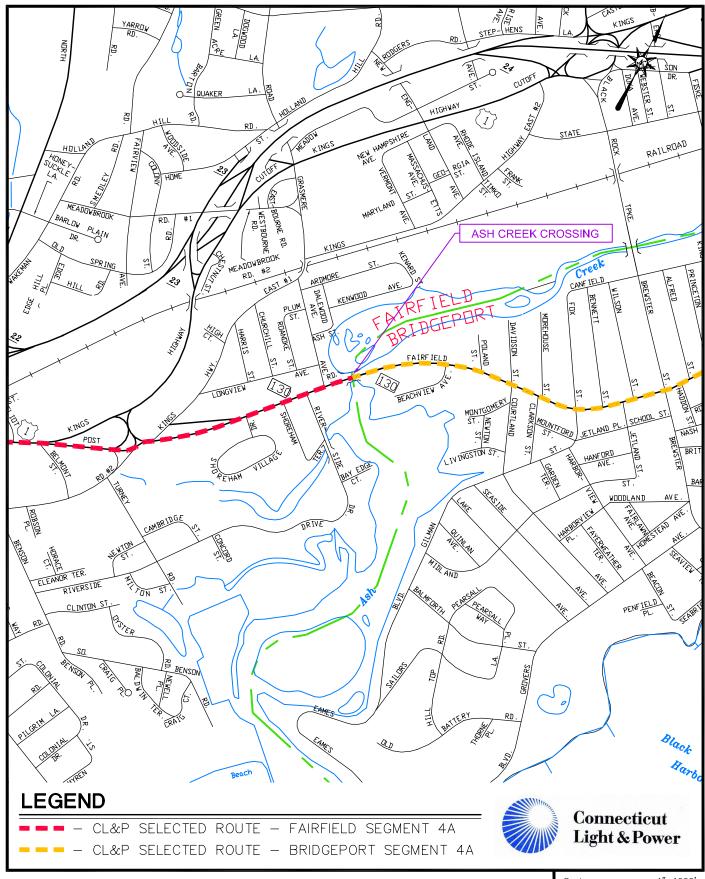




WATERCOURSE CROSSING LOCATION

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD, CONNECTICUT Scale 1"=1000'
Project No. 05C1314
Date 2/06/07
Revised -/--/CAD File MR_TRPT05C1314 FIG A2

FIG. A.2





WATERCOURSE CROSSING LOCATION

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD/BRIDGEPORT, CONNECTICUT
 Scale
 1"=1000'

 Project No.
 05C1314

 Date
 2/06/07

 Revised
 -/--/

 CAD File
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FIG. A.3

II. CORRIDOR INVENTORY AND DESCRIPTION

An investigation of the existing traffic/transportation conditions of the roadways along the portions of the selected transmission line route crossing Sasco Creek, Mill River (Southport Harbor), and Ash Creek formed the basis for preparing a recommended strategy for maintenance and protection of traffic. This investigation included a detailed field reconnaissance and preliminary research of pertinent planning and traffic data at local and State agencies.

Selected Transmission Line Route

As illustrated in Figure A.1, one segment of the selected transmission line route addressed in this report travels along U.S. Route 1 (Post Road) and across CDOT Bridge No. 00320 over Sasco Creek. This segment is located on the Town Line for the Towns of Westport and Fairfield. The second segment of the selected transmission line route addressed in this report is illustrated in Figure A.2. This segment travels along U.S. Route 1 (Post Road) and across CDOT Bridge No. 05858 over Mill River (Southport Harbor). This location is approximately 380 feet west of the intersection with Sasco Hill Road in the Town of Fairfield. Figure A.3 illustrates a third segment of the selected transmission line route addressed in this report. This segment travels along Route 130 (Post Road and Fairfield Avenue) and across CDOT Bridge No. 01668 over Ash Creek. This segment is located on the Town/City line for the Town of Fairfield and the City of Bridgeport.

For description and maintenance and protection of traffic purposes, the segments of the selected transmission line route addressed in this report are discussed individually. The following graphics/charts are included in this report to aid in the understanding of each segments' characteristics:

 Figures B.1, B.2, and B.3, located in the body of this report, summarize traffic signal locations as well as Average Daily Traffic volumes (ADT's) in the vicinity of each of the watercourse crossings, respectively.

- Figures D.1, D.2, and D.3 located in Appendix II pictorially summarize land use classifications and typical roadway widths at each watercourse crossing, respectively.
- Hourly traffic volume graphs for selected locations can be found in Appendix III.
- Aerial photographs of each signalized intersection located in the vicinity of each of the watercourse crossings are provided in Appendix IV.
- Aerial photographs of each watercourse crossing are provided in Appendix VI.

A. Sasco Creek Crossing

This approximately 85-foot long segment of U.S. Route 1 (Post Road) at CDOT Bridge No. 00320 is an east/west State-maintained facility with the following characteristics:

- Four travel lanes; two 12-foot wide eastbound travel lanes with a 2-foot shoulder and two 12-foot wide westbound travel lanes with a 2-foot shoulder
- Curb-to-curb width in this segment ranges from 52' to 55'
- Posted speed limit of 35 miles per hour
- Illumination is provided throughout
- Sidewalk availability is sporadic
- On-street parking is permitted in select locations in the vicinity of this watercourse crossing

There is a bus route traveling through this portion of U.S. Route 1 (Post Road) in the vicinity of the Sasco Creek Crossing. On the Town of Westport side of this segment, there is a bus stop located approximately 600 feet west of Sasco Creek at the intersection of U.S. Route 1 (Post Road) and Bulkley Avenue North and Bulkley Avenue South. On the Town of Fairfield side of this segment, there is a bus stop located approximately 850 feet east of Sasco Creek at the intersection of U.S. Route 1 (Post Road) and Hulls Highway.

Land uses adjacent to the Sasco Creek Crossing are a combination of commercial and mixed commercial/residential. Specifically, the properties adjacent to the Sasco Creek Crossing consist of retail stores (plaza type) and commercial type businesses. In relation to

the existing bridge (CDOT Bridge No. 00320), the parking facility for the Westport Plaza is located southwest of the existing bridge. The Old Sasco Mill, which has been converted for retail, is located at the northwest corner of the existing bridge and abuts the U.S. Route 1 (Post Road) highway line.

Two signalized intersections are located along this portion of U.S. Route 1 (Post Road) in the vicinity of the Sasco Creek Crossing and include the following, in order, from west to east:

- 1. U.S. Route 1 (Post Road) at Bulkley Avenue North and Bulkley Avenue South (State-maintained, Intersection #158-222)
- U.S. Route 1 (Post Road) at Hulls Highway (State-maintained, Intersection #050-203)

The ADT along U.S. Route 1 (Post Road) in the vicinity of the Sasco Creek Crossing is about 22,200 vehicular trips west of Sasco Creek and about 24,300 vehicular trips east of Sasco Creek.

B. Mill River (Southport Harbor) Crossing

This approximately 80-foot long segment of U.S. Route 1 (Post Road) at CDOT Bridge No. 05858 is an east/west State-maintained facility with the following characteristics:

- Three travel lanes; one 16-foot eastbound travel lane with a 6-foot shoulder and two
 12-foot wide westbound travel lanes with a 6-foot shoulder
- Typical curb-to-curb width in this segment is 46 feet
- Posted speed limit of 35 miles per hour
- Illumination is provided throughout
- Sidewalks are typically provided in the area east of the Crossing
- On-street parking is primarily prohibited

Land uses adjacent to the Mill River (Southport Harbor) Crossing are a combination of residential and mixed commercial/residential. Specifically, the properties adjacent to the

Mill River (Southport Harbor) Crossing site in reference to the existing bridge (CDOT Bridge No. 05858) consist of a large apartment building on the southwest corner, a law office building on the southeast corner, a residential property on the northwest corner, and a vacant wooded area near the northeast corner.

One signalized intersection is located along this portion of U.S. Route 1 (Post Road) in the vicinity of the Mill River (Southport Harbor) Crossing and includes the following:

 U.S. Route 1 (Post Road) at Sasco Hill Road (State-maintained, Intersection #050-262)

The ADT along U.S. Route 1 (Post Road) in the vicinity of the Mill River (Southport Harbor) Crossing is about 17,400 vehicular trips west of Mill River and about 18,200 vehicular trips east of Mill River.

C. Ash Creek Crossing

This approximately 550-foot long segment of Route 130 (Post Road and Fairfield Avenue) at CDOT Bridge No. 01668 is an east/west State-maintained facility with the following characteristics:

- Four travel lanes; two 12-foot wide eastbound travel lanes and two 12-foot wide westbound travel lanes
- 5' wide median located approximately 150' east of the Crossing
- Typical curb-to-curb width in this segment ranges between 48'-62'
- Posted speed limit of 35 miles per hour
- Illumination is provided throughout
- Sidewalks are typically provided throughout
- On-street parking is primarily prohibited
- Bus Stops are evident along this segment

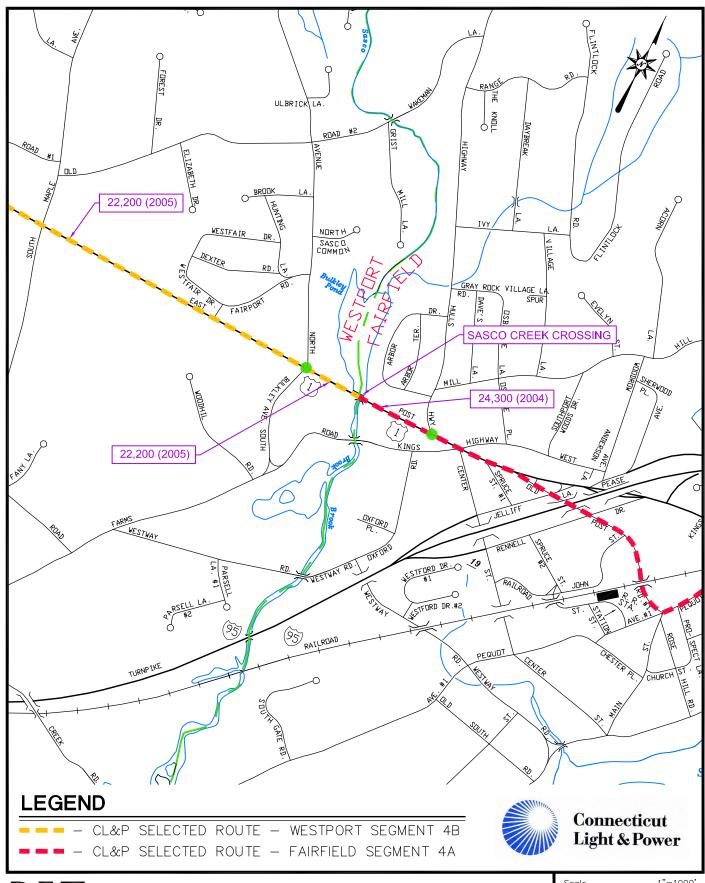
Land uses adjacent to the Ash Creek Crossing are primarily commercial/retail in nature, with some residential also present. Specifically, the properties adjacent to the Ash Creek

Crossing site in reference to the existing bridge (CDOT Bridge No. 01668) consist of a large commercial building on the southwest corner, a residential building on the northwest corner, a night club/restaurant on the northeast corner, and an auto repair garage on the southeast corner.

One signalized intersection is located along this portion of Route 130 (Post Road) in the vicinity of the Ash Creek Crossing and includes the following:

1. Route 130 (Post Road) at Riverside Drive and Grasmere Avenue (Statemaintained, Intersection #050-231)

The ADT along Route 130 (Post Road and Fairfield Avenue) in the vicinity of the Ash Creek Crossing is about 14,000 vehicular trips west of Ash Creek and about 15,500 vehicular trips east of Ash Creek.





TRAFFIC SIGNAL LOCATIONS AND ADT'S

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT WESTPORT/FAIRFIELD, CONNECTICUT
 Scale
 1"=1000'

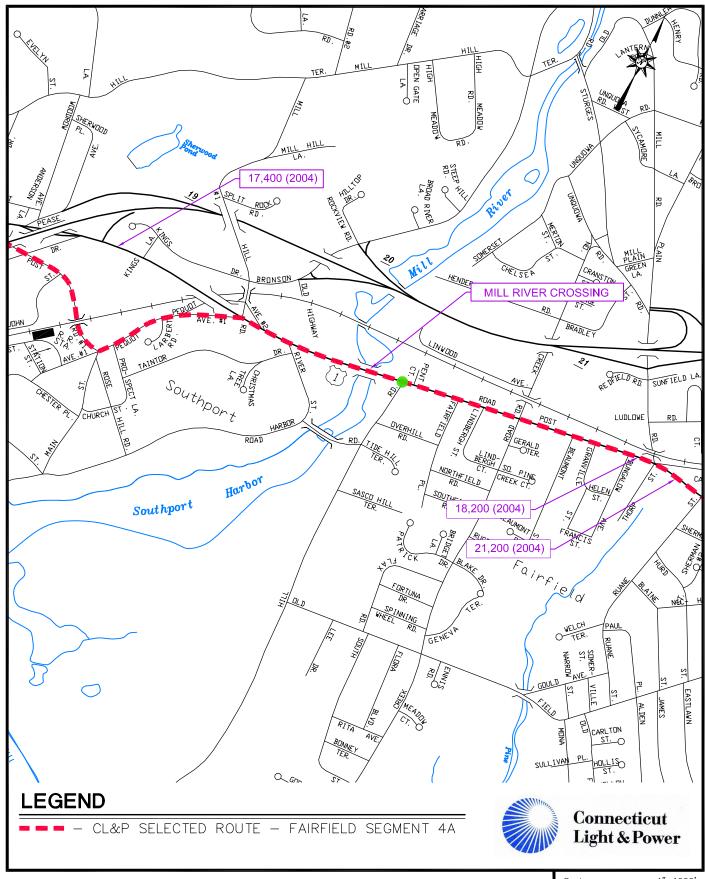
 Project No.
 05C1314

 Date
 2/06/07

 Revised
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 CAD File
 SC_TRPT05C1314 FIG B1

FIG. B.1

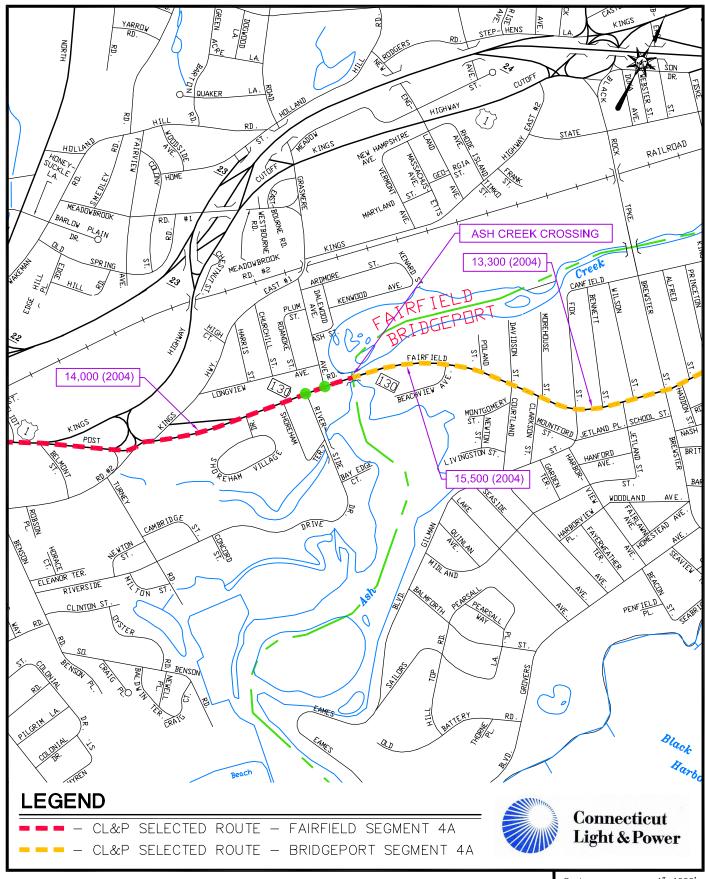




TRAFFIC SIGNAL LOCATIONS AND ADT'S

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD, CONNECTICUT

FIG. B.2





TRAFFIC SIGNAL LOCATIONS AND ADT'S

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD/BRIDGEPORT, CONNECTICUT

FIG. B.3

III. WORK BY OTHERS

Public Roadway Improvement Projects

The following are state projects that are proposed in the immediate vicinity of the Connecticut Siting Council approved CL&P 345-kV Transmission Line project area in the Town of Westport and the anticipated start dates:

State Project #158-193 – Route 1, Intersection Improvements and Operation Lane:
 Route 1 at Shaw's Shopping Center, Route 1 at Roseville Road, Route 1 at Hills
 Point Road, Route 1 at Buckley Avenue North and South (in design)

The following are state projects that are anticipated in the immediate vicinity of the CL&P 345-kV Transmission Line project area in the Town of Fairfield and the anticipated start dates:

• State Project #173-350, I-95 – Update Signs, currently in progress

The Town indicated that they are in the preliminary stages of design for a drainage system upgrade along Route 1 (Post Road) between Unquowa Road and Reef Road.

The following are state projects that are anticipated in the immediate vicinity of the CL&P 345-kV Transmission Line project area in the City of Bridgeport and the anticipated start dates:

• State Project #15-296, Route 130 – Reconstruction of Fairfield Avenue, June 2006

The following are state projects that are proposed in the general vicinity of the CL&P 345-kV Transmission Line project area in the City of Bridgeport and the anticipated start dates:

• State Project #15-272, I-95 Reconstruction, currently in construction

- State Project #15-271, I-95 Reconstruction of Exits 25-28, Warren Street to Yellow Mill, currently in construction
- State Project #15-311, City-wide Traffic Signal Modernization, September 2006

The following are projects outlined in the City of Bridgeport's Five Year Capital Plan Fiscal Year 2006-2010 and in the general vicinity of the CL&P 345-kV Transmission Line project area:

- City-wide Roadway Paving, 2006
- City-wide Lighting Programs, 2006

Development Projects

The Village at Black Rock Condominiums (STC #015-0502-07) a 130,000 square foot residential development has been approved by the City of Bridgeport and the State Traffic Commission (STC). The development is to be located within the northeast quadrant of the intersection of Route 130 (Fairfield Avenue) with Poland Street. Off-site improvements are limited to widening of an existing median opening near the development's Route 130 (Fairfield Avenue) emergency access in order to accommodate emergency access vehicles.

IV. CONSTRUCTION SEQUENCE AND UNDERSTANDING

General Duct Bank Construction

The construction of the 345-kV underground transmission line is a five (5) step process. The steps are performed sequentially, but not necessarily continuously. Therefore, periods of no visible construction activity or traffic disruption may occur between steps.

1. Splice Vault Excavation and Installation.

Large splice-vaults will be installed at intervals of approximately 1,650 feet. The vaults are installed in pairs, with 5 pairs anticipated in Norwalk for Segment 4c. ConnDOT has requested that wherever possible, vaults be located outside the travel way along the State roadways. Each vault measures 32' long, 9' wide and 10' high. An excavation pit of about 36' long, 14' deep and 13' wide is needed for each vault.

For any splice vaults in the roadway, the duration of construction for each pair is expected to be 7-14 days working nights only, or 24 days working 24 hours around the clock. Depending on the exact location and the task being performed, 2 or 3 traffic lanes will have to be closed for installation. The actual installation of the pre-cast concrete vault sections will require the use of a crane, which itself needs effectively two lanes for the outriggers and swing clearance. This installation will typically occur in the timeframe of one night. Backfilling, etc., may require a narrower work area. Should the excavation have to remain "open" when work is not in progress, protective barrier will be required if traffic is not maintained in the lane(s) of the excavation, and a special design for bridging the excavation if traffic is maintained in the lane(s) of the excavation.

2. Duct-bank Excavation and Installation.

The pavement will be saw cut to the width of the excavation. The excavation and duct bank will be approximately 4' wide with a minimum 30" deep cover. The depth of the trench will vary depending on underground conflicts but will have a typical depth of 5 feet. The duct

bank will contain 10 conduits and will be encased in concrete, cast in place. The trench will be backfilled and temporary pavement installed. In general, two travel lanes will be required for this work. Steel plates will be required if the trench cannot be backfilled at the end of the work day and the travel lanes must be opened. It is anticipated that 50-150 feet of duct-bank can be installed per day per crew.

3. Cable Pulling.

Cable reel carts and pulling machines will be set up over the vaults. Assuming a normal work shift, it is anticipated that six (6) work days will be required to pull cable between each pair of vaults. In general, one to two lanes of traffic will have to be closed for this activity.

4. <u>Cable Splicing.</u>

This is a time consuming activity requiring a controlled environment in the vaults. As such, a specially designed trailer is parked over the vault. Cable splicing will require 12 days per set of vaults, assuming a 24-hour work shift. For vault locations within the roadway, one to two traffic lanes will be occupied by this activity.

5. Pavement Restoration

The final task is the restoration of pavement. The trench will be temporarily repaired in accordance with temporary trench repair details (see Restoration and Maintenance and Protection of Traffic Plans, separate document). Typically two travel lanes will be occupied by this operation. At completion of the project, a mill and overlay will be constructed in accordance with ConnDOT standards to a width agreed to by CL&P and ConnDOT, within limits as set forth in the Encroachment Permit (see Restoration and Maintenance and Protection of Traffic Plans, separate document).

Crossing of Watercourses

Sasco Creek Crossing – Transmission Line Supported on Existing Structure:

The transmission line conduits shall be attached below the existing U.S. Route 1 (Post Road) Bridge (CDOT Bridge No. 00320) without widening the existing limits of the structure. The transmission line conduits shall cross the existing bridge within two separate superstructure bays. Each bay will consist of three 8-inch conduits, one 4-inch conduit, and one 2-inch conduit. Once the conduit passes through the existing west abutment backwall, they shall continue west for a short distance within the highway right-of-way and then proceed southwest onto private property and into the adjacent Westport Plaza parking lot where there shall be a splicing vault.

<u>Mill River (Southport Harbor) Crossing</u> – Transmission Line Supported on Existing Structure:

The transmission line conduits shall be attached below the existing U.S. Route 1 (Post Road) Bridge (CDOT Bridge No. 05858) without widening the existing limits of the structure. The transmission line conduits shall cross on the existing bridge within two separate superstructure bays. Each bay shall consist of three 8-inch conduits, one 4-inch conduit, and one 2-inch conduit. Once the conduits pass through the existing west abutment backwall, they shall continue west for a short distance within the highway right-of-way and connect to the proposed duct bank.

<u>Ash Creek Crossing</u> – Trenchless Construction Method

The transmission line cables shall be installed below Ash Creek utilizing the trenchless construction method of Horizontal Directional Drilling (HDD).

V. RECOMMENDATIONS FOR MAINTENANCE AND PROTECTION OF TRAFFIC

This project is a utility infrastructure improvement. However, from the perspective concerning the impact of construction on traffic, two of the construction elements, splice vault and duct-bank installation, are similar to major roadway corridor reconstruction and thus have the need for detailed maintenance and protection of traffic procedures. Although the cable pulling and cable splicing may be less intrusive than the duct bank and splice vault construction, the location and duration dictate the need to address maintenance and protection of traffic.

This section of the report is divided into two parts; General Recommendations applicable to the entire project; and Specific Recommendations developed for the individual areas of work.

General Recommendations

- 1. All work within the ConnDOT Right-of-way shall be completed in accordance with the State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 816 and the Supplemental Specifications dated 7/1/05.
- 2. Temporary traffic control plans shall be developed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), Part 6, and ConnDOT specifications.
- 3. Where appropriate, the ConnDOT typical Maintenance Traffic Control Plans shall be used (see Appendix VII). Non-standard traffic control plans shall be developed where the typical Maintenance Traffic Control Plans do not apply, and submitted for review and approval by ConnDOT. Any Contractor requested revisions must be submitted to ConnDOT for review and approval at least 30 days prior to implementation.
- 4. Traffic control devices shall meet the requirement of NCHRP Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features.

- 5. All flaggers shall be in accordance with the requirements under Section 9.74 "Trafficperson" in the <u>State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816</u> and shall have completed training through ATSSA (American Traffic Safety Services Association) or other organizations, as approved by ConnDOT.
- 6. The Contractor shall have at least one person trained as a work zone safety supervisor through ATSSA, or other organization approved by ConnDOT.
- 7. The Contractor shall maintain access for emergency vehicles through the work zone at all times.
- 8. Access accommodations shall be made for pedestrians at all times. Pedestrian access to businesses shall be maintained during those times when the businesses are open unless permission is granted from the business owner to close access.
- 9. The Contractor shall maintain vehicular access to and egress from all commercial and residential driveways. One access will be maintained or a temporary access will be provided. The Contractor will be allowed to close driveways to perform the required work during those periods when the businesses are closed unless permission is granted from the business owner to close the driveway during business hours. If a temporary closure of a residential driveway is necessary, the Contractor shall coordinate with the owner to determine the time period of the closure.
- 10. Roadway occupancy will be scheduled during off-peak hours where possible, and where necessary, at night. Local noise ordinances will be investigated for nighttime activities (see Appendix V).
- 11. The need to maintain traffic signal operation, including detection and interconnect is important, particularly along high volume routes. Temporary detection may require the use of means other than loops, such as microwave or video in areas of poor pavement. Use of a traffic signal contractor on stand-by duty during new construction activities should be provided.
- 12. During night work, existing roadway lighting must be maintained. Temporary lighting may have to be provided.
- 13. The contractor should only excavate a length of roadway that can be completed, including paving, in one work day (or work night) during the allowable work period as defined in the Specific Recommendations. If necessary, due to limited allowable work hours, steel plates may be used to bridge the excavation. See General Recommendation #14.

- 14. Steel plates will be required if the duct bank trench cannot be backfilled at the end of the allowable work period. No more than 300 feet of trench length shall be plated per the design waivers in the December 30, 2005 letter from Arthur Gruhn, PE, Chief Engineer Bureau of Engineering and Highway Operations for ConnDOT, to Anne Bartosewicz, Middletown-Norwalk Project Director (see Appendix VIII). Per the December 30, 2005 letter steel plates will be permitted for use from March 15 to the day before Thanksgiving in November. ConnDOT will permit the use of steel plates on weekends and holidays, within the above stated time period, however, no more than 40 feet of trench length shall be plated. If two safety inspections are conducted daily, up to 100 feet of trench length shall be plated. Plates at intersections are prohibited. Such plates shall meet the remaining ConnDOT requirements for steel plates as outlined in "Guidelines for Use of Steel Plates in State Highway Right of Way" and be inspected and maintained on a daily basis.
- 15. The Contractors work schedule should be coordinated on a daily basis, with at a minimum: ConnDOT inspection personnel, Town of Westport Engineering Department, Town of Fairfield Engineering Department, City of Bridgeport Engineering Department and local police, fire departments, and EMT personnel.
- 16. The Contractors work schedule shall be made available on a weekly basis to other impacted road users and local officials, such as: local elected officials, public works personnel, emergency service providers, hospitals, public transit providers, Board of Education transportation coordinators, US Postal Service, etc.
- 17. For any roadway closure, a construction sign should be installed in both directions in the vicinity of the closure two weeks prior to notify motorists of the date(s) of the construction.
- 18. If there is more than one alternating one-way traffic operation at one time on a roadway, then there shall be at least one mile between signing patterns.
- 19. No work shall be permitted on Sunday mornings between 8:00 a.m. and Noon within 1,000 feet of a place of worship.

Specific Recommendations

A. Sasco Creek Crossing

- The Contractor will not be allowed to perform any work that will interfere with the existing number of lanes of traffic, including turning lanes at intersections, on-street parking, and sidewalks on:
 - U.S. Route 1 (Post Road) EB and WB:

- Monday Friday: 6:00 a.m. to 6:30 p.m.
- Saturday Sunday: 10:00 a.m. to 4:00 p.m.
- 2. When actively working during the following periods, the Contractor will be allowed to close one lane of U.S. Route 1 (Post Road) as listed below and maintain one lane of traffic in that direction on a paved travel path of not less than 12 feet. Two lanes shall be maintained in the opposite direction on a paved travel path not less than 24 feet in width. This configuration shall be in accordance with a ConnDOT typical Maintenance Traffic Control Plan (see Appendix VII for ConnDOT typical Maintenance Traffic Control Plans).
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.
 6:30 p.m. to Midnight
 - Saturday Sunday: Midnight to 10:00 a.m.
 4:00 p.m. to Midnight
- 3. When actively working during the following periods, the Contractor will be allowed to close two lanes of U.S. Route 1 (Post Road) and maintain one lane in each direction of travel on a paved travel path of not less than 24 feet in width. This configuration shall be in accordance with a ConnDOT typical Maintenance Traffic Control Plan (see Appendix VII for ConnDOT typical Maintenance Traffic Control Plans).
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.

6:30 p.m. to Midnight

Saturday – Sunday: Midnight to 10:00 a.m.
 4:00 p.m. to Midnight

- 4. When actively working during the following periods, the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 12 feet in width. The length of alternating one-way traffic operation shall not exceed 300 feet and shall require Trafficpersons (uniformed flaggers or Town Police). This configuration shall be in accordance with a ConnDOT typical Maintenance Traffic Control Plan (see Appendix VII for ConnDOT typical Maintenance Traffic Control Plans).
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.

9:00 p.m. to Midnight

- Saturday Sunday: Midnight to 10:00 a.m.
 9:00 p.m. to Midnight
- 5. It would be preferential to prohibit night work (Monday through Friday from 8:00 p.m. to 7:00 a.m., Saturday and Sunday from 8:00 p.m. to 8:00 a.m.) exceeding Town noise ordinances, however, due to traffic volumes daytimes work hours are limited and the

daytime work period insufficient. Thus it will not be feasible to restrict night work. Therefore it is suggested that the Contractor choose to perform work that will be less disruptive during nighttime hours.

See Figure C.1 for Allowable Work Hours Map.

B. Mill River (Southport Harbor) Crossing

- 1. For all nighttime work in the Town of Fairfield, a waiver for the Town's noise control regulations will be sought from the Town Police. Nighttime hours are from:
 - Monday-Thursday: 12:00 a.m. to 7:00 a.m. and 10:00 p.m. to 12:00 a.m.
 - Friday: 12:00 a.m. to 7:00 a.m. and 11:00 p.m. to 12:00 a.m.
 - Saturday: 12:00 a.m. to 8:00 a.m. and 11:00 p.m. to 12:00 a.m.
 - Sunday: 12:00 a.m. to 8:00 a.m. and 10:00 p.m. to 12:00 a.m.

See Appendix V for the full text of the Fairfield Noise Ordinance.

- 2. The Contractor will not be allowed to perform any work that will interfere with the existing number of lanes of traffic, including turning lanes at intersections, on-street parking, and sidewalks on:
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: 6:00 a.m. to 10:00 a.m.
 12:00 p.m. to 6:30 p.m.
 - Saturday Sunday: 10:00 a.m. to 4:00 p.m.
- 3. When actively working during the following periods, the Contractor will be allowed to close one direction of U.S. Route 1 (Post Road) and maintain and protect two-way traffic operations on a paved travel path not less than 24 feet wide in the other direction in accordance with a ConnDOT Maintenance Traffic Control Plan (See Appendix VII for ConnDOT Maintenance Traffic Control Plans). On-street parking shall be prohibited. At least 48-hours notice for prohibition of parking shall be posted.
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.

10:00 a.m. to 12:00 p.m.

6:30 p.m. to Midnight

° Saturday – Sunday: Midnight to 10:00 a.m.

4:00 p.m. to Midnight

4. When actively working, during the following period, the Contractor will be allowed to close one lane in each direction along U.S. Route 1 (Post Road) and maintain and protect one travel lane, not less than 12 feet wide, in each direction in accordance with a ConnDOT Maintenance Traffic Control Plan (See Appendix VII for ConnDOT Maintenance Traffic Control Plans).

- U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.

10:00 a.m. to 12:00 p.m.

6:30 p.m. to Midnight

Saturday – Sunday: Midnight to 10:00 a.m.

4:00 p.m. to Midnight

- 5. When actively working during the following periods, the Contractor will be allowed to close one lane on U.S. Route 1 (Post Road) in one direction and maintain one 12-foot wide lane of traffic operation in that direction on a paved travel path. On-street parking may be removed if necessary. However, a notice for prohibition of parking shall be posted for at least 48 hours in advance. Should the curbside travel way remain open, on-street parking shall remain. The total paved width for the travel way and parking is 20 feet minimum.
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.

10:00 a.m. to 12:00 p.m.

6:30 p.m. to Midnight

Saturday – Sunday: Midnight to 10:00 a.m.

4:00 p.m. to Midnight

- 6. When actively working during the following periods, the Contractor will be allowed to maintain alternating one-way traffic operations on a paved travel path not less than 12 feet in width in accordance with a ConnDOT Maintenance Traffic Control Plan (See Appendix VII for the ConnDOT Maintenance Traffic Control Plans).
 - U.S. Route 1 (Post Road) EB and WB:
 - Monday Friday: Midnight to 6:00 a.m.

8:00 p.m. to Midnight

° Saturday – Sunday: Midnight to 10:00 a.m.

4:00 p.m. to Midnight

7. Bus stops within construction zones shall be maintained or temporarily relocated.

See Figure C.2 for Allowable Work Hours Map.

C. Ash Creek Crossing

- 1. For all nighttime work in the Town of Fairfield, a waiver from the Town's noise control regulations will be sought from the Town Police. Nighttime hours are from:
 - Monday-Thursday: 12:00 a.m. to 7:00 a.m. and 10:00 p.m. to 12:00 a.m.
 - Friday: 12:00 a.m. to 7:00 a.m. and 11:00 p.m. to 12:00 a.m.

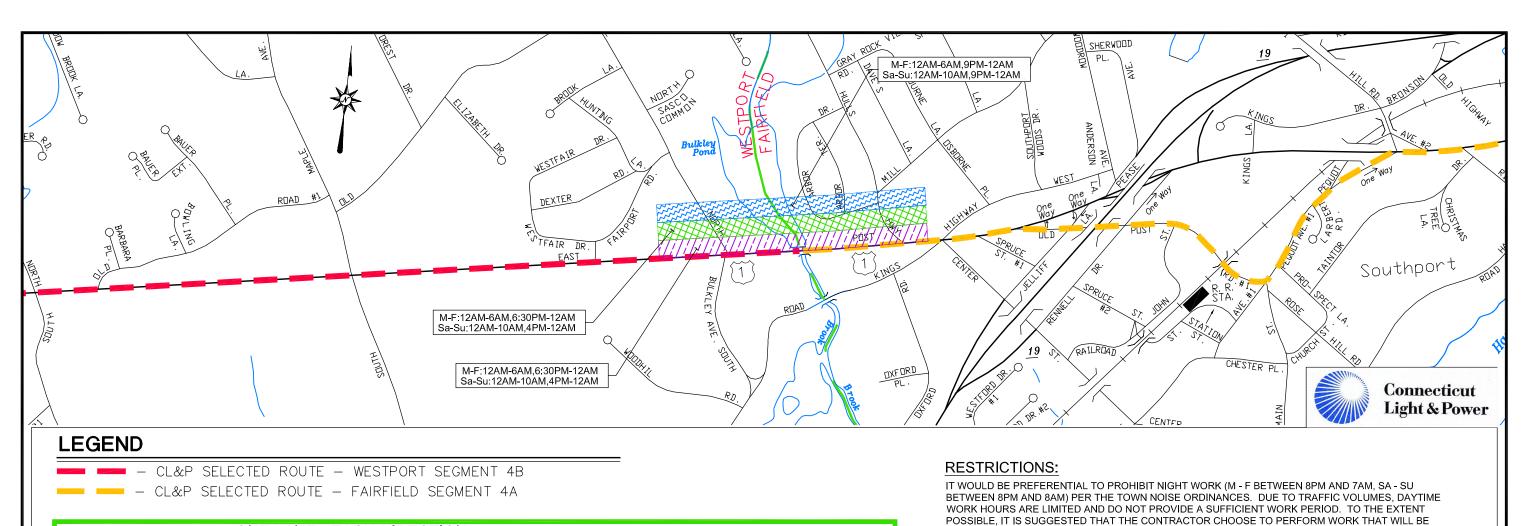
- Saturday: 12:00 a.m. to 8:00 a.m. and 11:00 p.m. to 12:00 a.m.
- Sunday: 12:00 a.m. to 8:00 a.m. and 10:00 p.m. to 12:00 a.m.

For all nighttime work in the City of Bridgeport, a waiver from the City's noise control regulations will be sought from the City. Nighttime hours are from:

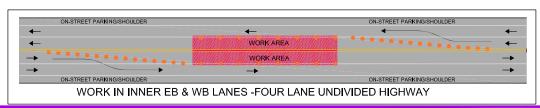
- Monday-Friday: 12:00 a.m. to 7:00 a.m. and 6:00 p.m. to 12:00 a.m.
- Saturday-Sunday: 12:00 a.m. to 9:00 a.m. and 6:00 p.m. to 12:00 a.m.

See Appendix V for the full texts of the Fairfield and Bridgeport Noise Ordinances.

- 2. It would be preferential to prohibit night work exceeding Town noise ordinances, however, due to traffic volumes daytimes work hours are limited and the daytime work period insufficient. Thus it will not be feasible to restrict night work. Therefore it is suggested that the Contractor choose to perform work that will be less disruptive during nighttime hours.
- 3. There will be no time restrictions placed on the Contractor to perform any work associated with construction for the Ash Creek Crossing.
- 4. Any work associated with the construction of Ash Creek Crossing will be completed in two stages. The Contractor shall utilize the Maintenance and Protection of Traffic Plans (See Appendix VIII) to accommodate traffic patterns during construction activities.
- 5. The Contractor shall close access to Riverside Drive and provide a detour in accordance with the Detour Plans shown in Appendix IX during Stage 1 of construction activities.
- 6. The Contractor shall close access to Grasmere Avenue and provide a detour in accordance with the Detour Plans shown in Appendix IX during Stage 2 of construction activities.
- 7. Any sidewalks or crosswalks affected within the construction zone shall be temporarily relocated in accordance with the Maintenance and Protection of Traffic Plans shown in Appendix VIII.



ONE LANE - EACH DIRECTION

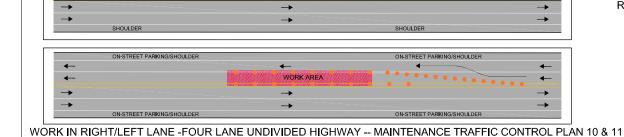


WORK HOURS:

ROUTE 1 (POST ROAD)

M-F: 12AM-6AM, 6:30PM-12:00AM
Sa-Su: 12AM-10AM, 4PM-12AM

ONE LANE - ONE DIRECTION



WORK HOURS:

ROUTE 1 (POST ROAD)

M-F: 12AM-6AM, 6:30PM-12AM
Sa-Su: 12AM-10AM, 4PM-12AM



ONE LANE - ALTERNATING TRAFFIC

LESS DISRUPTIVE DURING NIGHTTIME HOURS IN THESE RESIDENTIAL AREAS.

WORK IN TRAVEL LANE AND SHOULDER -TWO LANE HIGHWAY -- ALTERNATING ONE-WAY TRAFFIC OPERATIONS
MAINTENANCE TRAFFIC CONTROL PLAN 13

WORK HOURS:

ROUTE 1 (POST ROAD)

M-F: 12AM-6AM, 9PM-12AM Sa-Su: 12AM-10AM, 9PM-12AM



ARCHITECTURE
ENGINEERING
PLANNING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
ENVIRONMENTAL SCIENCES

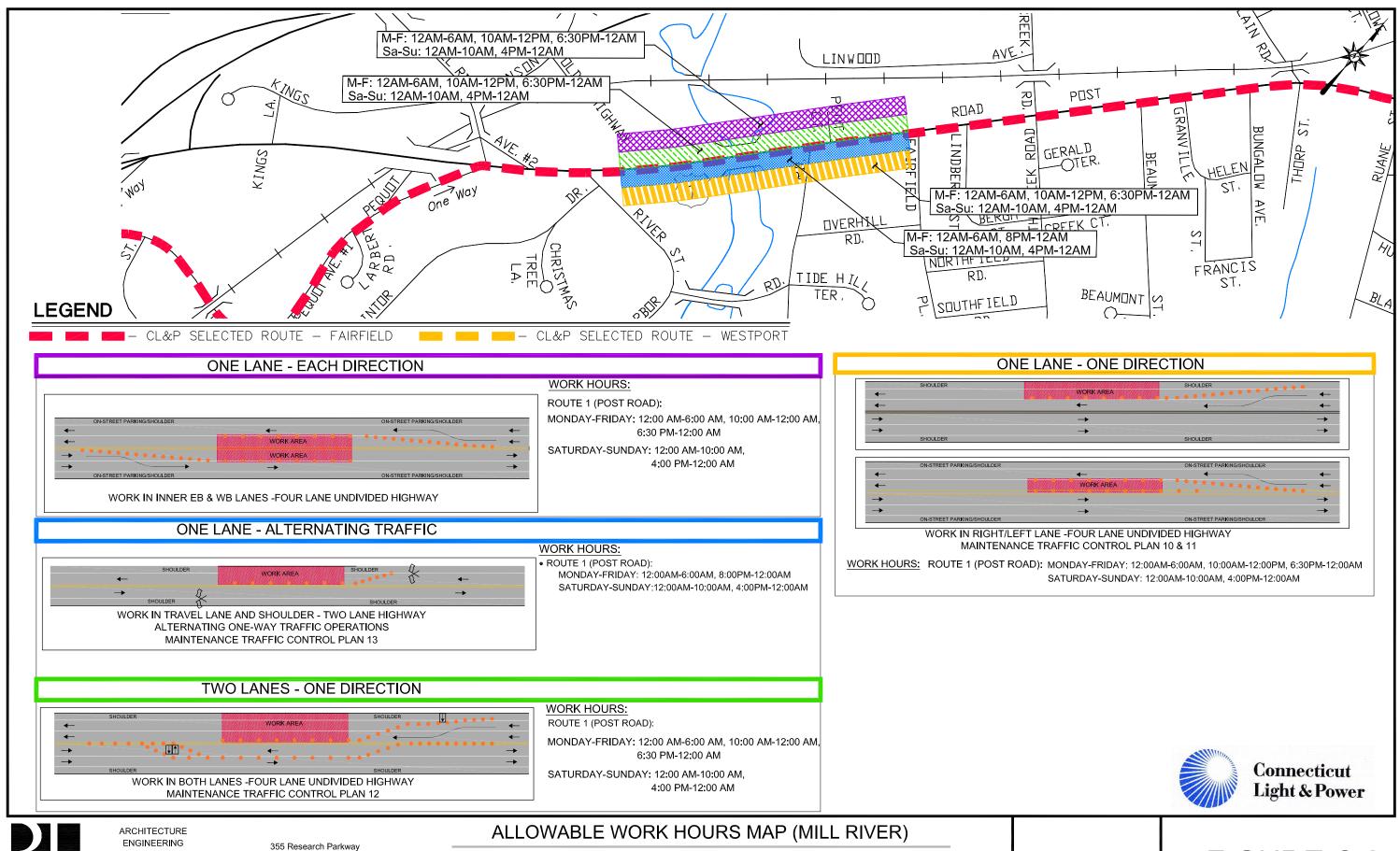
355 Research Parkway Meriden, CT 06450 (203) 630-1406 (203) 630-2615 Fax

ALLOWABLE WORK HOURS MAP (SASCO CREEK)

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT WESTPORT/FAIRFIELD, CONNECTICUT

Scale 1"=800'
Project No. 05C1314
Date 3/15/06
CAD File SC_TRPT05C1314 FIG C1

FIGURE C.1





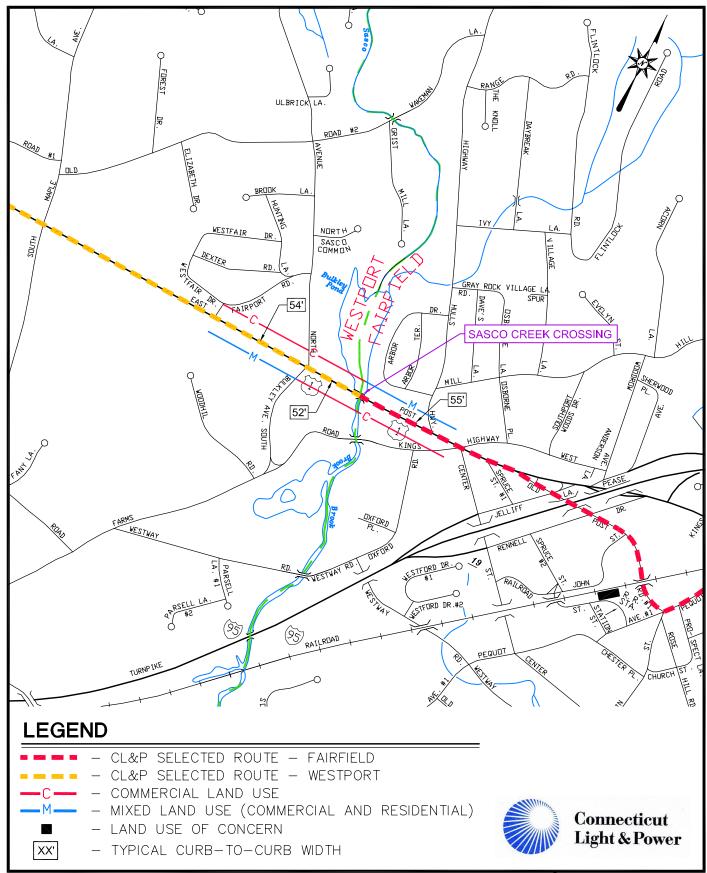
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ENVIRONMENTAL SCIENCES

355 Research Parkway Meriden, CT 06450 (203) 630-1406 (203) 630-2615 Fax

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD, CONNECTICUT Scale 1"=600'
Project No. 05C1314
Date 4/27/06
CAD File MR_TRPT05C1314 FIG C2

FIGURE C.2

APPENDIX II ROUTE INVENTORY

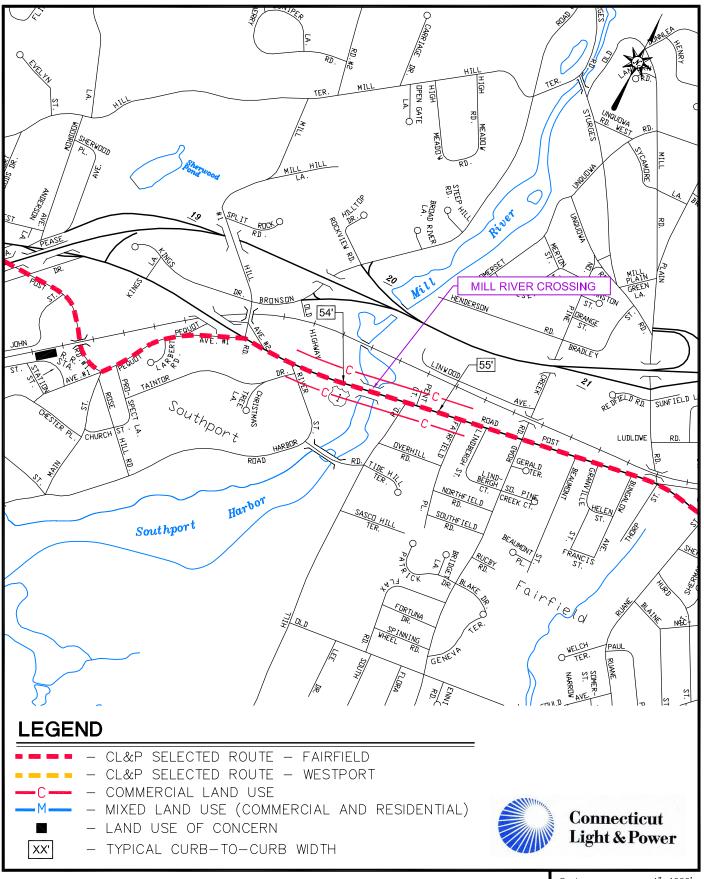




LAND USE AND ROADWAY WIDTHS

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT WESTPORT/FAIRFIELD, CONNECTICUT

FIG. D.1





LAND USE AND ROADWAY WIDTHS

MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD, CONNECTICUT
 Scale
 1"=1000'

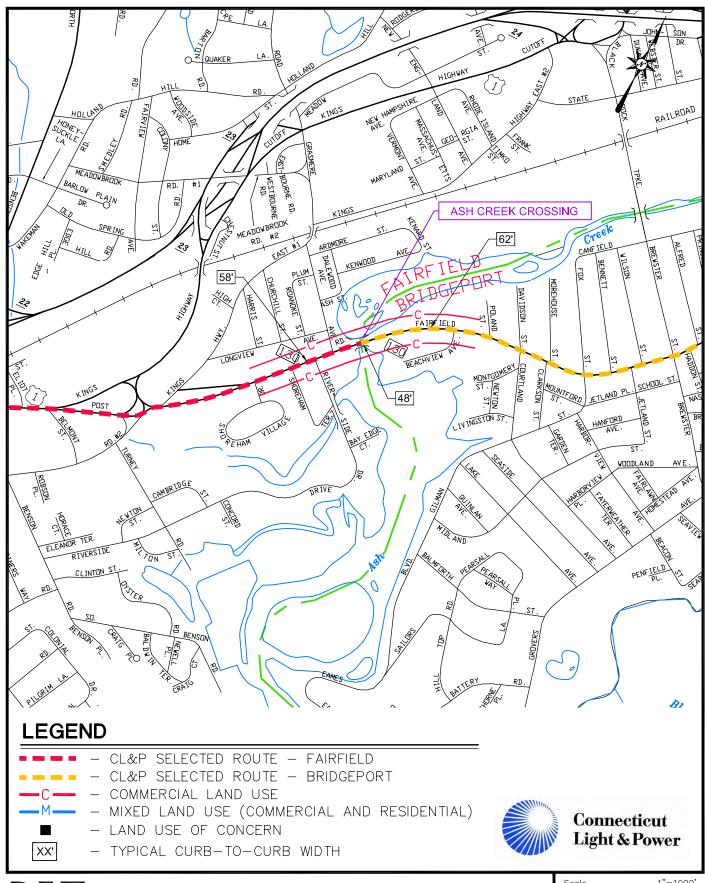
 Project No.
 05C1314

 Date
 2/06/07

 Revised
 -/--/

 CAD File
 MR_TRPT05C1314 FIG D2

FIG. D.2





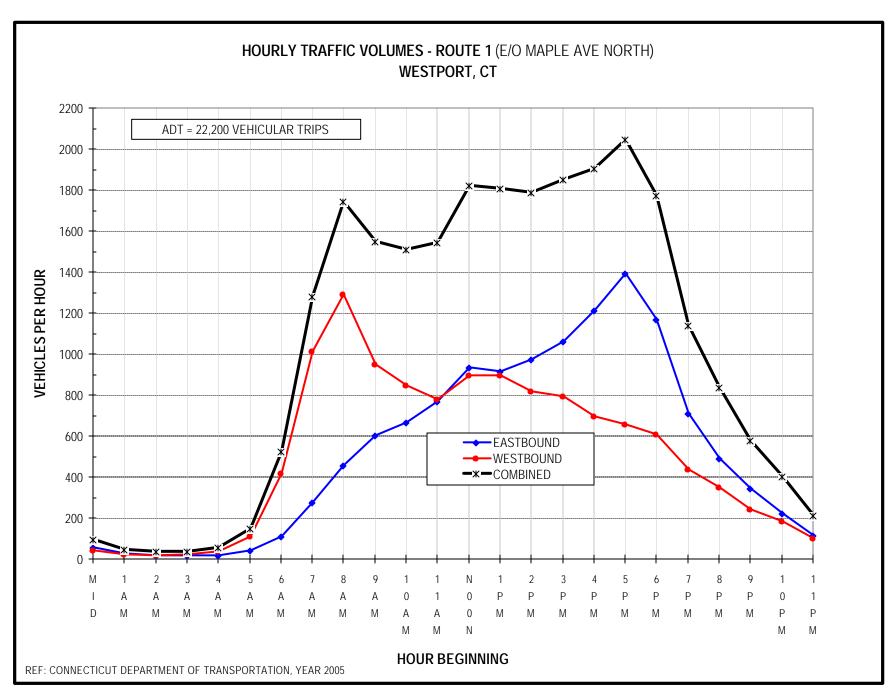
LAND USE AND ROADWAY WIDTHS

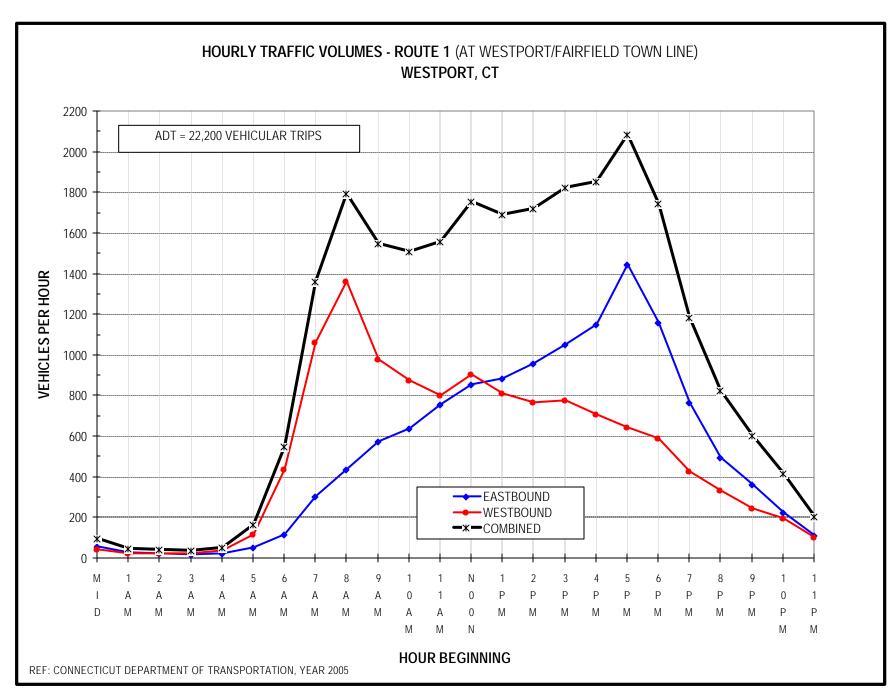
MIDDLETOWN TO NORWALK 345-kV TRANSMISSION PROJECT FAIRFIELD/BRIDGEPORT, CONNECTICUT Scale 1"=1000'
Project No. 05C1314
Date 2/06/07
Revised -/--/CAD File AC_TRPT05C1314 FIG D3

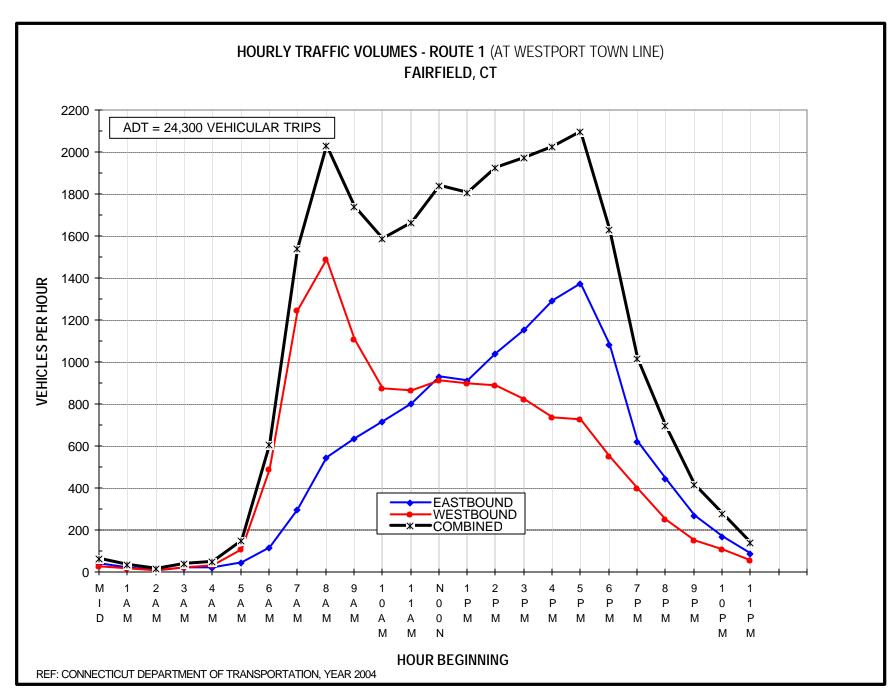
FIG. D.3

APPENDIX III SELECTED HOURLY TRAFFIC VOLUME GRAPHS

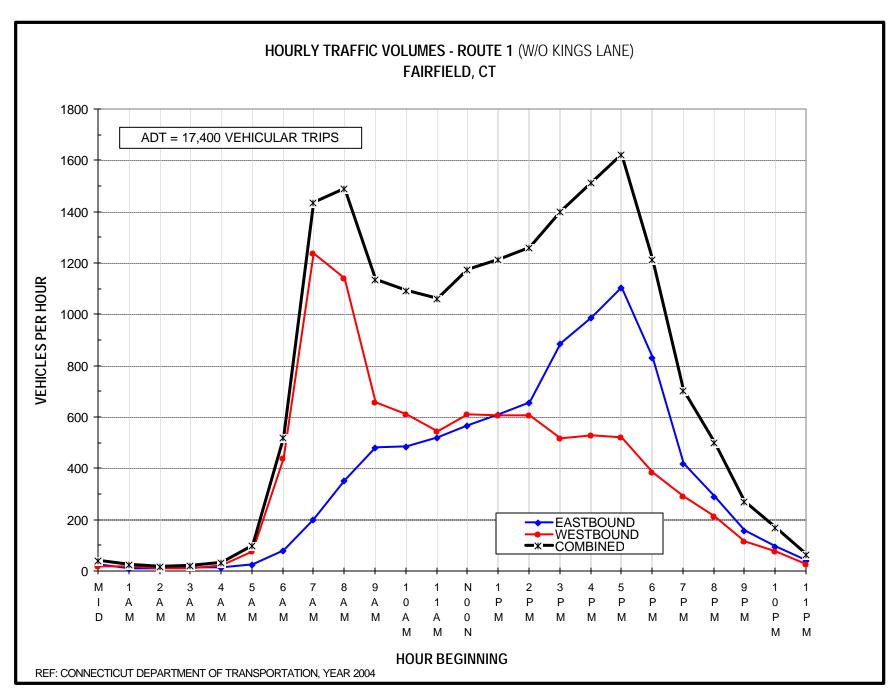
Sasco Creek U.S. Route 1 (Post Road)

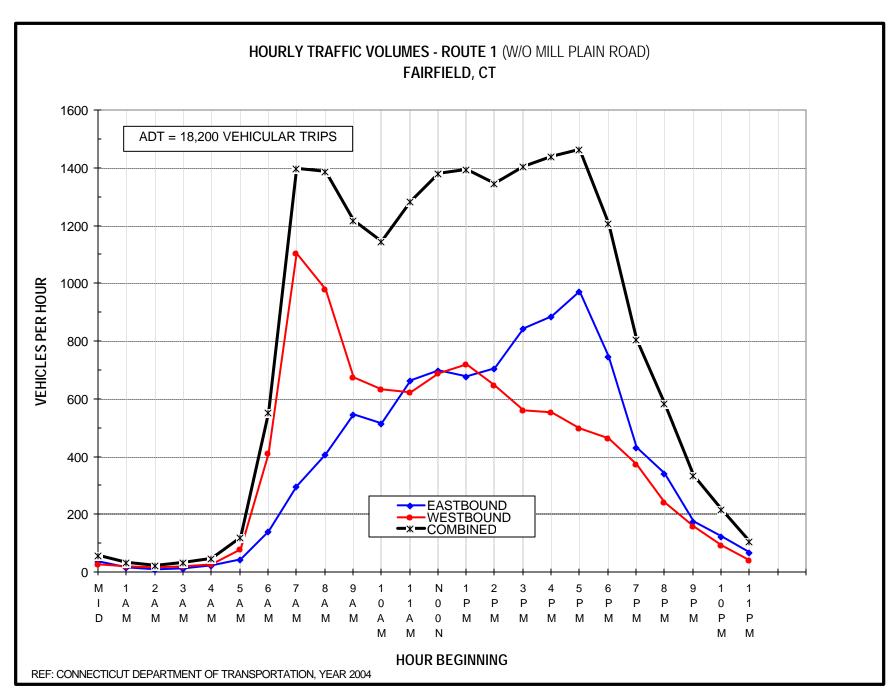


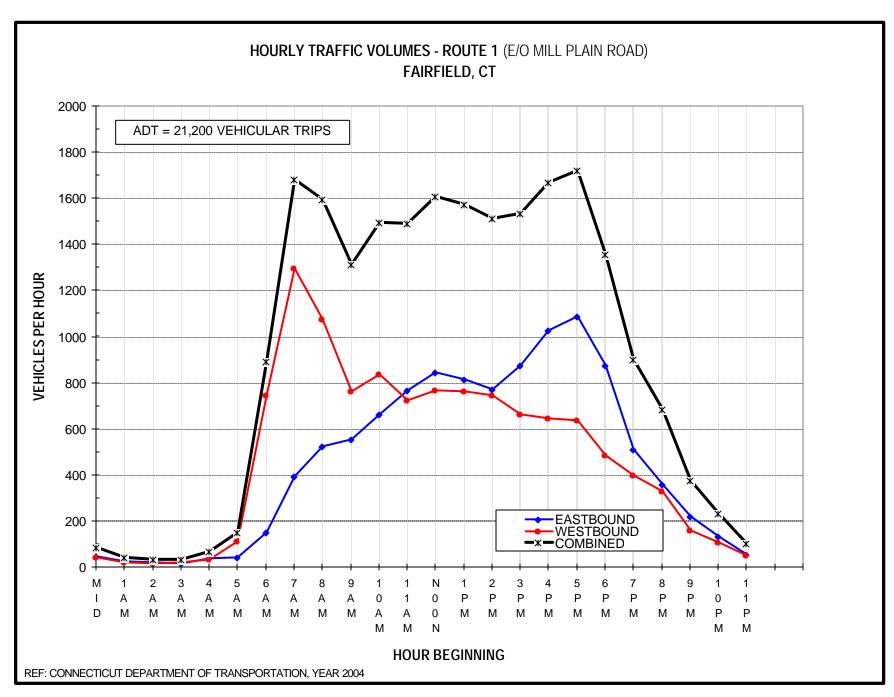




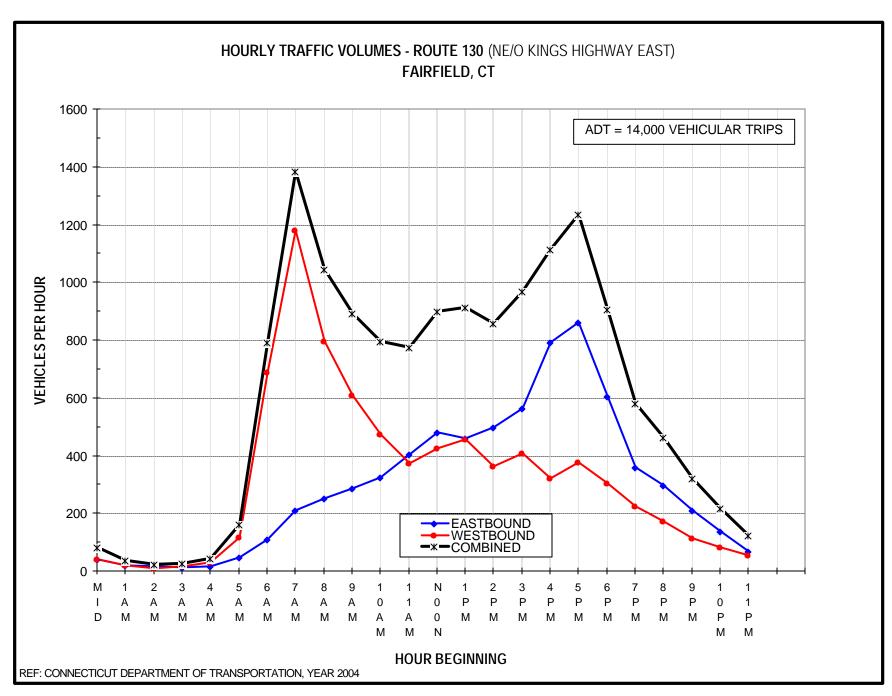
Mill River (Southport Harbor) U.S. Route 1 (Post Road)

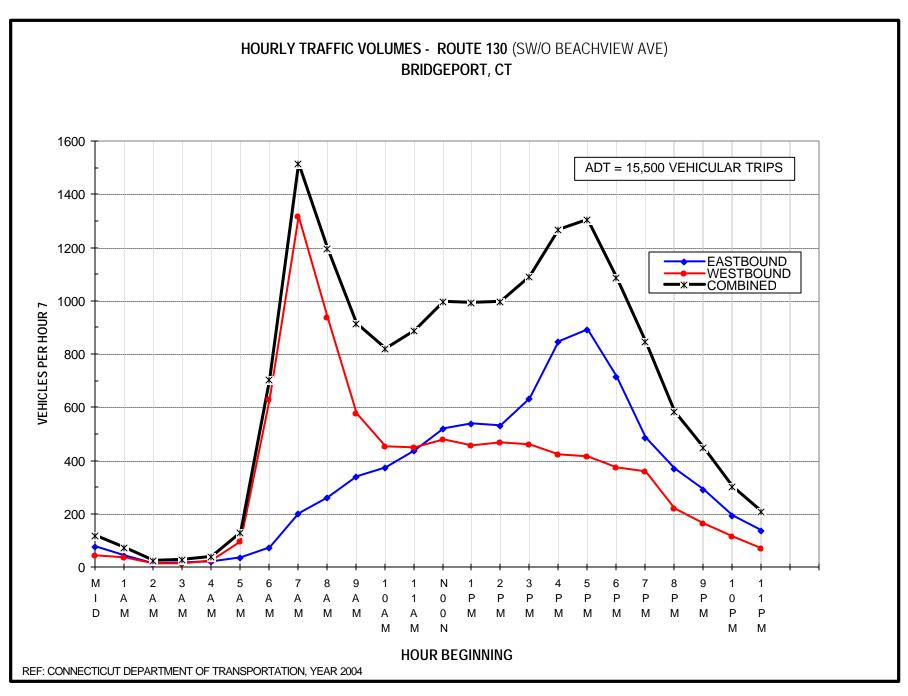


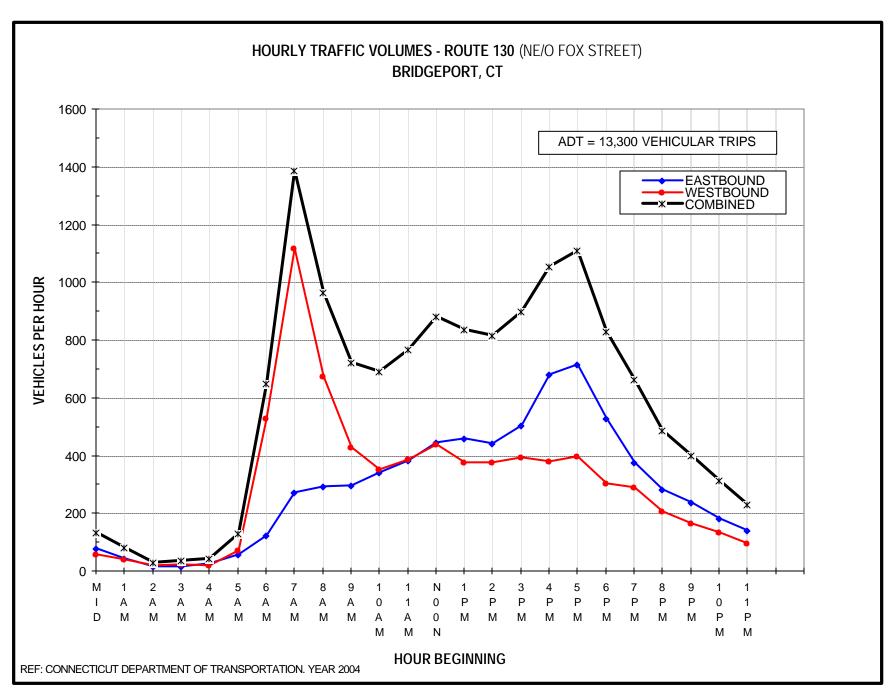




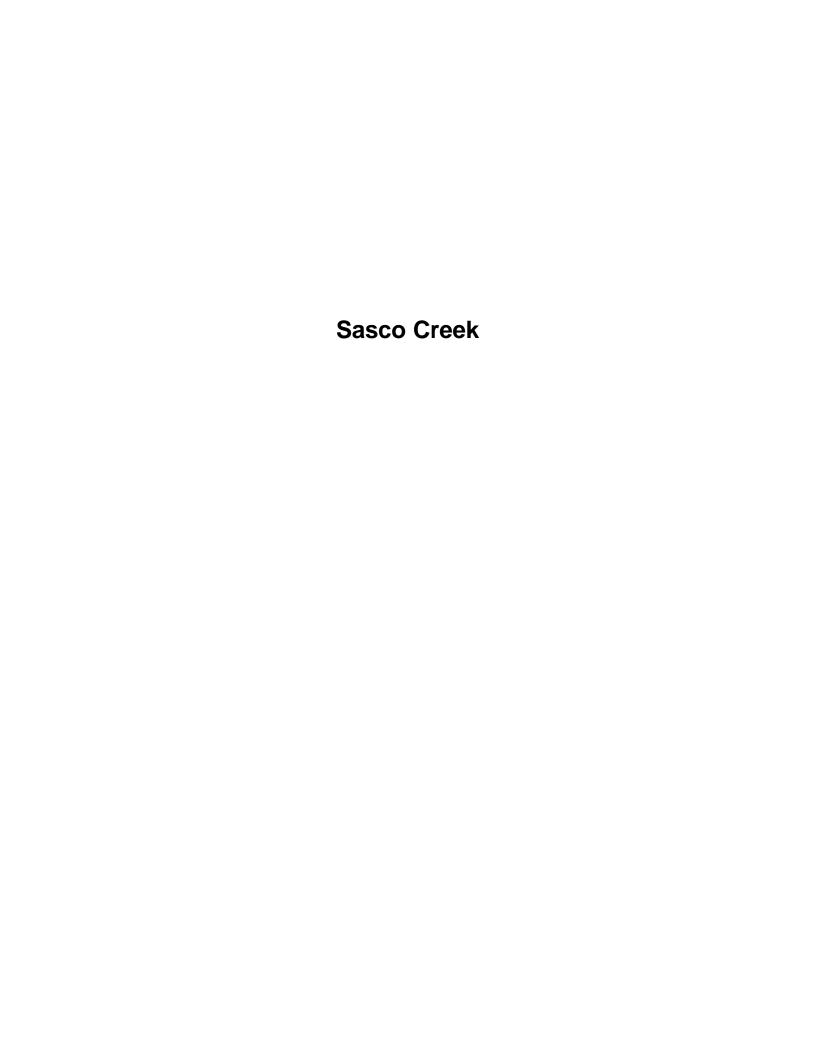
Ash Creek Route 130 (Post Road and Fairfield Avenue)







APPENDIX IV SIGNALIZED INTERSECTIONS AERIAL PHOTOGRAPHS







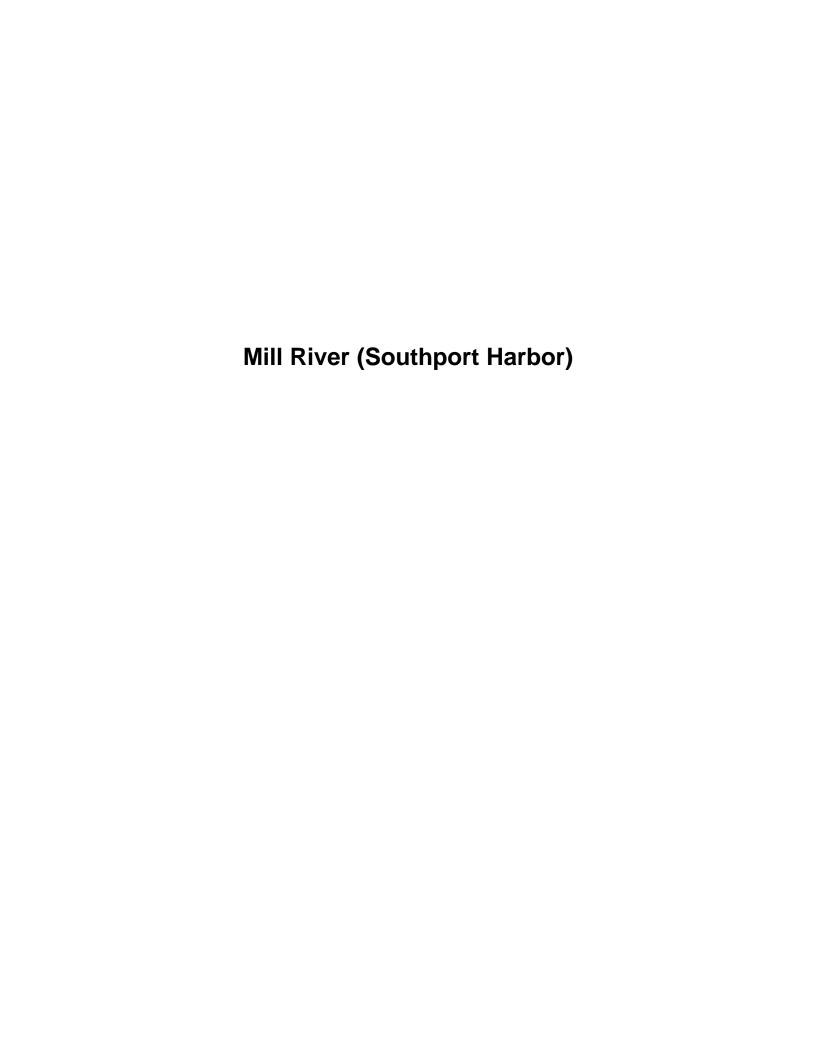
SIGNALIZED INTERSECTION #158-222
ROUTE 1 (POST RD. EAST) AT BULKLEY AVE. N. AND S.
WESTPORT, CONNECTICUT
SCHEMATIC, NOT TO SCALE FIGURE WI-01





SIGNALIZED INTERSECTION #050-203 ROUTE 1 (POST RD.) AND HULLS HIGHWAY FAIRFIELD, CONNECTICUT SCHEMATIC, NOT TO SCALE

FIGURE FI-1







SIGNALIZED INTERSECTION #050-262 ROUTE 1 (POST RD.) AND SASCO HILL RD. FAIRFIELD, CONNECTICUT
SCHEMATIC, NOT TO SCALE

FIGURE FI-2