

# Feasibility Study

## For the Construction of a Pedestrian Bridge over the Ash Creek Bridgeport/Fairfield, CT

PREPARED FOR



**Greater Bridgeport Regional Council**  
525 Water Street  
Bridgeport, CT 06604

September 26, 2013

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## SECTION 1 – EXECUTIVE SUMMARY

### 1.1 Project Overview and Scope

Alfred Benesch & Company has been retained by the Greater Bridgeport Regional Council (GBRC) to perform a feasibility study for the construction of a new pedestrian crossing over the Ash Creek between the Black Rock neighborhood of Bridgeport and the Fairfield Metro Center in the Town of Fairfield.

The Metro Center which was opened in December of 2011 provides an important transportation link for the surrounding neighborhoods allowing residents access to Metro-North's New Haven Line. The construction of this station is consistent with the sustainability goals of the region and will lessen the areas dependence on automobile transit.



The Ash Creek – Looking North Toward Fairfield Metro Center

The Metro Center is situated between Commerce Drive and Kings Highway to the North and by the Ash Creek to the South. The Ash Creek in this location is a tidal watercourse which initiates at the Rooster River and empties into Long Island Sound. It is diverse ecosystem consisting of the creek, adjacent mudflats, low marsh, high marsh, freshwater wetland and upland coastal meadow. While the Ash Creek is an environmental asset, it also serves as a barrier to the movement of traffic in the area.

With its BGreen 2020 sustainability plan, the City of Bridgeport has looked to identify strategies that can have a positive effect on the environment, climate change, energy dependency and the national economy. In line with these goals, the GBRC has embarked on this study to consider the feasibility of the introduction of a new pedestrian bridge crossing the Ash Creek between the Black Rock Neighborhood and the Fairfield Metro Center.

This report presents the results of this study. Included in the study is the consideration of several alternate bridge crossing locations in the general area as well as several bridge structure types. Beyond the bridge structure itself, the study takes into consideration the connections to of the new bridge to the existing transportation infrastructure.

Considerations evaluated in this study include environmental impacts, project costs, permitting, hydraulic considerations, foundation impacts, accessibility and aesthetics.

## 1.2 Crossing Location Alternates

The alternate crossing locations considered in this study include the following:

- **Alternate 1: No-Build Option:** This alternate considers the continued usage of the existing pedestrian facilities at the Brewster Street Bridge over the Ash Creek.
- **Alternate 2: Fox Street:** This alternate considers a new dedicated pedestrian bridge crossing located at the extension of Fox Street on the Bridgeport side of the Ash Creek.
- **Alternate 3: Davidson Street:** This alternate considers a new dedicated pedestrian bridge crossing located at the extension of Davidson Street on the Bridgeport side of the Ash Creek.

Of the three alternates, Alternate 2 was determined to represent the most suitable improvement to the movement of non-motorized traffic in the area. Of the two options involving the construction of a new bridge, this option represents the shorter span and is significantly less expensive than the Davidson Crossing. This option also involves less impact to the environmental resources surrounding the Ash Creek. Alternate 1; though offering benefits of having no cost or environmental impact; represents no improvement to the current conditions at the site.

## 1.3 Structure Type Study

After determining the most suitable location for the crossing, this study included the evaluation of three bridge structure types. The options considered are as follows:

- **Structure Type 1: Steel Plate Girder:** This option consists of a 158' steel plate girder main span with a 65' long steel rolled beam approach span. The spans are supported on reinforced concrete piers and abutments supported on pile foundations. The estimated construction cost for this alternate is \$2,440,000.
- **Structure Type 2: Steel Truss:** This option consists of a 158' steel truss main span with two 33' long steel rolled beam approach spans. The spans are supported on reinforced concrete piers and abutments supported on pile foundations. The estimated construction cost for this alternate is \$2,600,000.
- **Structure Type 3: Cable-Stayed Bridge:** This option consists of an asymmetrical cable-stayed bridge structure. This option includes a steel trapezoidal box girder superstructure suspended from stay cables anchored to a central concrete tower located at the south bank of the Ash Creek. The estimated construction cost for this alternate is \$3,130,000.

## 1.4 Walkway Considerations

Beyond the construction of the bridge itself, this study considered improvements to the existing pedestrian / non-motorized infrastructure at each end of the bridge to facilitate the movement of pedestrians and to encourage the use of non-motorized transit.

Improvements identified on the Bridgeport side include the establishment of a new walking path along the existing Canfield Avenue Right of Way between Fox Street and Davidson Street. Improvements to Fox Street between Canfield and Fairfield Avenues are also recommended. Improvements to bicycle traffic could be achieved by extending the existing bike trail that ends at the intersection of Gilman Street and Fairfield Avenue so that it continues down Fox Street and across to the Metro-Center over the proposed bridge.

On the Fairfield side of the crossing, the proposed walkway will tie into the existing gravel trail located within the conservation easement. The existing walkway leads to a crosswalk accessing the Fairfield Metro Center Parking Lot. As there is no defined walkway within the parking lot leading pedestrian traffic to the Metro-North train platform, this study recommends the creation of a defined walkway to better guide pedestrians and improve safety. As the bridge is intended to be a multi-use path, localized improvements to the existing gravel path are recommended in order to provide a paved surface for the bicycling public wishing to access the Fairfield Metro Center.

## 1.5 Project Data

- Estimated Construction Costs:

|                        |             |
|------------------------|-------------|
| Site Improvements:     | \$845,000   |
| Bridge (Plate Girder): | \$2,440,000 |
| Bridge (Truss)         | \$2,600,000 |
| Bridge (Cable-Stayed)  | \$3,130,000 |
- Estimated Construction Duration: 18 Months
- ROW Involvement: Partial Property Acquisition at 925 Brewster Street for Bridge Construction and Site Improvements
- Utilities Impacted: None Identified
- Permits Anticipated:
  - DEEP Structure and Dredging Permit
  - ACOE - Section 404 Permit
  - DEEP Tidal Wetlands Permit
  - DEEP Coastal Consistency Determination
  - Fairfield Conservation Commission Approval
  - Local Inland Wetlands Permit
  - Local Planning and Zoning Approval
  - DEEP Flood Management Certifications

## SECTION 2 – PROJECT DESCRIPTION

With its BGreen 2020 Sustainability Plan, the City of Bridgeport has embarked on a plan to identify strategies that can have an impact on the environment, climate change, energy dependency and the national economy.

In 2011, a new commuter rail station was completed in Fairfield adjacent to the Black Rock Neighborhood of Bridgeport. This station is known by the name “Fairfield Metro” and provides an important link connecting the surrounding area to the commuter rail network. The station offers great opportunities for the use of mass transit with a potential of reducing the volume of automobile traffic in the area. The station is a part of a larger development area located between Commerce Drive and the Ash Creek known as the Fairfield Metro Center. Future expansion is planned for the site which could result in the residential, commercial, or mixed use development.



Fairfield Metro – Train Platform

Located opposite the Metro Center on the other side of the Ash Creek is the Black Rock neighborhood of Bridgeport. This neighborhood is comprised of medium to high density residential uses along with a commercial district located along Fairfield Avenue. The residential density of the area coupled with the close proximity to the Fairfield Metro Center creates the potential for a significant population to be able to benefit from the opportunities offered by the transit facility. One major obstacle to this opportunity is the Ash Creek. There are limited existing crossing locations in the area to traverse the Ash Creek. There is a roadway bridge crossing at Brewster Street / Black Rock Turnpike which includes sidewalks on either side of the road but with heavy vehicular traffic and limited useable sidewalk width, this crossing is limited in its functionality.

Given the opportunities offered by the Fairfield Metro-Center and the limitations of the existing infrastructure, the Greater Bridgeport Regional Council (GBRC) has secured funding from the Surface Transportation Program to investigate the feasibility of the construction of a pedestrian bridge across the Ash Creek in this area.

The goal of this project is not only to consider the feasibility of the bridge structure itself but to also consider opportunities to enhance the connections of the bridge to the existing infrastructure on either end of the bridge.

## **SECTION 3 – PROJECT APPROACH**

### **3.1 Project Team**

In order to accomplish the goals of this study, Benesch assembled an experienced team including TPA Design Group to perform landscape architecture services and GZA GeoEnvironmental to provide geotechnical, hydraulic and permitting support for the project. Structural engineering services as well as project coordination and oversight were provided by Benesch.

### **3.2 Community Involvement**

From the outset, the GBRC stressed the need for a collaborative approach in the development of this feasibility study. There are many community groups who have a stake in the future development around the Fairfield Metro Center and the Ash Creek. In order to ensure that the input of all interested parties was taken into consideration, the GBRC formed a group of community stakeholders and arranged for periodic meetings to present the progress of the project.

Stakeholders included:

- City of Bridgeport Officials
- Town of Fairfield Officials
- Fairfield Conservation Commission
- Fairfield Metro Center Developer
- Black Rock Neighborhood Representatives

Two stakeholder meetings were held during the development of this study; one initial meeting at the Bridgeport Morton Government Center and a second at the Burroughs Community Center located in the Black Rock section of Bridgeport.

Beyond the stakeholder meetings, routine conference calls with representatives of the GBRC, the City of Bridgeport, the Town of Fairfield and the project team were held to keep all parties apprised of the development of the study and to solicit input.

This coordination resulted in a guided evaluation process in which all ideas raised were vetted in the course of the study.

### **3.3 Project Approach**

The development of the feasibility study proceeded in a series of major phases. These included Data Collection, Base Map Development, Identification of Control Parameters, Assessment of Crossing Locations, Structure Type Study, and Development of Site Improvements. The following is a brief discussion of the effort involved in each phase.

### **3.3.1 Data Collection**

During this phase a variety of data was gathered by the GBRC and the project team. This information included the following:

- GIS Information
- Design Plans for Fairfield Metro Center in Including Topographical Information
- Geotechnical Information (Boring Logs)
- FEMA Flood Insurance Study Information
- ConnDOT Bridge Inspection Reports
- Aerial Site Photos
- Bridgeport Parcel and Bicycle Route Information
- Brewster Street Rehabilitation Plans

The project team also performed multiple site visits to gather information on existing conditions and environmental resources. Photos were taken of the existing infrastructure and site features.

### **3.3.2 Base Map Development**

Utilizing the mapping elements gathered as a part of the data collection phase, the project team compiled a composite base map of the project area. The data for the project area within the limits of the City of Bridgeport was extracted from GIS information while the data from Fairfield was retrieved from CAD files from the Metro Center development. The mapping was compiled in Autocad format and was used to develop the design alternates considered in this study.

### **3.3.3 Identification of Control Parameters**

During this phase, the data gathered relative to items such as hydraulics, environmental resources and geotechnical conditions was evaluated to develop the key project control parameters to be used in the assessment of suitable bridge crossing locations. This information included design flood elevations, wetland limits and other critical environmental boundaries as well as property lines.

### **3.3.4 Assessment of Crossing Locations**

With the base mapping developed and the control parameters identified the next task was to assess a series of potential locations for a new pedestrian bridge. This evaluation process is detailed in Section 8 of this report.

### **3.3.5 Structure Type Study**

This phase consisted of the evaluation of three structure types for use as a new pedestrian bridge over the Ash Creek. The alternates were evaluated with respect to their relative aesthetics, structural depths (and associated impacts on the walkway profile), and costs.

### **3.3.6 Development of Site Improvements**

In this phase, we considered site improvements at each end of the proposed bridge which would serve to better link the new bridge to the existing infrastructure. This included consideration of the pedestrian, bicycle, and other transit connections.

The results of all of these phases of the work are summarized in this report.

## SECTION 4 – EXISTING CONDITIONS

Within the project area, the primary route for pedestrian access to the Fairfield Metro Center from Black Rock is via the existing bridge crossing over the Ash Creek at Brewster Street / Black Rock Turnpike. Pedestrians pass over Bridge No. 04203 and turn left down an existing sidewalk along Ash Creek Boulevard. There is a crosswalk that allows passage across the street into the Metro Center Parking lot. Also in this location is a gravel path which runs through a conservation easement established along the Ash Creek, which serves as the town line between Fairfield and Bridgeport. On the Bridgeport side of the creek lie the primarily residential neighborhood streets of Black Rock. In this section, we will evaluate the existing pedestrian facilities along these routes.



Area Map showing Existing Pedestrian Facilities

## 4.1 Brewster Street / Black Rock Turnpike

Brewster Street / Black Rock Turnpike runs generally in the NW / SE direction and crosses between the City of Bridgeport and the Town of Fairfield. This street is designated as Brewster Street in Bridgeport and Black Rock Turnpike in Fairfield and is classified as an urban minor arterial. At the bridge crossing over the Ash Creek, the roadway has a width of 37'-8" with 5' sidewalks on either side. The useable sidewalk width is reduced to approximately 3'-6" in some locations due to obstructions (utility poles / fire hydrants).



East Sidewalk at Brewster Street Bridge (Looking North)

The bridge carrying Brewster Street over the Ash Creek was constructed in 1929 and was subsequently rehabilitated in 2007. As a part of the rehabilitation, the roadway appears to have been widened by reducing the width of the sidewalks.



Crosswalk at Intersection of Brewster St. & Canfield Ave.

Traffic counts performed as a part of this study indicated an ADT at the intersection of Brewster Street and Fairfield Avenue of 6,000 vehicles and 13,400 vehicles at the intersection of Black Rock Turnpike and Commerce Drive. The relatively high ADT combined with the limited sidewalk width make this an inconvenient pedestrian route.

Regarding existing crosswalks, there are existing pedestrian-actuated crosswalks at the intersections of Brewster Street and Canfield Avenue as well as

the intersection of Black Rock Turnpike and Commerce Drive.

## 4.2 Ash Creek Boulevard

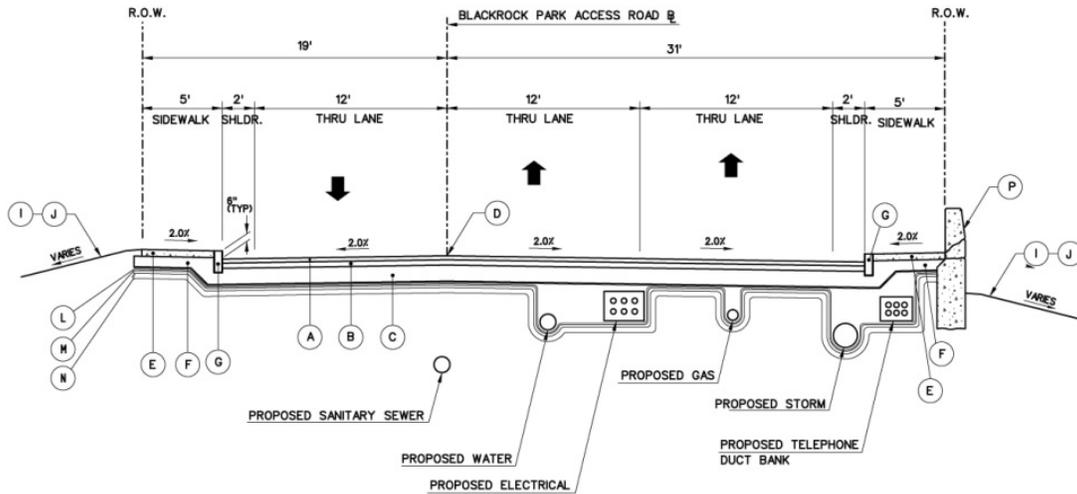
In order to access the Fairfield Metro Center from Brewster Street / Black Rock Turnpike, pedestrians can utilize Ash Creek Boulevard. This roadway was constructed as a part of the Fairfield Metro Center project and is the access road to the Metro Center parking lot.



Crosswalk at Entrance to Metro Center Parking Lot



Sidewalk along Ash Creek Blvd with Obstruction



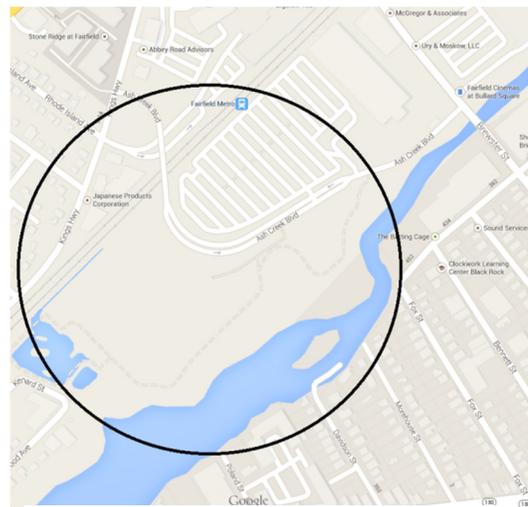
Ash Creek Blvd Cross Section (From Design Plans)

The road consists of three lanes of traffic with two lanes running in the eastbound direction and one lane running in the westbound direction. There are 5' wide sidewalks running along each side of the roadway along much of its length though between the Metro Center parking lot entrance and Brewster Street, there is only a sidewalk along the south side of the roadway. This sidewalk has obstructions in locations allowing as little as 34" clear useable width at one light pole foundation.

Prior to the vehicular entrance to the Metro Center parking lot, there is a non-signalized crosswalk to allow pedestrian traffic to cross Ash Creek Boulevard toward and enter the parking lot. Upon entrance to the parking lot, there is no formalized pedestrian route to the train platform.

### 4.3 Conservation Easement Trail

When the Fairfield Metro Center site was initially developed, a Conservation Easement was established along the Ash Creek to preserve the natural conditions of this location. This easement is maintained by the Town of Fairfield Conservation Commission. Within this easement is a gravel trail which winds along the north bank of the Ash Creek. The path connects in with the sidewalk on Ash Creek Boulevard in the vicinity of the crosswalk connecting to the Metro Center parking lot.



Conservation Easement Trail System Location



Conservation Easement Trail

This path has an approximate width of 6 feet within the project area. The trail system through the Conservation Easement exceeds ½ mile in length and ties in to Kenard Street south of the Metro Center. This trail



is maintained by Black Rock Realty. It winds along the west edge of the Creek and is composed of a gravel surface that exhibits some weed growth and is being encroached on by vegetation along its sides.

#### 4.4 Black Rock Neighborhood Streets

On the Bridgeport side of the Ash Creek lies the medium to high density residential neighborhood of Black Rock. In the immediate vicinity of the Ash Creek lie a series of residential streets that terminate into Canfield Avenue (or the Canfield Avenue right of way). These streets include (from east to west) Wilson Street, Bennett Street, Fox Street, Morehouse Street and Davidson Street.



Black Rock Neighborhood

These streets generally consist of roadway widths of 30 to 32 feet with 5' sidewalks on either side of the road. Parking is allowed on both sides of the road. The sidewalks on Wilson, Bennett, and Fox Streets tie into the sidewalks on Canfield Avenue. The sidewalks on Morehouse and Davidson Streets dead-end at the undeveloped Canfield Avenue right of way at their north ends. Pedestrians wishing to access the Fairfield Metro Center are required to walk south to Fairfield Avenue and head east to Brewster Street.



View Along Fox Street – Looking South from Canfield Avenue

Between Fox Street and Brewster Street, Canfield Avenue has a mix of residential and commercial use. The geometry of the roadway is similar to the previously noted residential streets with sidewalks along each side of the roadway and a paved width of approximately 32'. The existing sidewalks tie into the sidewalks at Brewster Street. At the intersection of Brewster Street and Canfield Avenue, there are pedestrian actuated crosswalks.

Between Fox Street and Davidson Street, the Canfield Avenue right of way is undeveloped. The width of the right of way is approximately

Between Fox Street and Brewster Street, Canfield Avenue has a mix of residential and commercial use. The geometry of the roadway is similar to the previously noted residential streets with sidewalks along each side of the roadway and a paved width of approximately 32'. The existing sidewalks tie into the sidewalks at Brewster Street. At the intersection of Brewster Street and Canfield Avenue, there are pedestrian actuated crosswalks.



View Along Canfield Avenue- Looking West from Brewster Street

Between Fox Street and Davidson Street, the Canfield Avenue right of way is undeveloped. The width of the right of way is approximately

50 feet. This property is owned by the City of Bridgeport. At the intersection of Fox Street and Canfield Avenue, there is also undeveloped right of way along the extension of Fox Street heading toward the Ash Creek.

#### 4.5 Vehicular and Pedestrian Traffic

As part of the study to construct a new pedestrian bridge over the Ash Creek, Vehicular and Pedestrian counts were made at several locations in the vicinity of the Fairfield Metro Center. The traffic counts were conducted at the following locations. Refer to Appendix H for traffic count data.

Manual Vehicular Turning Movement and Pedestrian Counts (Weekday (6:30-8:30 AM) and (4-6 PM)):

1. Brewster Street at Fairfield Avenue
2. Brewster Street at Canfield Avenue
3. Black Rock Turnpike at Ash Creek Blvd/ Cinemas Drive
4. Black Rock Turnpike at Commerce Drive
5. Crosswalk across Ash Creek Blvd. to Fairfield Metro Station

Automatic Traffic Recorder Count (Bi-Directional Volume Only Counts):

1. Black Rock Turnpike East of Commerce Drive
2. Brewster Street West of Fairfield Avenue

The counts were conducted during the week of March 24, 2013 which is considered an “Average” month therefore no seasonal adjustment is necessary. The actual count sheets are presented in the Appendix.

In the vicinity of the site, the primary vehicular access to the Fairfield Metro Rail Station is from Black Rock Turnpike, in Fairfield. Black Rock Turnpike continues easterly over Ash Creek into Bridgeport and is then named Brewster Street. Review of the counts shows there is significantly more traffic on this road to the west of the Metro Station than to the east. The Average Daily Traffic (ADT) for Black Rock Turnpike/Brewster Street east and west of the site are as follows:

|  |        |
|--|--------|
| Black Rock Turnpike East of Commerce Drive | 13,400 |
| Brewster Street West of Fairfield Avenue   | 6,000  |

The vehicular and pedestrian turning movement counts were conducted to determine from which direction patrons of the Fairfield Metro Station approach the site. The vehicular counts show that during the morning peak period approximately 53 percent of the patrons approach the site from the east (Bridgeport) and 47 percent approach from the west (Fairfield). Of the patrons

exiting the site during the morning peak hour, 89 percent travel east while only 11 percent travel to the west. During the afternoon peak period 73 percent of the patrons approach the site from the east and 27 percent approach from the west. Of the patrons exiting the site during the morning peak hour, 79 percent travel east while only 21 percent travel to the west.

Due to the location of the Fairfield Metro Railroad Station and the location of its access to Black Turnpike the pedestrian linkages to the residential areas for the Black Rock section of Bridgeport are perceived to be poor. Review of the pedestrian counts taken at the various intersections bear this out. The total pedestrian volumes for intersections directly associated with the station are as follows:

|   | AM<br>Peak Hour | PM<br>Peak Hour |
|---|-----------------|-----------------|
| Black Rock Turnpike at Ash Creek Blvd/ Cinemas Drive        | 7               | 14              |
| Crosswalk across Ash Creek Blvd. to Fairfield Metro Station | 22              | 23              |

It is believed that the people living in the Bridgeport immediately south of Ash Creek wishing the use the station will find a dedicated pedestrian access-way more convenient and use it rather than driving to the station.

## **SECTION 5 – ENVIRONMENTAL RESOURCES AND PERMITTING**

Construction of a pedestrian bridge across the Ash Creek in the vicinity of the Fairfield Metro Center would involve work in and near natural resources that are regulated by agencies at the local, federal and state level. Selection of a preferred alternative for the bridge location will certainly involve the consideration of impacts to natural resources. The purpose of this section is to present the natural resources in the project area and the associated regulations, permits and approvals that would likely pertain to the project.

### **5.1 Natural Resources – The Ash Creek**

Ash Creek is a tidal estuary with upstream flows from the Rooster River and tidal flows emanating from Long Island Sound. Within the project area, Ash Creek is near the upper end of its tidal range which extends slightly north of the Brewster Street Bridge. According to the 2010 305b CT DEEP Water Quality Assessment, the tidal creek does not meet water quality goals for three designated uses: Marine and Aquatic Life, Recreation, and Commercial Shellfish. The Creek also does not meet designated uses for Fish Consumption. Existing and historic sources of pollution likely responsible for the relatively poor water quality include: combined sewer overflows (CSOs), stormwater discharge from urban runoff and historical manufacturing uses along the Creek.

Connecticut has a statewide Total Maximum Daily Load (TMDL) for bacteria. The outlet of Ash Creek is impaired with fecal coliform bacteria and prohibited from shellfish harvesting near Black Rock Harbor, and the central part of the impaired segment is permitted by Restricted-Relay/Depuration.

A TMDL analysis was completed for indicator bacteria in three subbasins of the Southwest Eastern Regional Basin. Waterbodies included in the TMDL analysis are the Mill River, Rooster River and Sasco Brook. These waterbodies were included on the CT Impaired Waters List due to exceedences of the indicator bacteria criteria contained within the State Water Quality Standards.

Despite the poor water quality of the Ash Creek, it is a diverse ecosystem nestled within a dense urbanized area. Components of this ecosystem include: Ash Creek proper, adjacent mudflats, low marsh, high marsh, freshwater wetland and upland coastal meadow as shown in Figure 1. These ecosystems collectively provide many valuable functions including: floodwater alteration, fish and shellfish habitat, sediment/toxicant/pathogen retention of pollutants, nutrient removal/retention/transformation, carbon fixation to reduce global warming, shoreline stabilization, wildlife habitat, (limited) recreational opportunities, and visual quality/aesthetics.

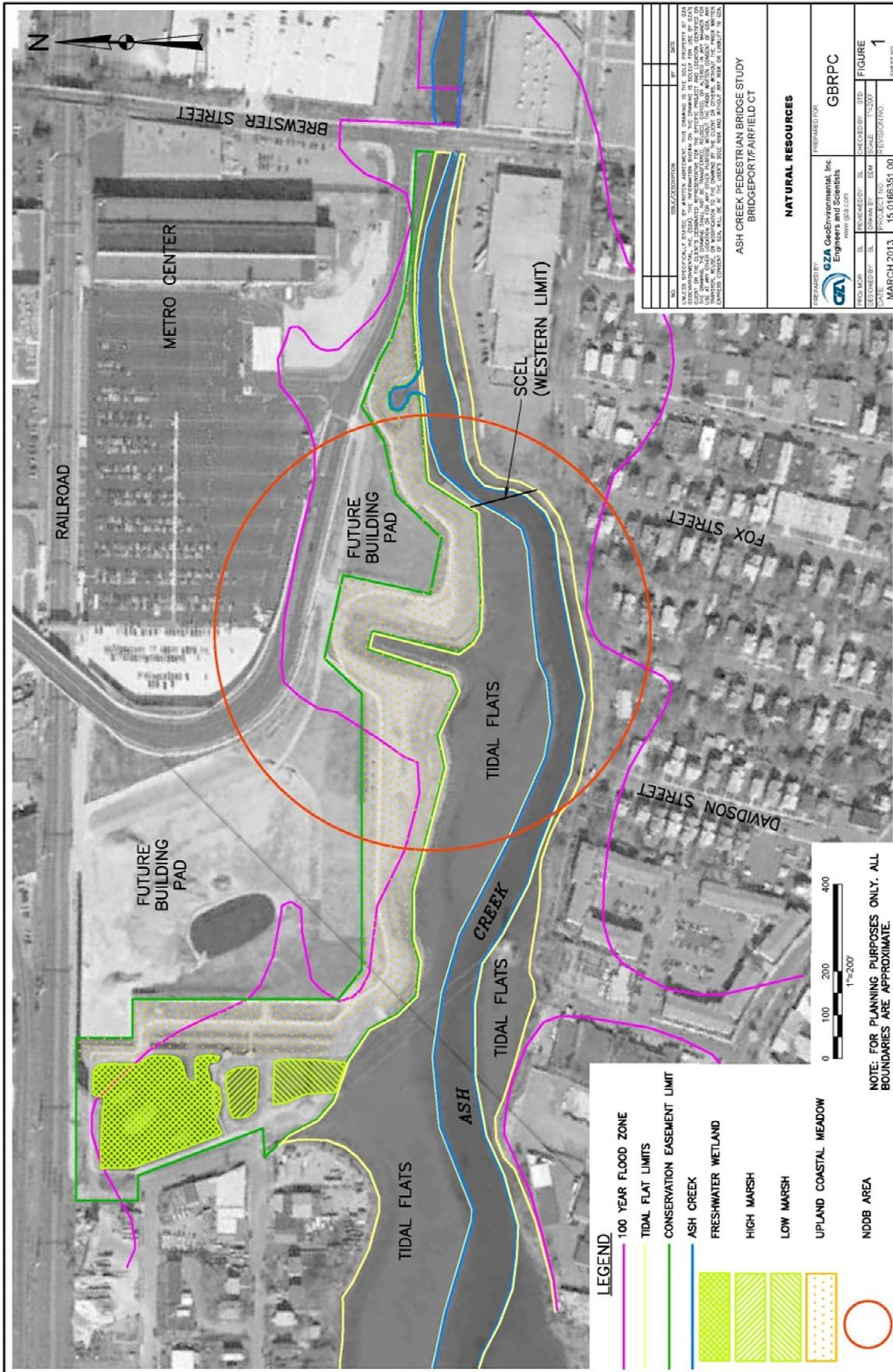


FIGURE 1

The tidal mud flats in the project area are extensive with the most expansive mud flats occurring on the north side of the Creek. The mud flats support an invertebrate population preyed upon by a variety of shorebirds. Those observed during a February, 2013 site visit included: heron gull, widgeon, killdeer, merganser, and black duck. Great blue heron have also been observed at other times.

The extent of tidal wetlands in the project area is limited to a few patches along the south banks of the Ash Creek and, at the time of the field visit, appeared to be thin patches of *Phragmites australis*, an invasive species.

The north side of the Ash Creek within the project area is a created wetland/upland complex that was recently completed as part of the Metro Center site development project. The mitigation included creation of an intertidal marsh, approximately 8 feet in width where the toe of slope meets the upper limits of the mud flat (Figure 1). During a February 2013 site visit, this interface appeared stable, but there was little evidence of salt marsh vegetation development. From this area the slope rises sharply to a created upland meadow area which was planted with a coastal meadow seed mix.

Although not within the project area it is worthy to note that the wetland mitigation on the west end of the Metro Center involved creation of low marsh, high marsh, freshwater wetlands and open water with access to this area via a new boardwalk system. This area would likely not be affected by the project.

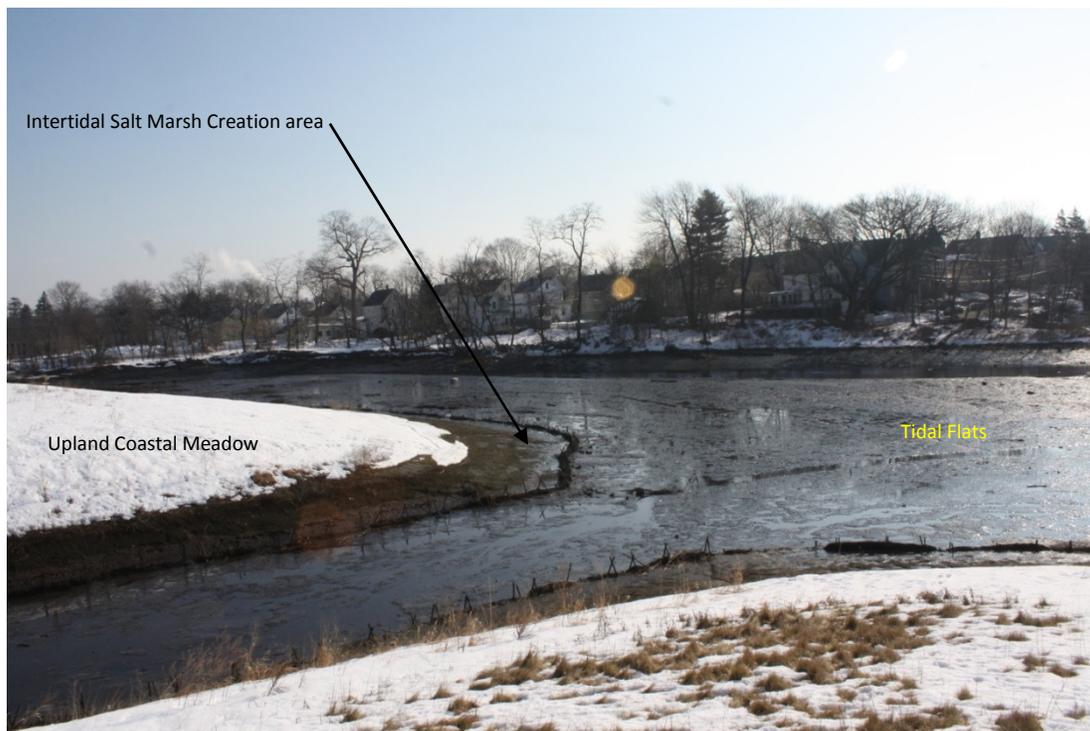
The upland coastal meadow and intertidal habitats created for the Metro Center are protected via a conservation easement which has been filed with the Town. Its boundary is demarcated in the field with a fieldstone wall. The Conservation Easement and companion Stewardship Easement does not specify what types of actions can or cannot be conducted; however there are goals, uses and purposes contained within the Conservation Easement as follows:

1. “To serve to protect the structural integrity of the underlying Brownfield remediation project’s membrane cap in order to permanently protect the environment and visitors to the easement area;
2. To serve to provide a permanent requirement to protect the easement area for its contribution to the conservation of a coastal ecosystem and related open space purposes;
3. Serve to provide the general public with access to the protected conservation easement area whose permissible and prohibited uses and activities are compatible with the Fairfield Conservation Commission’s Open Space Regulations; and
4. To serve to provide permanent funding for addressing the long term management needs of this protected easement area as required in the inland wetland permit no. 2003-2008 “mitigation package”.

Any temporary or permanent work done within the conservation easement would require the approval of the Fairfield Conservation Commission.

Item 1 refers to the remediation of the Metro Center Site which was completed in 2010. Approximately 250,000 cubic yards of casting sands containing volatile organic compounds and polychlorinated biphenyls (PCBs) were remediated by burying and capping the sands underneath the Metro Center Site, including the upland coastal meadow. A series of overlapping HDPE membranes were placed over the sands to isolate the contaminants from the environment. An Environmental Land Use Restriction (ELUR) is being created that would limit the types of uses within the ELUR.

Discussions with the Metro Center development project team indicate that placement of piles and other support structures associated with the bridge would likely need to penetrate the membrane but that the membrane could be resealed to retain its long term effectiveness in isolating contaminants from the environment. A relatively small volume of contaminated soil may need to be removed and disposed of in accordance with applicable state and federal regulations as a result of pile displacement. Also note that any test borings performed during the design process that penetrate the cap will have to be permitted for and the HDPE cap re-sealed afterwards.



Southeast View from Metro Center Conservation Area

The south side of the project area is a densely developed area consisting primarily of single and multifamily residential units. Adjacent to the Fox Street is an existing light industrial facility that currently houses an indoor baseball training center and offices. This building dates back to

at least 2006. Prior to that it was a parking lot and undeveloped land dating back to 1971 and before that it was undeveloped land except for a building located close to the proposed touchdown point. From aerial photos it cannot be determined if this was a residential or industrial structure. The Fox Street terminus at Ash Creek is currently signed for “No Dumping” implying that dumping has occurred there in the past. Based on the above factor, we recommend that a Phase 1 ESA be conducted in this area to determine if there is potential for contaminants to be encountered during construction.



View Northwest from Fox Street Touchdown Point at Low Tide

The Davidson Street touchdown point is entirely residential in nature. At this location is a thin line of vegetation consisting of Tree-of-Heaven, Weeping Willow and Red Cedar and Reed Grass (Phragmites). There is also a stormwater outfall at this location. Site contamination potential in this area is low.



Looking North from Davidson Street Touchdown Area at Low Tide

## 5.2 Environmental Permitting

The project will require several environmental permits. The number, type and complexity of the permitting will depend on the chosen location and the details of the design, particularly the placement of structures (e.g. piles) with regulated resource areas. If state and/or federal funds are used for the project's construction, then this will also have an impact on the permit requirements. The following is a summary of the permits that will likely be needed and their applicability to each of the alternatives.

### 5.2.1 Structures and Dredging Permit

Any work conducted below the Coastal Jurisdiction Line (CJL) requires a permit from the DEEP Office of Long Island Sound Programs (OLISP). The CJL for Bridgeport is elevation 5 feet and elevation 5.2 feet for Fairfield (NAVD88).

### 5.2.2 Section 404 Permit

A Section 404 Permit would be required from the U.S. Army Corps of Engineers (USACE) if there is fill below mean high water (MHW). The USACE and DEEP have developed a Programmatic General Permit (PGP) that allows for expedited and coordinated review among these two agencies as well as the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, two agencies charged with review of Section 404 permit applications. The level of review will depend on the type of action and the magnitude of its impact on regulated resources. Category I and II actions are covered under the PGP but projects that exceed the thresholds of Category II would require an Individual Permit from the USACE which is a more stringent and lengthy approval process that includes a public comment period. Any amount of fill within tidal flats is not eligible for the PGP and would therefore require an Individual Permit.

### 5.2.3 Tidal Wetlands Permit

Any work in tidal wetlands requires a Tidal Wetlands Permit from DEEP OLISP. The bridge crossing at Fox Street and Davidson Street could impact a narrow fringe of tidal wetlands of relatively low functional value because they are dominated by Phragmites. The potential touchdown location on the Fairfield side would not directly impact the immediate shoreline, which would be classified as tidal wetlands, however the aerial spanning of the tidal wetlands is still reviewable by DEEP OLISP.

### 5.2.4 Natural Diversity Data Base Review

Associated with the DEEP permitting for this project is the NDDDB review requirement. As mentioned previously, the project is located within an NDDDB area which indicates that there may

be state or federally endangered, threatened or special concern species or their habitats within that area. An NDDB Review Request Form was submitted to DEEP as a part of this study and the response indicated that no endangered, threatened or special concern species are anticipated to be impacted by the proposed work.

### **5.2.5 Coastal Consistency Determination**

Also required as part of DEEP permitting is a Coastal Consistency Review because the project is within the coastal boundary. The project will be reviewed with respect to the goals and policies of the State's Coastal Zone Management Program.

### **5.2.6 Conservation Commission Approval**

The project will likely involve work within the Conservation Easement established for the Metro Center Site; therefore this aspect of the project would need to be approved by the Fairfield Conservation Commission.

### **5.2.7 Local Inland Wetlands Permit**

The local Inland Wetlands Commissions regulate freshwater wetlands. Tidal wetlands are regulated by DEEP as stated above. There do not appear to be any freshwater wetlands in the project area that would be affected by the project, therefore IWWC approvals will not be required.

### **5.2.8 Local Planning and Zoning Approval**

The City of Bridgeport and Town of Fairfield's Planning and Zoning Commissions will require Coastal Site Plan approval for the bridge.

### **5.2.9 Flood Management Certification**

If the project receives funding from the State, then Flood Management Certification will be required because at least a portion of the project could be located below the 1% annual chance (a.k.a. 100-year) flood elevation. The approximate 100-year flood elevation is shown in Figure 1. The applicant must demonstrate that the project does not cause an increase in flood elevations upstream or downstream of the project.

## SECTION 6 – HYDRAULIC CONSIDERATIONS

It is expected that hydraulic modeling may be required by CT DEEP to demonstrate that the proposed pedestrian bridge will not cause adverse flooding impacts. As a part of this study, we set out to establish likely modeling approaches to be utilized during design, including software and data requirements. To that end, existing sources of hydrologic and hydraulic data pertaining to the site were identified and reviewed, and are summarized below. Data gaps and needs to complete the hydrologic and hydraulic analysis are identified.

It should be noted that the watercourse downstream of Brewster Street is called Ash Creek while it is known as the Rooster River upstream of Brewster Street.

### 6.1 Available Data

The following is a summary of the pertinent available hydraulic / hydrologic data identified during this study.

#### Connecticut Stream Channel Encroachment Lines (SCELS)

SCELS are mapped for Ash Creek/Rooster River, beginning near Fox Street and extending upstream. The development of the SCELS are described in “Report on Stream Encroachment Lines – Rooster River-Bridgeport-Fairfield, Connecticut”, prepared by Roger C. Brown, Consulting Engineer, February 1964.

#### DEEP Coastal Jurisdiction Lines

DEEP Coastal Jurisdiction Lines (CJL) are the jurisdiction lines for activities requiring permits under CGS Section 22a-361. CJL elevations have been pre-determined by DEEP for municipalities subject to tidal influence. The CJL is a series of elevations that are computed from the highest predicted tides found in Long Island Sound, and the Connecticut, Housatonic and Thames Rivers up to their respective heads of tide. The CJL elevations reflect the long-term elevation of the highest predicted tide without the effects of weather. At the NOAA primary tide station in Bridgeport (NOAA ID 8467150), the CJL is 5.0 ft NAVD88. Thus, the CJL elevation for Bridgeport is also 5.0 ft NAVD88. The CJL elevation for Fairfield is 5.2 ft NAVD88.

#### United States Geological Survey (USGS) stream flow data

USGS gage 01208873 is located on Rooster River in Fairfield, upstream of North Avenue (US Route 1) near Renwick Drive. This is approximately 2 miles upstream of the project area. Data available for this gage includes instantaneous observations of discharge (cubic feet per second) and gage height (feet) from 2007 to the present (real time). Daily mean discharge is available from 1977 to the present. Daily, monthly, and annual discharge statistics are compiled for 1977 through 2010. Annual peak stream flow from 1977 through 2011 (shown below) shows a maximum discharge in April of 75.1 cubic feet per second (cfs) and a mean discharge in April of 25.2 cfs.

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 12.5   | 15.3   | 18.4   | 19.8   | 18.0   | 24.3   | 25.2   | 19.2   | 15.4   | 9.0    | 11.0   | 11.1   |
| <b>Max</b>  | 52.5   | 36.0   | 42.1   | 74.1   | 37.7   | 65.9   | 75.1   | 71.2   | 65.1   | 23.1   | 34.1   | 40.8   |
| <b>(WY)</b> | (2006) | (2007) | (1997) | (1979) | (2008) | (2010) | (1983) | (1989) | (1982) | (1984) | (2011) | (2011) |
| <b>Min</b>  | 3.42   | 3.50   | 2.25   | 3.68   | 4.57   | 7.51   | 6.08   | 6.28   | 3.73   | 2.30   | 1.38   | 2.49   |
| <b>(WY)</b> | (2002) | (2002) | (1999) | (1981) | (2002) | (2006) | (1985) | (1986) | (1999) | (1999) | (1981) | (2007) |

Source: USGS

Notes: WY = Water Year

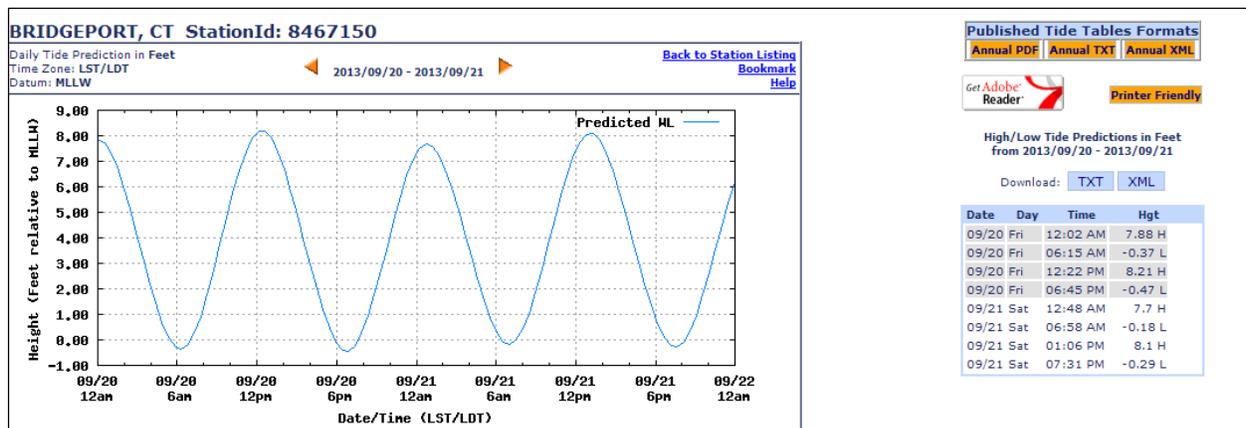
Monthly Statistics of Daily Discharge (Cubic Feet Per Second) at Rooster River Station 01208873, Fairfield, CT from 1977-2011

[http://waterdata.usgs.gov/nwis/nwisman/?site\\_no=01208873&agency\\_cd=USGS](http://waterdata.usgs.gov/nwis/nwisman/?site_no=01208873&agency_cd=USGS)

### National Oceanic and Atmospheric Administration (NOAA) tidal data

The nearest tidal gage to the project area is the NOAA CO-OPS (Center for Operational Oceanographic Products and Services) Station 8467150, located at the mouth of the Pequonnock River in Bridgeport. The Pequonnock River enters Long Island Sound approximately 3.5 miles northeast of the mouth of Ash Creek. This station provides real time and historic water level and meteorological data, as well as statistical extremes. The station was established in 1932 and has been in its present installation since 1989.

The tidal range at Bridgeport Harbor is approximately 8 feet as shown below. There is no tidal gauge data for Ash Creek near the project area, but given its 2± mile distance from Long Island Sound, the tidal influence would be diminished and freshwater inputs would have a significant influence on water levels.



Tidal Elevations at Bridgeport Harbor for September 20, 2013. Source: NOAA.

<http://tidesandcurrents.noaa.gov/geo.shtml?location=8467150>

### Natural Resources Conservation Service (NRCS) / Northeast Regional Climate Center (NRCC) extreme precipitation data

The NRCC together with the NRCS maintains the website, “Extreme Precipitation in New York and New England, An Interactive Web Tool for Extreme Precipitation Analysis”

(<http://precip.eas.cornell.edu/>), which provides estimates of extreme rainfall for various durations (from 5 minutes to 10 days) and recurrence intervals (1 year to 500 years). These estimates are based on a comprehensive climatology of rainfall events for the New York and New England region, updated to include data up to 2008.

The current standard rainfall-duration-frequency data used in hydrologic analyses in Connecticut are from U.S. Weather Bureau Technical Paper Number 40 (TP-40). TP-40 was published by the United States Weather Bureau (now the National Weather Service) in the 1960's, and the climatology of extreme rainfall events had not been updated since then, until the NRCC and the NRCS partnered to conduct an extreme precipitation analysis based on actual rainfall events through the end of 2008. These analyses show that storms once considered to have a 1 in 100 chance of occurring annually (i.e., the 100-year storm) now have a higher likelihood of occurring in New England; and that the 100-year storm based on the updated data is larger than the 100-year storm as published by TP-40.

The ConnDOT Drainage Manual (October 2000) has tabulated rainfall – duration – frequency relationships for Connecticut, by county, based on TP-40. Extreme Precipitation Tables were generated for the project location using the web tool and are attached. The table below compares the 24-hour duration rainfall statistics from the web tool to those listed in the ConnDOT Drainage Manual for Fairfield County.

**Table 1. Tabulated Rainfall Data**

| Return Frequency | Rainfall (inches)  |         |
|------------------|--------------------|---------|
|                  | NRCC/NRCS Web Tool | ConnDOT |
| 2-year           | 3.4                | 3.3     |
| 5-year           | 4.3                | 4.3     |
| 10-year          | 5.1                | 5.0     |
| 25-year          | 6.3                | 5.7     |
| 50-year          | 7.5                | 6.4     |
| 100-year         | 8.9                | 7.2     |

Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) mapping and backup (i.e., technical and administrative support) data

The project area is included on the Flood Insurance Rate Map (FIRM) for Fairfield County, Connecticut, Effective Date June 18, 2010 (Panel 436 of 626, Map Number 09001C0436F). Upstream of Brewster Street, the watercourse is known as Rooster River and is subject to inundation by the 1% annual chance flood (base flood) with mapped base flood elevation lines and values. There is also a mapped floodway on Rooster River upstream of Brewster Street. Downstream of Brewster Street, which includes the project area, the watercourse is

called Ash Creek and is subject to inundation by the base flood due to backwater from Long Island Sound to elevation 10 (NAVD88).

GZA submitted a data request to FEMA for Ash Creek from Long Island Sound to Brewster Street and Rooster River from Brewster Street upstream to I-95, associated with the FIRM effective date of June 18, 2010. The FEMA Engineering Library was able to locate and provide HEC-2 model input and output data for Rooster River which apparently cover approximately cross-sections A through Q to match cross-sections A through Q in the 2010 FIS study. In addition, coastal data for Ash Creek was provided. These data included the following:

- Tidal Flood Profiles New England Coastline prepared by the Hydraulics and Water Quality Section, New England Division, U.S. Army Corps of Engineers, September 1988.

#### Bridgeport:

##### Frequency-Tide Elevation Curves for Long Island Sound

- Flood Insurance Study Supplement – Wave Height Analysis (FEMA, September 1, 1983)
- Wave Height Analysis for Flood Insurance Studies (WHAFIS) input and output data for wave height computations

#### Fairfield:

- Total Tide Frequency Curves for Long Island Sound

The HEC-2 input and output data were examined to confirm that they could be correlated to the published FIS. While the bridges and cross-sections appeared to be located appropriately in the HEC-2 input data, the 100-year water surface elevations shown in the HEC-2 output data did not completely agree with the elevations as indicated on the published FIRM and profile in the FIS. Therefore, there is little confidence that the HEC-2 input data provided includes the final model runs which were used to prepare the FIRM and FIS profile; and it is not recommended that these data be utilized for future modeling efforts.

#### Ash Creek/Rooster River Hydraulic Report for the Reconstruction of Brewster Street Bridge, prepared for City of Bridgeport and Town of Fairfield, Rev. October 20, 2004

Hydraulic modeling was conducted in association with the replacement of the superstructure of the Brewster Street Bridge, with the limits of modeling from Brewster Street to the Metro North Railroad crossing. The report indicates that the input data sets obtained from FEMA at that time did not include data for the Brewster Street Bridge project area. It appears that the data obtained from FEMA by the engineer is not the same data that was provided by the data request conducted for this report.

A field survey was performed by the project team in December 2001 to obtain cross-sections for the hydraulic analysis, which was performed using HEC-RAS for Brewster Street upstream to the Metro North Railroad crossing. Survey cross sections were taken from just downstream of Brewster Street to just downstream of the Metro North Railroad crossing.

### Hurricane Surge Inundation

CT DEEP has available a GIS data layer which includes Hurricane Surge Inundation areas for category 1 through 4 hurricanes striking the coast of Connecticut with a peak hurricane surge arriving at high mean water. The hurricane surge elevation data used to define these areas were calculated by the National Hurricane Center using the Sea Lake and Overland Surge from Hurricanes (SLOSH) Model. The SLOSH model hurricane surge elevations have an accuracy of +/- 20 percent. The hurricane surge inundation areas depict the inundation that can be expected to result from a worst case combination of hurricane landfall location, forward speed, and direction for each hurricane category. Ash Creek would experience storm surge from a Category 1 hurricane as far upstream as North Avenue (US Route 1), which encompasses the project area. It is expected that hydraulic modeling may be required by CT DEEP to demonstrate that the proposed pedestrian bridge will not cause adverse flooding impacts. The objective of this study was to establish likely modeling approaches to be utilized, including software and data requirements. To that end, existing sources of hydrologic and hydraulic data pertaining to the site were identified and reviewed, and are summarized below. Data gaps and needs to complete the hydrologic and hydraulic analysis are identified.

## **6.2 Data Needs**

The amount of proposed construction associated with the pedestrian bridge to be conducted within the limits of the base flood and below the base flood elevation will impact the extent of hydrologic and hydraulic modeling that will need to be conducted. If the flood zone can be spanned completely, then modeling will likely not be required. If bridge piers are placed within the area of the base flood, modeling may be required to evaluate potential impacts and estimate flow velocities around the bridge piers. As the location of the proposed bridge is in a tidal backwater area, impacts may be expected to be minimal and consultation with DEEP would be required to determine the extent of modeling required.

If HEC-RAS modeling is required to estimate the impacts upstream of the proposed pedestrian bridge, the cross-sections used in the Ash Creek/Rooster River Hydraulic Report for the Reconstruction of Brewster Street Bridge (STV Inc., Rev. October 20, 2004) may be used for analysis of Rooster River from Brewster Street upstream. Survey will need to be performed to collect Ash Creek and floodplain cross-sections for the project area, from Brewster Street downstream.

Any bridge piers placed within the area of the base flood will need to be analyzed for scour. In accordance with HEC-181, the following additional field data should be collected to support scour calculations:

- a. Boring logs to define geologic substrata at the bridge site. Note that borings in certain areas will require penetration of the HDPE membrane covering contaminated fill and these penetrations will need to be re-sealed. Additionally, special permits may be required to perform this work and would have to be coordinated with the DEEP and Fairfield Conservation Commission.
- b. Bed material size, gradation, and distribution in the bridge reach.

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1 U.S. DOT, FHWA, Hydraulic Engineering Circular No. 18, Evaluating Scour at Bridges, Fifth edition, Publication No. FHWA-HIF-12-003, April 2012.

## SECTION 7 – GEOTECHNICAL CONSIDERATIONS

When considering the placement of a potential bridge structure, it is important to consider the subsurface conditions of the site. These conditions will dictate the type and extent of the foundation structures necessary to support the proposed bridge. As a part of this study, we gathered available existing information from the project site pertaining to the subsurface conditions in order to estimate the magnitude of the proposed bridge foundations. Should this project proceed into a formal design phase, site specific foundation investigations will be required to confirm the requirements.

### 7.1 Summary of Existing Data

The following readily available information was reviewed to evaluate the subsurface conditions in the vicinity of the proposed bridge:

- 1992 Surficial Materials Map of Connecticut, published by US Department of the Interior, the US Geological Survey and the CT Department of Environmental Protection, prepared by Janet Stone et al.
- A 2008 Geotechnical Report for the Fairfield Metro Center at 21 Blackrock Turnpike, Fairfield Connecticut, prepared by PB Americas, Inc. of Glastonbury Connecticut. About ninety test borings were performed for that study.
- A 2010 Addendum (1) to the Geotechnical Report for the Fairfield Metro Center at 21 Blackrock Turnpike, Fairfield Connecticut, also prepared by PB Americas, Inc. Six additional test borings were performed for the Addendum.

In general, the geologic map indicates that the soils to the southeast of Ash Creek are glacial till whereas the soils northwest of Ash Creek are sand over fines. Test borings drilled on the northwest side of Ash Creek confirm the geologic mapping and also show various amounts of fill overlying the sand and fines. No test boring data was readily available for the southeast side of Ash Creek.

Two potential bridge locations are being considered, one the end of Fox Street and the other at the northwest of end of Davidson Street (aka Canfield Avenue Extension). The available test borings closest to the potential bridge locations were reviewed. Ground surface elevation data were not presented on the logs.

#### Fox Street Location

Subsurface conditions encountered in test borings on the northwest side of Ash Creek consisted of:

- up to about 20 feet of existing urban fill; overlying

- up to about 30 feet of organic silt with peat;
- sand, silty sand and sandy silt; overlying
- bedrock.

Depth to bedrock in the 14 test borings reviewed in this area, varied from about 35 to 60 feet below the grades at the time of the explorations. Organic silt and peat deposits are anticipated to increase in thickness as the distance from Ash Creek decreases. Groundwater was encountered at depths ranging from about 3 to 13 feet below grade. Borings evaluated in this area included D-series 70, 71, 73, 76, 77, 79, 80, 81, 82, 83 84, 85, 86, and 87.

### Davidson Street Location

Subsurface conditions encountered in test borings on the northwest side of Ash Creek consisted of:

- up to 20 feet of existing urban fill; overlying
- up to about 40 feet of naturally deposited sand or sand and gravel; overlying
- bedrock.

Organic silt and peat were only encountered in two of 11 test borings in this vicinity at thicknesses up to about 5 feet. Organic silt and peat deposits are anticipated to increase in thickness as the distance from Ash Creek decreases. Depth to bedrock in this area ranged from about 10 to 40 feet below then-existing grades. Groundwater was encountered at depths ranging from about 5 to 7 feet below grade. Borings reviewed in this area included D-series 52, 53, 54, 55, 58, 59, 60, 61, 62, 63 and 65.

## **7.2 Preliminary Recommendations**

The existing fill and organic silt (with peat) strata are not suitable for direct support of the proposed bridge foundations. According to the Connecticut DOT's policies, bridges over waterways subject to scour must be pile-supported. Wingwalls and retaining walls that may be used to retain approach fill may also be required to be pile supported due to settlement of the organic silt and peat strata from addition of the approach fill. Global stability of the approach fill should also be accounted for in the foundation design. Approach slabs should also be assumed in the structure design.

The organic silt and peat stratum is located relatively deep, so replacement will likely not be a cost-effective alternative. The organic silt and peat will continue to compress over time, likely leading to the long term settlement of approach fills.

For planning and cost estimating purposes, we recommend the bridge abutments and wingwalls be founded on driven piles. The piles should also be designed for downdrag loads to accommodate anticipated settlement of the approaches. For steel piles, epoxy-coating may be required through the organic silt to reduce the effects of corrosion. Approximate pile lengths for end-bearing piles, driven to and bearing on bedrock can be assumed to be approximately 75 feet.

Approach fill settlements can be reduced or accelerated using the following techniques:

- Preloading the approach fill area (with or without the use of wick drains to reduce preload times); and
- Use of lightweight fill or lightweight materials to reduce the applied load from the approach fill.

Construction of bridge abutments and a center pier (if required) foundation will require temporary support of excavation in the form of “Cofferdam and Dewatering.”

## SECTION 8 – CROSSING LOCATION ALTERNATE ASSESSMENT

### 8.1 Introduction

Of primary importance in the evaluation of a potential pedestrian crossing across the Ash Creek is the location of the crossing. The location will have a large impact on the cost of the bridge, the people who will utilize the bridge, the environmental impacts caused by the bridge construction, and the functionality of the bridge.

Included in the Scope of Services for this project was the assessment of three alternative bridge crossings.

The alternatives considered are as follows:

- Alternate 1: No-Build Option: This alternate considers the continued usage of the existing pedestrian facilities at the Brewster Street Bridge over the Ash Creek.
- Alternate 2: Fox Street: This alternate considers a new dedicated pedestrian bridge crossing located at the extension of Fox Street on the Bridgeport side of the Ash Creek.
- Alternate 3: Davidson Street: This alternate considers a new dedicated pedestrian bridge crossing located at the extension of Davidson Street on the Bridgeport side of the Ash Creek.

In this section, we will discuss each of the alternates as well as their relative benefits and shortcomings



Aerial View of Project Site with Potential Crossing Locations Marked

## 8.2 Walkway Placement Considerations

As detailed in previous sections, there are several items / criteria which serve as the framework for the decisions to be made in the course of the study. These include the hydraulic characteristics of the site, the environmental resources and permitting requirements, as well as accessibility guidelines. In this section, we will discuss specifically how these criteria shape our decision process in selecting a suitable bridge crossing location.

### 8.2.1 ADA Accessibility Guidelines

One critical item to consider when laying out the proposed bridge crossing are the accessibility guidelines as defined by the American Disabilities Act (ADA). As this bridge and associated walkway facilities are intended to be used by the public, the goal is to make them accessible to all potential users including the physically impaired.

The ADA guidelines state that an accessible route with a slope greater than 1:20 (5%) shall be considered a ramp. Walkways designed as ramps shall have a maximum slope of 1:12 (8.3%) and shall have a landing for every 30 inches of rise (max).

### 8.2.2 Flood Elevations

Another important consideration in the assessment of new crossing locations is the flood elevation. When setting the elevation for a bridge, it is desirable to have the structure placed at an elevation above the design flood elevation. This is to ensure both that the bridge is not subject to damage from the flood waters and any floating debris and also to ensure that the bridge does not contribute to flooding upstream due to created backwater.

At this location, the design flood elevation (100 Year Flood) is approximately Elevation 10.0'. This value is important when considering the accessibility guidelines discussed in Section 8.2.1. If the bridge structure is to be kept above the flood elevation within the floodplain, adequate horizontal distance will be needed at the approaches to ensure that the walkway surface can be transitioned back down to the approach grade without exceeding the ADA sloping guidelines.

### 8.2.3 Permitting Impacts

Another item to consider when locating a bridge structure is the impact on environmental permitting. As discussed in Section 3, there are regulated environmental areas within the project site which, if impacted, will trigger environmental permitting requirements. Due to the presence of wetland soils in the vicinity of the project it does not appear feasible that the proposed bridge can be constructed without any impact to these resources. Likewise, due to

the size and limits of the floodplain in this area, there will inevitably be fill required to be placed within the floodplain as a result of this work.

One resource that appears to be avoidable (based on the available survey information) is the area within the Coastal Jurisdiction Lines (CJL). This elevation has been defined as 5.0 in Bridgeport and 5.2 in Fairfield. As such, the placement of the substructure elements (piers and abutments) will take into consideration the location of the CJL to make sure that there is no fill placed within those limits.

#### **8.2.4 Construction Cost**

As is the case with any construction project, the cost of the work is a major factor in the decision process. In the consideration of various options for a bridge crossing, the option which costs the least amount of money will generally be the most desirable solution. There may be circumstances where an unacceptable / unpermissible environmental impact may prohibit the selection of the lowest-cost solution from but cost generally always plays a major factor in the evaluation of alternates.

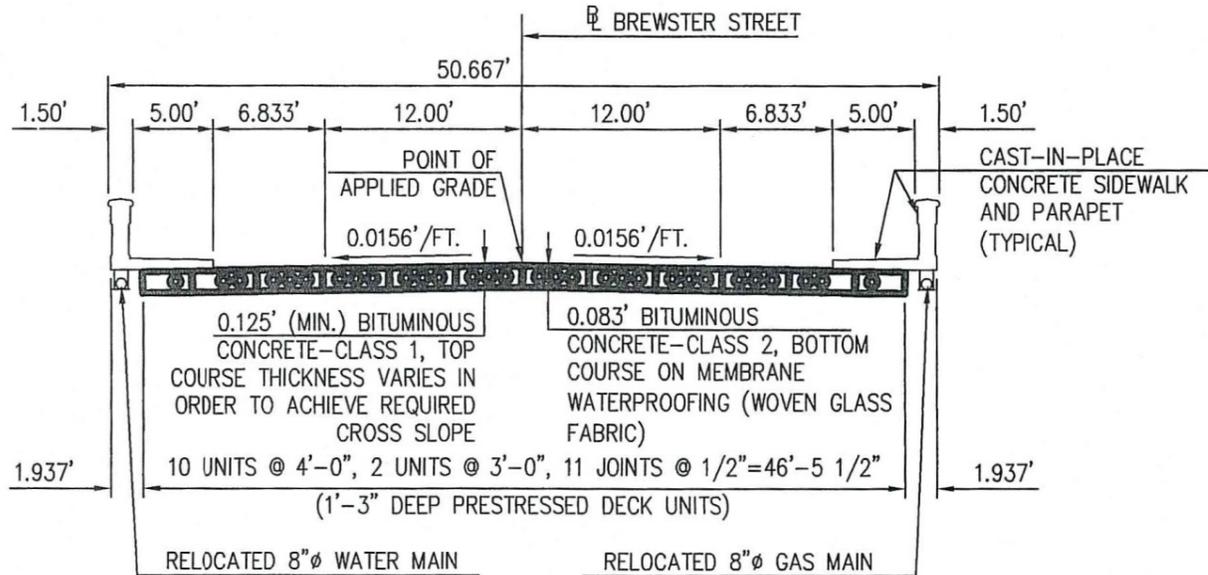
#### **8.2.5 Property Impacts**

Another criteria to be considered when evaluating the location of proposed construction are the property impacts associated with the work. Property acquisitions and easements take time to secure and cost money to the project. Crossing locations with the least amount of property impacts are preferred.

### **8.3 Alternate 1 – Brewster Street / Black Rock Turnpike Bridge**

As a baseline for the crossing alternates assessment, we have considered the existing pedestrian facilities in the area in order to examine their adequacy for accommodating the existing pedestrian traffic and also to assess their capability to accommodate further growth in pedestrian and non-motorized traffic. This facility consists of the existing bridge structure carrying Brewster Street (Blackrock Turnpike) over the Ash Creek. A cross section of the existing bridge is shown below.

The bridge accommodates one lane of vehicular traffic in each direction using two twelve-foot lanes. There are shoulders in each direction of a width of 6'-10". To accommodate the pedestrian traffic, there are two sidewalks lining the roadway each with a width of 5'-0".



Bridge Cross Section from Rehabilitation Plans

### 8.3.1 Benefits of Alternate 1

The primary benefits of the “status-quo” option are that it involves no expense and it will involve no environmental impacts. Some of the other benefits of this option are itemized in the following list.

1. Provides pedestrian access today.
2. Access provided along City/Town collector road with existing sidewalks, utilized by more than just the immediate neighborhood.
3. Busier roads may provide increased sense of security.
4. Brewster Street/Blackrock Turnpike is centrally located geographically east west in the Blackrock neighborhood.
5. Brewster Street Bridge was recently rehabilitated and sidewalks are in good physical condition. Pedestrian ramps are new at the intersection of Blackrock and Ash Creek Boulevard.
6. Streetscape improvements with concrete paver bands and ornamental lights exist along the Blackrock Cinemas frontage.
7. Greater Bridgeport Transit available at the Blackrock Cinemas on Canfield Avenue.
8. Does not impact the Metro site conservation easement area.

### 8.3.2 Drawbacks of Alternate 1

The primary drawback for Alternate 1 is that it offers no improvement over the existing conditions. Some of the other specific negatives associated with this option are listed below.

1. No crosswalks at signalized intersection of Blackrock Turnpike and Ash Creek Boulevard.
2. Brewster Street (GIS elev. 6 adjacent to Blackrock Cinemas) and bridge may be subject to flooding (GIS bridge pavement elevation 8).
3. Streetscape needs aesthetic and physical improvements (cluttered with overhead utilities, inconsistent sidewalk pavement, parked cars encroach on sidewalk area, lacks pedestrian amenities).
4. The existing 5' wide sidewalks have obstructions which limit the useable width of the walkway. These include utility poles, fire hydrants, and light pole bases.
5. Access management issues: vehicles backing across sidewalks at commercial property.
6. Distance between Brewster Street Bridge and Fairfield Avenue 1,450 L.F., passing approximately 46 properties.

### 8.4 Alternate 2 – Crossing at Fox Street Extension

Upon review of the project area, an obvious choice for a new bridge crossing over the Ash Creek is at the extension of Fox Street. The evident benefit of this location is the reduced width of the Ash Creek. The smaller width requires reduced bridge span as well as a reduced construction cost. This location has been previously discussed as a potential crossing location for a pedestrian bridge. This location was specifically mentioned in the Fairfield Plan for Conservation and Development. Some other considerations relative to this option are as follows:

#### 8.4.1 Benefits of Alternate 2

1. Fox Street, although mostly residential, is used as a cut-through between Fairfield Avenue and Brewster Street via Canfield Avenue, therefore serving more than just the immediate neighborhood. Busier roads may provide increased sense of security.
2. Fox Street city 50' undeveloped right-of-way extends north beyond Canfield Avenue intersection providing direct access to the Ash Creek. The extension also provides a convenient area to transition the grade from the required bridge elevation to the existing elevation on the Bridgeport side.

3. Canfield Avenue city 50' undeveloped right-of-way extends west beyond Fox Street intersection providing access along Ash Creek and possible pedestrian connection to Morehouse and Davidson (GIS elev. between 6 and 8).
4. Undeveloped right-of-ways provide opportunity for pedestrian spaces/sitting areas (right-of-transit easement).
5. Ash Creek crossing is considerably narrow (100 L.F. aligned with Fox Street or 50 L.F. crossing Ash Creek perpendicular, measured water's edge to water's edge from aerial photograph). This will allow for a clear span of the watercourse thus limiting the environmental impact of this option.
6. Fox Street provides direct linkage to the Black Rock Neighborhood Bicycle Route. (The route currently terminates at Gilman/Fox and Fairfield Avenue).
7. Fox Street is not a dead end, providing access from multiple directions and has potential for more security surveillance.

#### **8.4.2 Drawbacks of Alternate 2**

1. Pedestrian connection on Fairfield side will impact the conservation easement and membrane, requiring review and approval.
2. Increases pedestrian/bicycle activity along mostly residential street.
3. Fox Street right-of-way does not extend all the way to Ash Creek. Depending on the bridge orientation, the project may require easement from In-Vest, Inc. 925 Brewster Street property owner.
4. Fox Street is three blocks from the Brewster Street crossing, which has an existing bridge and could be considered too close.
5. Distance between Canfield Street and Fairfield Avenue 1,170 L.F., passing approximately 39 properties. Streetscape needs sidewalk improvements.

#### **8.5 Alternate 3 – Crossing at Davidson Street Extension**

As a secondary option for a new bridge crossing, the extension of Davidson Street presents a unique alternate. The existing bridge crossings over the Ash Creek at this location are the bridge at Brewster Street and the existing bridge at Fairfield Avenue. Both of the structures have sidewalks to allow for pedestrian movement. The location at Davidson Street presents a crossing approximately at the midpoint between the existing bridges. The immediately visible negative about this crossing is the large width of the Ash Creek. In contrast to the alternate at Fox Street, this option will require a significantly longer span and with that a significantly higher cost. Some other considerations relative to this option are as follows:

### 8.5.1 Benefits of Alternate 3

1. Shortest access from Fairfield Avenue (660 L.F.) passing 22 properties.
2. Provides pedestrian crossing equal distance between Brewster Street and Grasmere Avenue (5 blocks from Brewster Street).
3. Davidson Street right-of-way extends all the way to Ash Creek, avoiding requirement for easements.
4. Short paved section of Canfield Avenue with undeveloped right-of-way may permit pedestrian access along Ash Creek between Davidson, Morehouse and Fox Streets.

### 8.5.2 Drawbacks of Alternate 3

1. Crossing is wide at approximately 320 L.F. (measured water's edge to water's edge from aerial photograph).
2. Associated cost is higher due to greater width of the Creek to be crossed at this location. Considering a similar price per square foot for bridge structure and evaluating these options based on the clear distance between the banks of Ash Creek, the structure cost at the Davidson Street would be roughly three times the cost of the same bridge at Fox Street.
3. Length of the bridge will likely require the construction of an intermediate pier within the Ash Creek the creating an adverse environmental impact as well as introducing an obstruction to the flow of the watercourse.
4. Long length of required footbridge will have dramatic impact on Ash Creek viewshed.
5. Pedestrian connection on Fairfield side will impact the conservation easement and membrane, requiring review and approval.
6. Increases pedestrian/bicycle activity along mostly residential, dead-end street.
7. Connection to Fairfield Metro Station is circuitous requiring walking along the conservation easement, behind the proposed residential building, walking past the Fox Street footbridge location option to the Metro Access Road at-grade crosswalk.
8. Davidson is a dead-end street limiting access and surveillance.
9. Right-of-way land elevation is lowest at GIS Elev. 6'. 100 year flood elevation 11', Mean High Water is 5'.
10. Unlike at Fox Street, there is no area along the proposed alignment to transition the grade from the bridge elevation back to the approach elevation at the Bridgeport end. In order to make the ADA slope limits work, a "switchback" will be required along the Canfield Avenue right of way. Pedestrians and bicyclists will have to turn 90 degrees to make the crossing.
11. Streetscape needs sidewalk improvements.

## 8.6 Discussion and Recommendations

Upon review of the three options, the first determination to be made is whether or not the existing facilities are adequate so support the needs of the community. As previously noted in Section 4 and as listed above, the existing pedestrian facilities along Brewster Street are limited in that they do not provide sufficient width and they are located along a busy roadway. With the opening of the Fairfield Metro station, a new opportunity has been created to enhance to access to mass transit and to encourage the advancement of non-motorized, sustainable travel. In keeping with the goals of Bridgeport's BGreen 2020 sustainability plan and Fairfield's plan for conservation and development, the construction of a new pedestrian bridge over the Ash Creek would encourage this advancement and is recommended.

In considering the two alternates for a proposed bridge crossing, cost and environmental impacts play a major role. Considering the potential spans of the two crossings; Davidson would have a length of approximately 420' as compared to the length of approximately 160' at Fox Street. This value does not include the approach spans at Fox Street as Davidson will also require "switchback spans" along the Canfield Avenue right of way. Considering a structure with the same width, and square footage cost, the cost of the bridge at Davidson Street will cost over 2.5x that of the Fox Street crossing. With the added cost, there will also be added environmental impact with the need for a pier within the watercourse. The Davidson Street alternate will likewise not allow for the smooth tie-in with the existing bike path at Gilman Street and will require a 90 degree turn for the switchback ramps.

Based on these considerations, Alternate 2 (Crossing at Fox Street Extension) is recommended.

## SECTION 9 – STRUCTURE TYPE STUDY

Following the determination for the most suitable crossing location for a proposed pedestrian bridge, the next decision to be made is the selection of the most suitable bridge structure type. Included in the Scope of this feasibility study is the evaluation of the following structure types:

- **Structure Type 1:** Steel Plate Girder
- **Structure Type 2:** Steel Truss
- **Structure Type 3:** Signature Bridge (Cable-Stayed)

The design criteria for the preliminary design of these options was performed in general conformance with the “Guide Specifications for Design of Pedestrian Bridges” published by the American Association of Street and Highway Officials (AASHTO). The design loading considered includes a live load of 85 lbs/SF as well as the accommodation of H-10 truck loading (in the event of the need for light truck access over the bridge for maintenance / emergency purposes).

In the following section, we will discuss some of the criteria considered for the determination of the most appropriate structure type.

### 9.1 Evaluation Criteria

#### 9.1.1 Cost

As with any capital improvement project, cost will play a major role in the determination of the most favorable project solution. Projects of this scale require significant funding and the more expensive the option, the more difficult the process of obtaining the needed funds. As such, an emphasis will be placed on economic design.

#### 9.1.2 Environmental Impacts

Due to the environmentally sensitive nature of the Ash Creek environment, relative environmental impacts between structure type options will be considered. Preference will be given to options which result in a reduced impact to the environmental resources at the site.

#### 9.1.2 Structure Depth / Profile

As discussed in Section 7.2.2, one consideration made in the placement of the crossing is the design flood elevation. The intent of the design is to place the low chord of the structure above the 100 year design flood elevation (10.0). With the low chord elevation fixed, variations of the structure depth will have to be accommodated by adjusting the walkway elevation of the bridge. The result is that structure types with a deeper depth will require the

walking surface to be at a higher elevation. This raising of the walking surface requires a greater elevation difference that needs to be accommodated in the sloping of the walkway at the approaches. As stated in Section 7.2.1, if the walkway grade exceeds 5%, this will require the introduction of landings to meet ADA requirements. Furthermore grades will not be allowed to exceed 8%. With this in mind, options with a shallower structure depth will be deemed to be more desirable.

### 9.1.3 Aesthetics

As this structure will be placed in a very exposed location, the aesthetic look of the bridge will be of key importance. The aesthetic qualities of a bridge can come from architectural features added to the bridge (ie: decorative railings / light fixtures / walkway textures) or from the structural form itself. In considering the structure type, we'll focus on the latter. For this study, we have selected options ranging from a more conventional steel girder option to a more aesthetic cable-stayed option. Generally speaking, the conventional bridge option would be expected to offer the least level of aesthetic appeal at the lowest cost whereas the more complex, architectural would offer better aesthetic appeal at a higher cost. Each option provides a viable solution and the selection of the most suitable option would depend on the preferences of the community and the budgetary constraints.

## 9.2 Structure Type 1: Steel Plate Girder

### 9.2.1 Description of Structure

This alternate consists of a steel plate girder superstructure with a reinforced concrete deck supported on reinforced concrete abutments and piers. The bridge has a main span of approximately 160' and an approach span at the Bridgeport (south) approach. The width of the walkway for this alternate is 14'-0" clear distance between rail elements.



Schematic Rendering of a Plate Girder Option

#### Superstructure

A preliminary design was performed using a two-girder deck-girder design utilizing 5'-6" deep girders for the main span located at 10' spacing. A reinforced concrete deck spans in the transverse direction and has a thickness of 8". Rail elements are located along each edge of the deck.

The approach span at the Bridgeport approach consists of four W30 rolled beams at 4'-0" spacing with a span of 65'-0". This span also has a concrete deck.

### Substructure

The bridge will be supported on reinforced concrete abutments and piers. The substructure elements will be placed outside of the coastal jurisdiction line (CJL). There is one abutment with retaining walls at each end of the bridge and one pier between the main span and approach span located at the Bridgeport bank of the Ash Creek. The substructure elements are to be supported on pile foundations in accordance with the preliminary geotechnical recommendations.

### **9.2.2 Profile Considerations**

Under this option, the profile begins with a 5% grade starting from the tie-in with the existing grade at Fox Street. Transitioning to the main span, the grade reduces to approximately 2% before descending at 2% to the end of the main span at the Fairfield approach. Off the bridge, in order to match in to the grade at the existing gravel path, a series of 8% grade ramps and landings is required. This is driven by the relatively deep structure depth (as compared to the other alternates).

### **9.2.3 Estimated Preliminary Cost**

The preliminary estimated cost for this alternate is \$2,440,000. An itemized preliminary cost estimate is included in Appendix F of this report.

## **9.3 Structure Type 2: Steel Truss**

### **9.3.1 Description of Structure**

This alternate consists of a steel pony-type truss superstructure with a reinforced concrete deck supported on reinforced concrete abutments and piers. The bridge has a main span of approximately 160' and two approach spans at the Bridgeport (south) approach. The width of the walkway for this alternate is 14'-0" clear distance between rail elements.



Schematic Rendering of a Steel Truss Option

### Superstructure

The preliminary design of this alternate includes a pony truss superstructure with truss depths of approximately 12'-0". The truss members consist of W14 members. Spanning between the trusses are floorbeam elements consisting of W12 members. These floorbeams support a series of four stringers at equal spacing consisting of W8 members. The stringers support a concrete deck with a 5" thickness. There are railing elements inboard of the truss members.

The approach spans consist steel rolled beams (W16) spaced at 5' o.c. supporting an 8" reinforced concrete deck.

### Substructure

Similar to the plate girder option, the truss superstructure will be supported on reinforced concrete abutments and piers placed outside of the coastal jurisdiction line (CJL). There is one abutment with retaining walls at each end of the bridge and two piers located at the Bridgeport bank of the Ash Creek.

### **9.3.2 Profile Considerations**

Under this option, due to the shallower structure depth, the grade changes are not as pronounced. The profile begins with a 3.6% grade starting from the tie-in with the existing grade at Fox Street. At the main span, the grade reduces to 0.5% and continues to the Fairfield abutment. At the Fairfield approach, a descending grade of 3.7% is required to make the connection to the existing walking trail. This option does not require the use of landings.

### **9.3.3 Estimated Preliminary Cost**

The preliminary estimated cost for this alternate is \$2,600,000. An itemized preliminary cost estimate is included in Appendix F of this report.

## **9.4 Structure Type 3: Signature Bridge: Cable-Stayed Bridge**

### **9.4.1 Description of Structure**

This option consists of a 232' long cable-stayed bridge structure. The layout includes a pair of central towers located on the Bridgeport bank of the Ash Creek. Due to the location of the towers, this layout includes asymmetrical spans with the longer portion spanning the Ash Creek.



Schematic Rendering of a Cable-Stayed Option

### Deck Structure

The deck structure of this alternate consists of a steel, trapezoidal box girder with a depth of 24". This girder supports a reinforced concrete deck and provides a 14' clear walking distance between bridge rail elements. The box girders span between cable supports and have spans on the range of 35' – 70'. The maximum span is located between the northern-most cable support and the Fairfield abutment.

### Tower Structure

The cables transfer the bridge loading to a pair of central towers at the Bridgeport bank of the Ash Creek. These towers have a height (above the walking surface) of approximately 50 feet. They consist of reinforced concrete oval sections with a plan dimension of approximately 4' x 2'. The towers are supported on reinforced concrete pile caps which are founded on drilled shafts.

### Abutments

The abutments consist of reinforced concrete abutments supported on pile foundations. Due to the tension in the cables, these abutments will be required to resist any uplift that may be generated by the thermal behavior of the structure. It is critical that the ends of the bridge not lift so as to create a tripping hazard to the public under these conditions.

### **9.3.2 Profile Considerations**

Under this option, the approach grades are approximately 5% which preclude the need to introduce periodic landings. The slopes become more gradual as the walkway crosses the bridge on a crest vertical curve.

### **9.3.3 Estimated Preliminary Cost**

The preliminary estimated cost for this alternate is \$3,130,000. An itemized preliminary cost estimate is included in Appendix F of this report.

## **9.5 Discussion and Recommendations**

As stated above, each of the options evaluated will provide a suitable bridge structure to allow pedestrian and other non-motorized access across the Ash Creek. The decision of the option to use primarily depends on two criteria – the goals of the community and stakeholders for the aesthetic appearance of the bridge structure and the budget constraints. If it is the desire of the community to have a bridge structure which is utilitarian in nature and blends in with the surroundings, the girder option may be more appropriate. This option would also result in a decreased construction cost as well. If the community desires the crossing to be a landmark structure which attracts attention, the truss or cable-stay option may be more desirable.

From a functional perspective, there is a benefit to be offered by Alternates 2 and 3 in that the reduced structure depth allows for the approach grades to be kept below the 5% threshold and no landings will be required.



This study also recommends the extension of the existing bicycle route (currently terminating at the intersection of Gilman Street and Fairfield Avenue) down Fox Street and over the new pedestrian bridge. As such, the site improvements call for pavement markings and signage identifying the bike route.

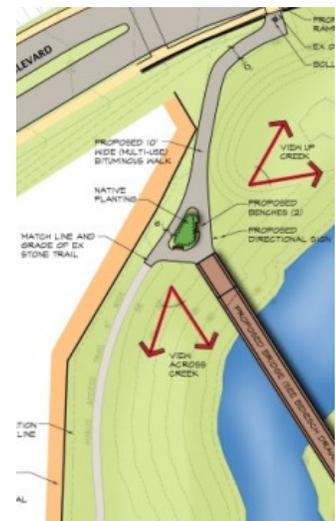
At the intersection of Fox Street and Canfield Avenue, new decorative crosswalks are proposed to accommodate pedestrian movement in this area. A new stop sign and stop bar is likewise recommended across Canfield Street in this location.

## 10.2 Fairfield Site Improvements

### 10.2.1 Connection to Existing Walking Trail

At the Fairfield end of the bridge, the walkway is proposed to be tied into the existing walking trail running through the Conservation Easement along the Ash Creek. The proposed site plan shows a split in the walkway allowing pedestrians to either turn left to access the gravel path or head right to head towards the Fairfield Metro Center parking lot and train platform.

As the new pedestrian bridge is intended to serve both pedestrian and bicycle traffic, it is recommended to replace the 6' wide gravel path between the end of the bridge and Ash Creek Boulevard with a 10' paved multi-use path to accommodate both pedestrians and bicyclists. This modification would require approval from the Fairfield Conservation Commission. Alternatively, a wider path may be considered here, matching the bridge width and providing additional room for combined pedestrian and bicycle use.



At the walkway split, an island is proposed to be created to include benches and native plantings.

### 10.2.2 Connection to the Fairfield Metro Center



To complete the connection to the Fairfield Metro Center and, more specifically, the New Haven-bound platform, the preliminary site plan includes some site improvements to better define this route and improve the safety of those using it.

The first modification involves relocating the existing crosswalk slightly to the east to coincide with the end of the walkway. A decorative material would be used to designate the crosswalk. The textured surface will provide greater visibility, a more aesthetically pleasing

feature and help calm traffic. New crosswalks, using the same material, would be installed across the main access driveway to the Metro Center parking lots and across a secondary driveway located just to the west. A raised crosswalk, across Ash Creek Boulevard, could be considered to provide access to the Metro Center parcel and would act as an additional traffic calming measure.

The existing sidewalk along the north side of Ash Creek Boulevard continues along the roadway and does not extend into the parking area. To provide pedestrian connection to the station platform, it is recommended that a new sidewalk be constructed along the south edge of the parking lot at the base of the retaining wall. The proposal will require removal of parking spaces, the loss of which, along with any related impact, will be further examined in the design phase. The DOT should be consulted regarding pedestrian and bicycle improvements to the existing lot and in regard to the impact of a future terminal building.

### 10.3 Site Furnishings

On the proposed site plans, the installation of various site furnishings has been detailed to enhance the experience throughout the proposed walkway area. These items include concrete walks, benches, lighting fixtures, signage, and bike racks. There are many options for each of these types of site furnishings. Site furnishings shall not be placed within the paved travel way, providing an impeded path to pedestrians and bicyclists. At this stage of the planning process, a specific selection for each site furnishing has not been identified, but Appendix G provides a sampling of site furnishing options for consideration on this project. Should this project progress into the design phase, further evaluation of the options will be made with the Client and a decision rendered at that time on the site furnishing specifications to be used.



### 10.4 Preliminary Site Costs

As a part of this feasibility study, we have prepared preliminary construction cost estimates for the recommended site improvements. These costs are summarized as follows:

- **Creek Trail Improvements (Canfield ROW):** \$155,000
- **Fox Street Improvements:** \$360,000
- **Site Work for Bridge Improvements:** \$330,000

### 10.5 Transit Connection Improvements

The construction of a new pedestrian bridge over the Ash Creek at Fox Street and the associated walkway improvements will provide an enhancement to the entire transit network

in the Black Rock / Metro Center Area. In this section, some of the improvements will be highlighted.

**Bike Routes:** There is an existing bike route which runs through Black Rock and terminates at the intersection of Gilman Street and Fairfield Avenue. This route runs generally along the coast and passes attractions such as Saint Mary's by the Sea and Captain's Cove. The extension of this route along Fox Street and to the Fairfield Metro Center will create a new link to commuter rail service.



Terminus of Bike Route at Gilman Street and Fairfield Ave

**Bus Routes:** Greater Bridgeport Transit (GBT) operates several routes in the vicinity of the project area. These include Bus Route 5 (Along Brewster Street and Canfield Avenue), Bus Route 7 (Along Kings Highway and Commerce Drive), and the Coastal Link (CL) Route (Along Fairfield Avenue) which connects communities from Norwalk to Milford. The new pedestrian bridge at Fox Street will enhance the connections and transfers between local bus and rail service.



Coastal Link (CL) Bus Stop Along Fairfield Avenue

Access from the Coastal Link to the Fairfield Metro Center will be much more direct under the build scenario.

**Rail Transit:** The new pedestrian bridge will greatly improve access to the Fairfield Metro Center station for the residents of Black Rock.

## SECTION 11 – STUDY SUMMARY

The objective of this study was to explore the feasibility of the construction of a new pedestrian link across the Ash Creek between the Fairfield Metro Center and the Black Rock neighborhood of Bridgeport. In the process the constraints, impacts, and likely costs were assessed. In addition to the physical feasibility of a new bridge, opportunities to aesthetically enhance the area and provide better transportation connections and linkages were determined.

Three options were evaluated for the pedestrian crossing. These included a no build alternative based on using the existing Brewster Street bridge and two build options at different locations. Based on this assessment, it was determined that a new structure from the end of Fox Street offered the greatest number of advantages and the best opportunity for improving existing conditions.

Once the crossing location was determined, three alternate structure types were evaluated. These included steel plate girder, steel truss, and cable-stayed bridge. Each offers a distinct aesthetic choice at varying range of cost. The determination of the most appropriate structure type will ultimately be governed by the aesthetic preferences of the community as well as the available budget for this project.

A key element in ensuring the new bridge will be well used is its connection to the surrounding neighborhoods. This study looked at ancillary site enhancements on both sides of the creek. Preliminary site plans were developed. The proposed improvements include the construction of a walking trail along the undeveloped Canfield Avenue right of way, making streetscape improvements along Fox Street between Canfield Avenue and Fairfield Avenue, and improving the pedestrian connection from the proposed bridge to the Fairfield Metro Center.

The following is a summary table of the findings of this study:

### STUDY SUMMARY

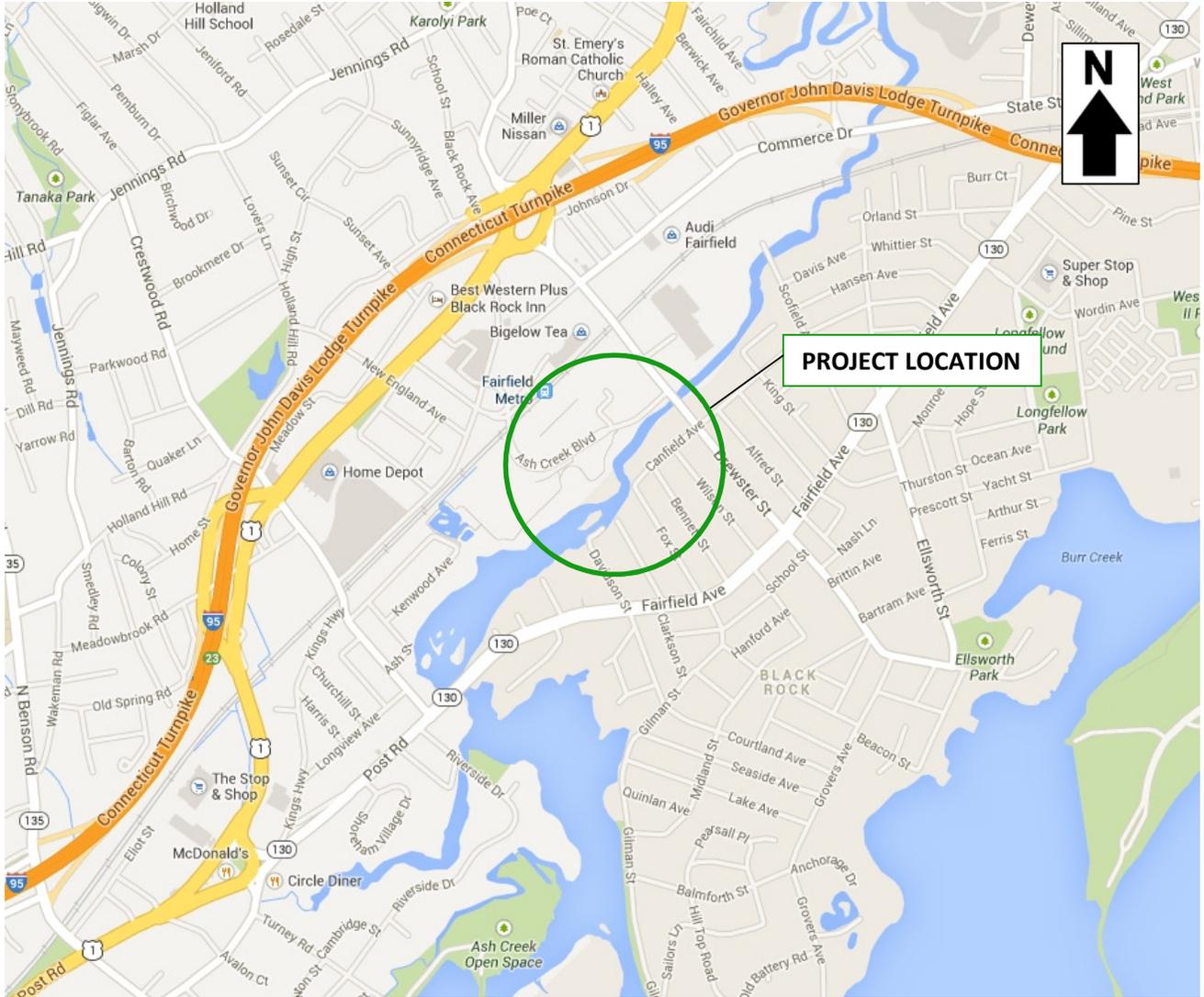
|  |                         |
|--|-------------------------|
| Most Suitable Proposed Crossing Location:            | Extension of Fox Street |
| <b><i>ESTIMATED STRUCTURE CONSTRUCTION COSTS</i></b> |                         |
| Alternate 1: Plate Girder Bridge                     | \$2,440,000             |
| Alternate 2: Steel Truss Bridge                      | \$2,600,000             |
| Alternate 3: Cable-Stayed Bridge                     | \$3,130,000             |
| <b><i>ESTIMATED STRUCTURE DESIGN COSTS</i></b>       |                         |
| Alternate 1: Plate Girder Bridge                     | \$244,000               |
| Alternate 2: Steel Truss Bridge                      | \$312,000               |
| Alternate 3: Cable-Stayed Bridge                     | \$376,000               |

| <i><b>ESTIMATED SITE IMPROVEMENT CONSTRUCTION COSTS</b></i> |                  |
|---|------------------|
| Creek Trail Improvements                                    | \$155,000        |
| Fox Street Improvements                                     | \$360,000        |
| Site Work for Bridge Improvements                           | \$330,000        |
| <b>Total Site Improvement Costs</b>                         | <b>\$845,000</b> |

This study has collected and analyzed the various data needed to determine the feasibility of constructing a bridge across the Ash Creek to accommodate pedestrian and allow the City of Bridgeport and Town of Fairfield to make an informed decision on whether or not to advance the project. The study has also clearly identified the likely cost to implement the project as well as the next steps in the process.

# Appendix A

## LOCATION MAP



**PROJECT LOCATION**

# Appendix B

## PHOTOS



PHOTO 1: BREWSTER STREET BRIDGE – WEST ELEVATION



PHOTO 2: BREWSTER STREET BRIDGE – ROADWAY SURFACE



PHOTO 3: BREWSTER STREET BRIDGE – WEST SIDEWALK, LOOKING SOUTH



PHOTO 4: BREWSTER STREET BRIDGE – EAST SIDEWALK, LOOKING NORTH



PHOTO 5: FOX STREET CROSSING – LOOKING SOUTH



PHOTO 6: FOX STREET CROSSING – LOOKING SOUTH (CLOSE-UP)



PHOTO 7: FOX STREET – LOOKING SOUTH FROM ASH CREEK



PHOTO 8: FOX STREET CROSSING – LOOKING NORTH



PHOTO 9: DAVIDSON STREET CROSSING – LOOKING SOUTH



PHOTO 10: DAVIDSON STREET CROSSING – LOOKING SOUTH (CLOSE-UP)



PHOTO 11: VIEW OF ASH CREEK – FROM DAVIDSON STREET



PHOTO 12: DAVIDSON STREET CROSSING – LOOKING NORTH



PHOTO 13: DAVIDSON STREET – VIEW FROM ASH CREEK



PHOTO 14: EXISTING DRAINAGE OUTLET @ DAVIDSON STREET



PHOTO 15: WALKWAY FROM BREWSTER STREET / BLACK ROCK TPKE.



PHOTO 16: LIGHT POLE BASE OBSTRUCTION ON EXISTING SIDEWALK



PHOTO 17: ENTRANCE TO CONSERVATION TRAIL FROM ASH CREEK BLVD.



PHOTO 18: TYPICAL GRAVEL PATH THROUGH CONSERVATION EASEMENT



PHOTO 19: CROSSWALK AT ASH CREEK BLVD



PHOTO 20: SIDEWALK ALONG ASH CREEK BLVD

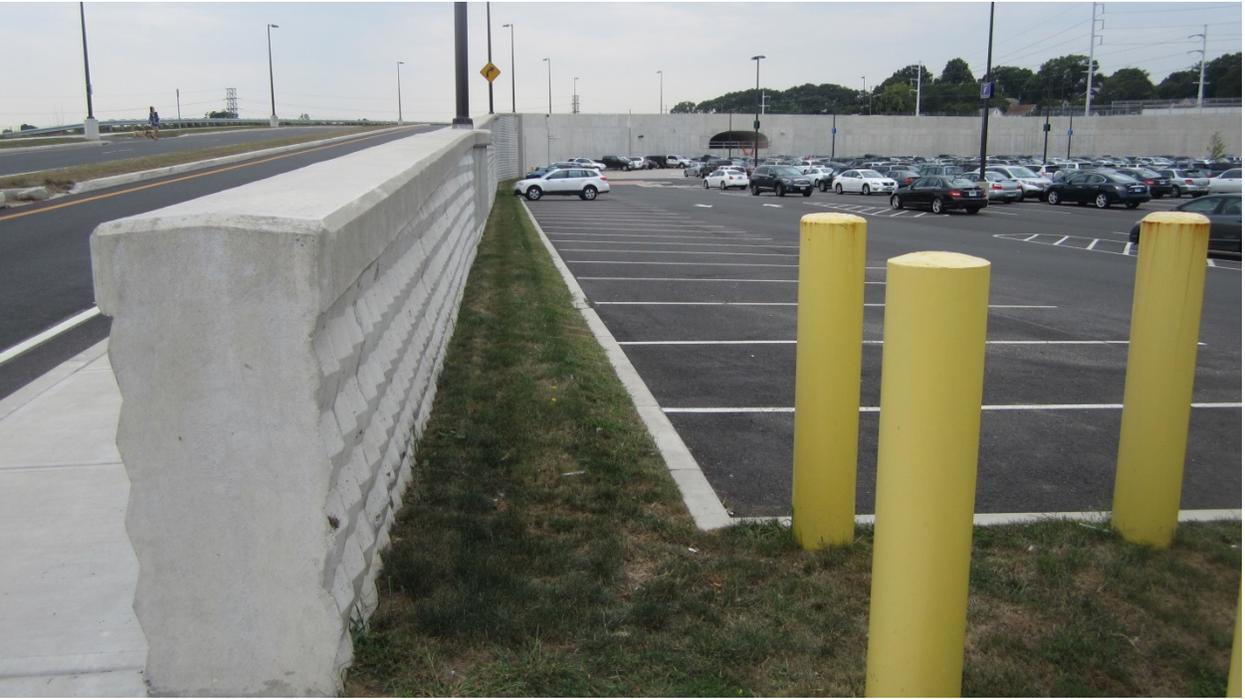


PHOTO 21: RETAINING WALL AT ENTRANCE TO METRO CENTER PARKING LOT



PHOTO 22: FAIRFIELD METRO CENTER PARKING LOT. LOOKING NORTH.



PHOTO 23: INTERSECTION OF FOX STREET AND CANFIELD AVE – LOOKING WEST



PHOTO 24: VIEW OF CANFIELD STREET R.O.W. FROM FOX STREET



PHOTO 25: CANFIELD STREET R.O.W. FROM DAVIDSON STREET – LOOKING EAST



PHOTO 26: TYPICAL SIDEWALK ALONG DAVIDSON STREET



PHOTO 27: FAIRFIELD AVENUE – TYPICAL VIEW



PHOTO 28: FAIRFIELD AVE – TYPICAL VIEW



PHOTO 29: TYPICAL GBT BUS STOP ON FAIRFIELD AVE



PHOTO 30: GBT BUS SHELTER AT CANFIELD AVE



PHOTO 31: END OF BIKE ROUTE AT GILMAN STREET – FOX STREET ON FAR SIDE



PHOTO 32: TYPICAL BIKE ROUTE SHOULDER MARKINGS

# Appendix C

## PRELIMINARY SITE PLANS

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- FOX STREET IMPROVEMENTS**
- NEW GRANITE CURBS (RESTORE 6" CURB HEIGHT)
  - NEW CONCRETE SIDEWALKS
  - NEW CONCRETE DRIVEWAY RAMPS
  - DESIGNATE "BLACKROCK NEIGHBORHOOD BICYCLE ROUTE" ON ROAD

NOTE:  
BASE INFORMATION PROVIDED BY BENESCH

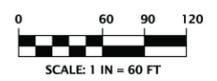


8/21/13

# OVERALL CONCEPT PLAN

## ASH CREEK PEDESTRIAN BRIDGE FEASIBILITY STUDY

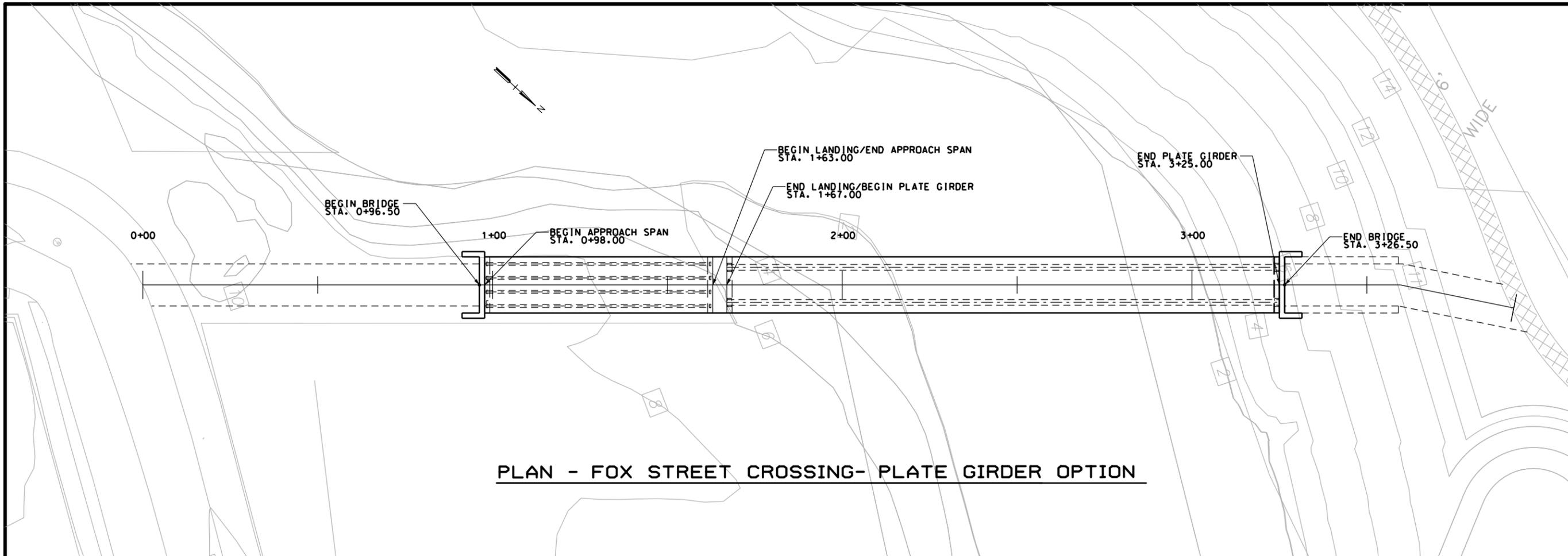
### Bridgeport and Fairfield, Connecticut



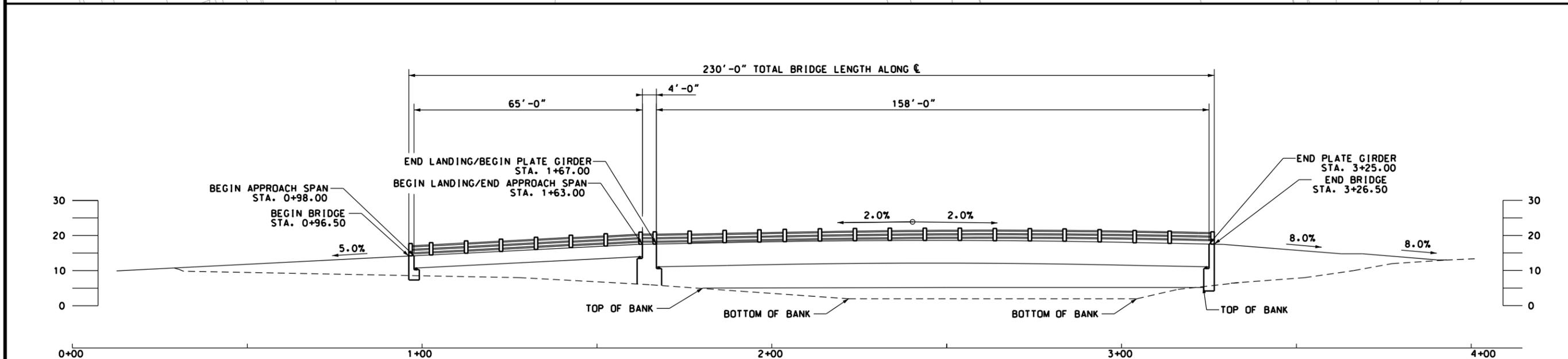


# Appendix D

## PRELIMINARY STRUCTURE PLANS



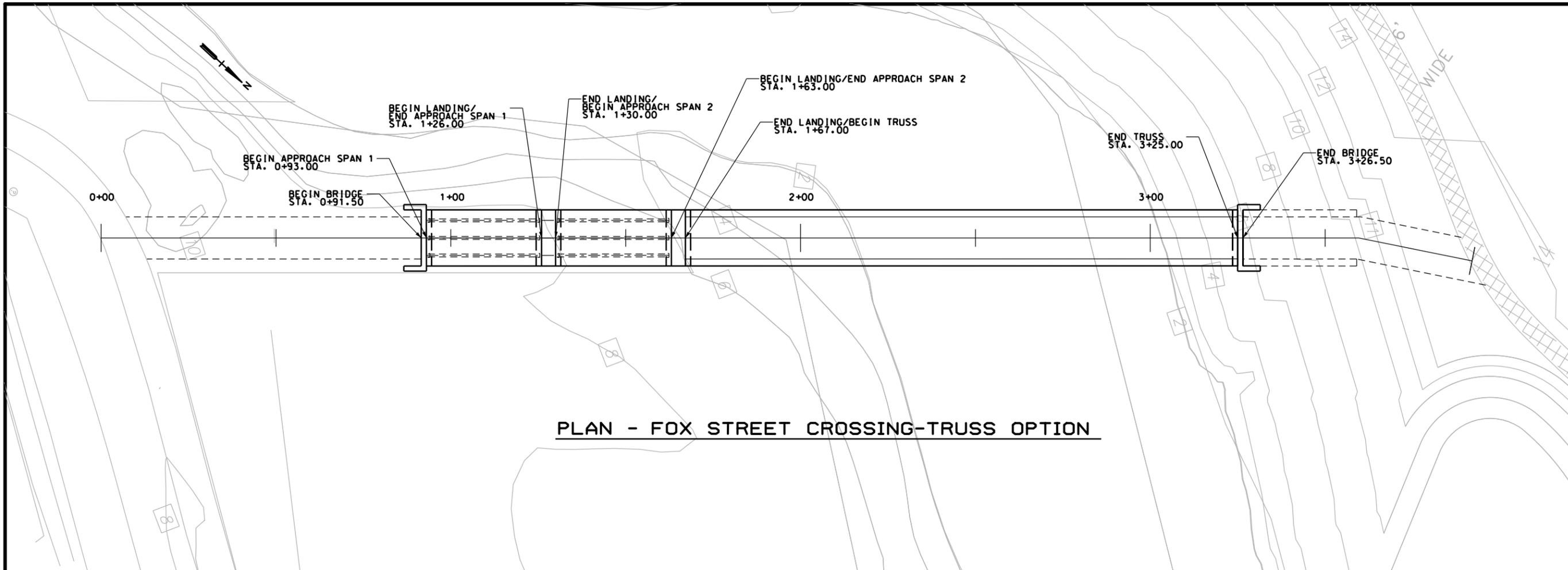
**PLAN - FOX STREET CROSSING- PLATE GIRDER OPTION**



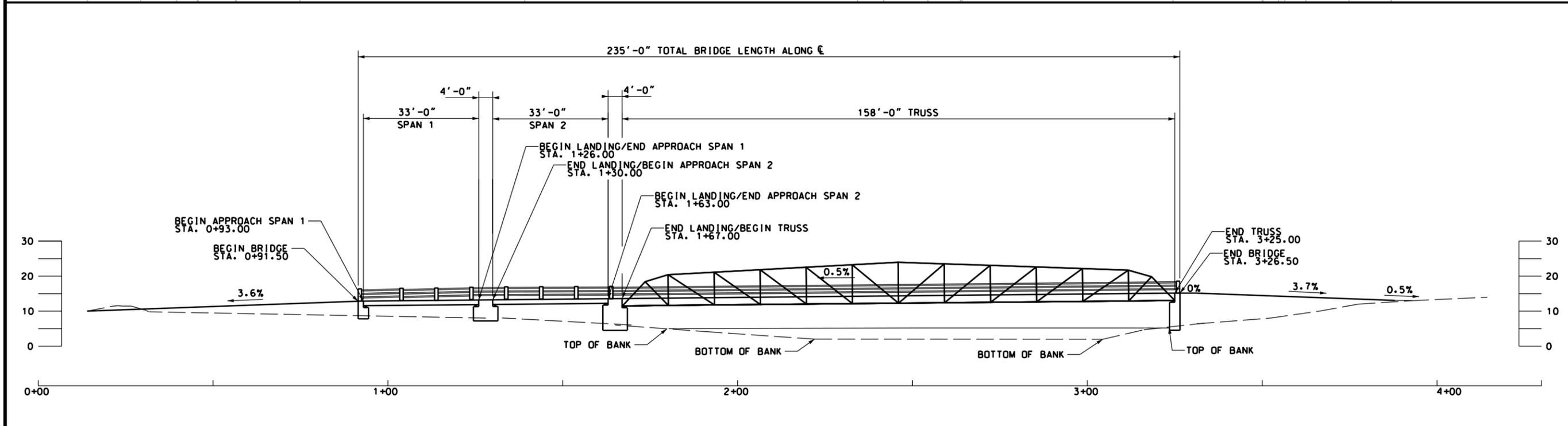
**ELEVATION - FOX STREET CROSSING- PLATE GIRDER OPTION**

| ITEM                | UNIT    | TOTAL   | SUPERSTRUCTURE | ABUT. 1 | PIER 1 | ABUT. 2 |
|---------------------|---------|---------|----------------|---------|--------|---------|
| APPROACH STEEL GR50 | LBS     | 26,400  | 26,400         |         |        |         |
| PLATE GIRDER STEEL  | LBS     | 187,000 | 187,000        |         |        |         |
| CONCRETE            | CU. YD. | 177     | 87             | 18      | 37     | 35      |
| RAILING             | L.F.    | 460     | 460            |         |        |         |

| DR. | CHK. | DATE | DESCRIPTION |
|-----|------|------|-------------|
|     |      |      |             |
|     |      |      |             |
|     |      |      |             |



**PLAN - FOX STREET CROSSING-TRUSS OPTION**



**ELEVATION - FOX STREET CROSSING- TRUSS OPTION**

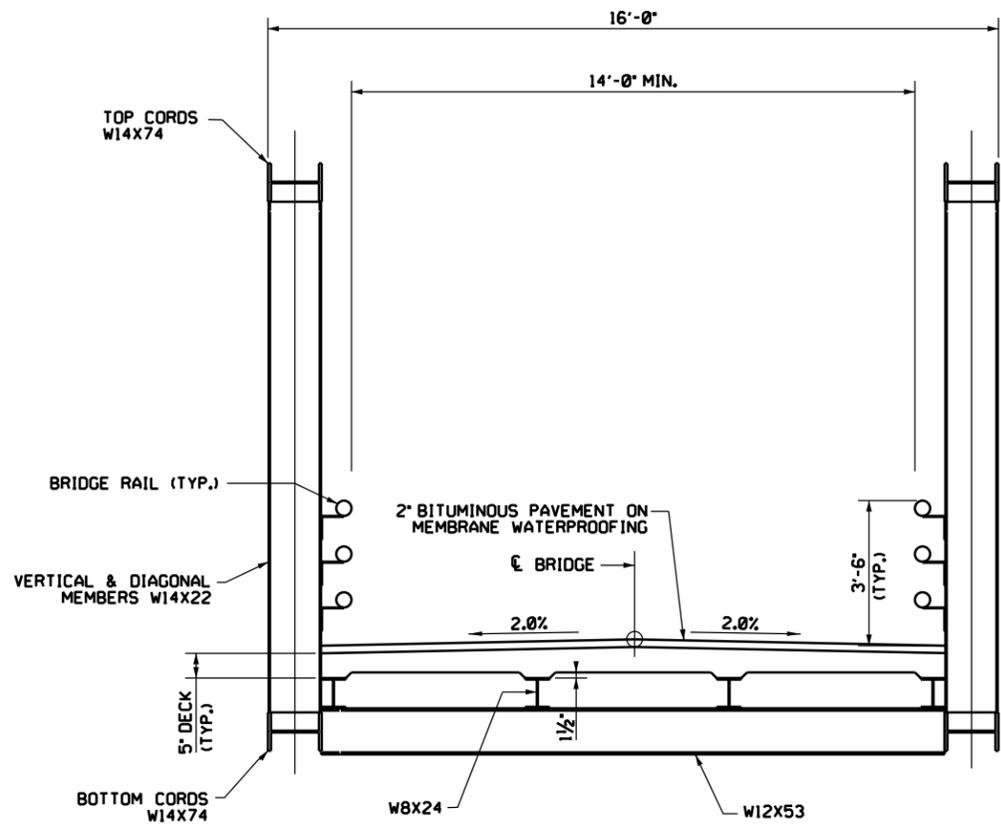
| ITEM                | UNIT    | TOTAL   | SUPERSTRUCTURE | ABUT. 1 | PIER 1 | PIER 2 | ABUT. 2 |
|---------------------|---------|---------|----------------|---------|--------|--------|---------|
| APPROACH STEEL GR50 | LBS     | 13,200  | 13,200         |         |        |        |         |
| TRUSS STEEL         | LBS     | 104,500 | 104,500        |         |        |        |         |
| CONCRETE            | CU. YD. | 165     | 59             | 15      | 22     | 35     | 34      |
| RAILING             | L.F.    | 470     | 470            |         |        |        |         |

PRELIMINARY TRUSS BRIDGE

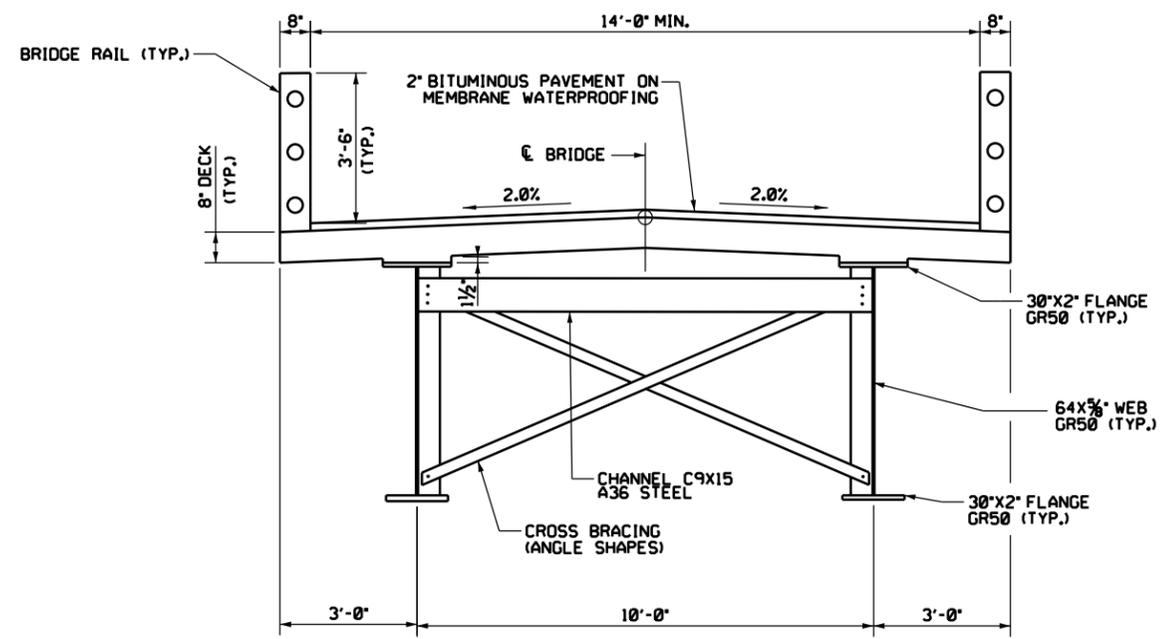
ASH CREEK  
PEDESTRIAN BRIDGE

| DR. | CHK. | DATE | DESCRIPTION |
|-----|------|------|-------------|
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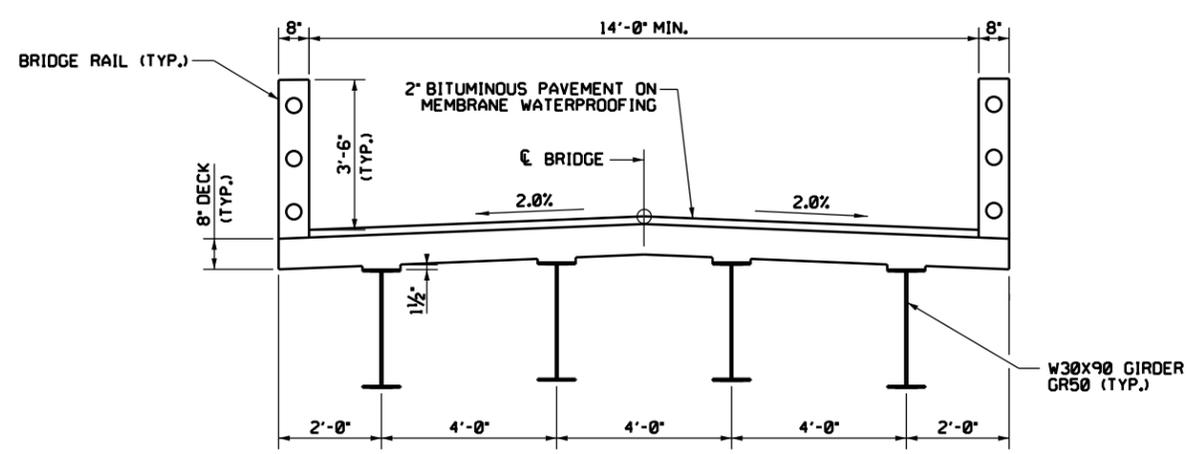
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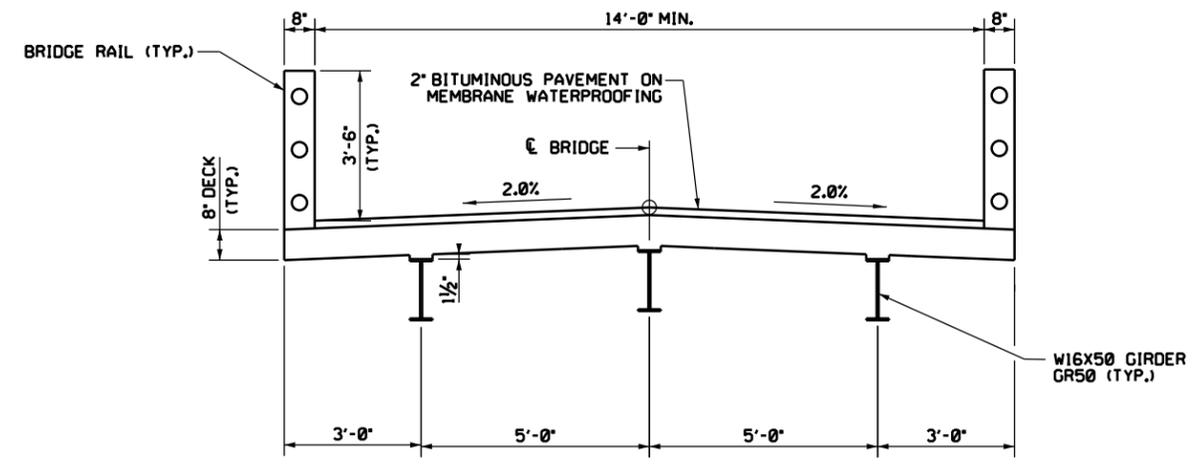
**CROSS SECTION - TRUSS BRIDGE**



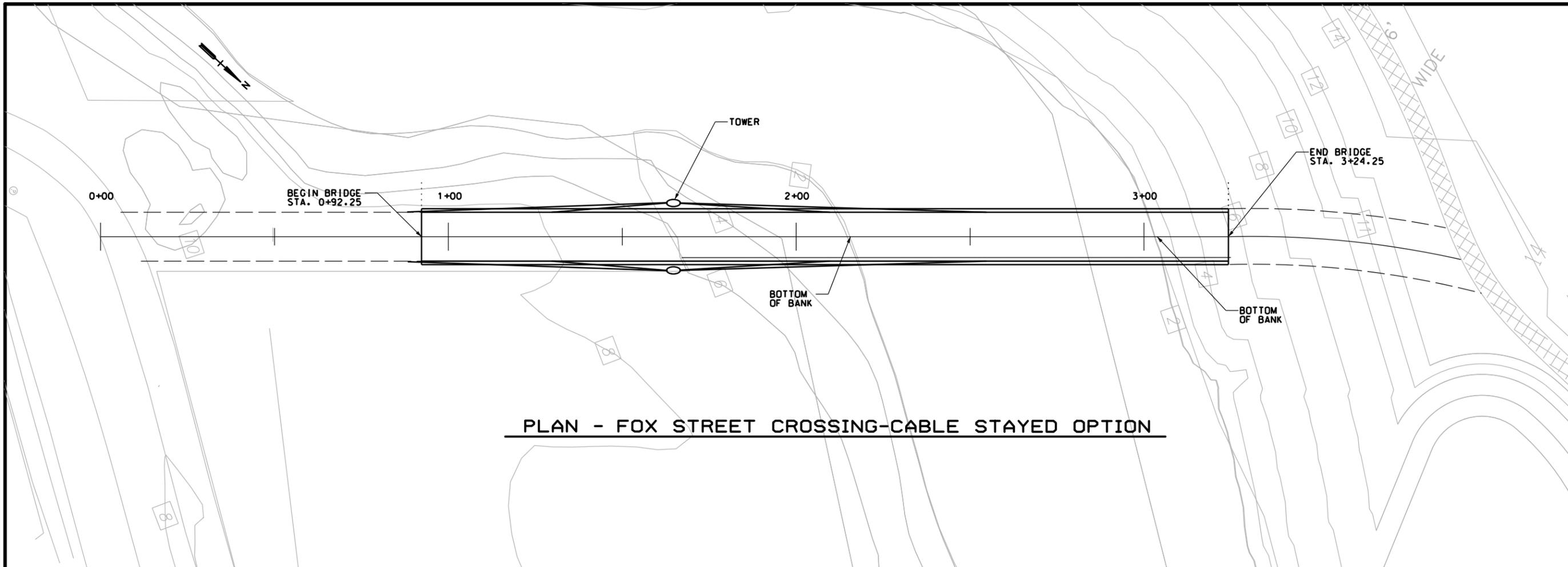
**CROSS SECTION - STEEL PLATE GIRDER BRIDGE**



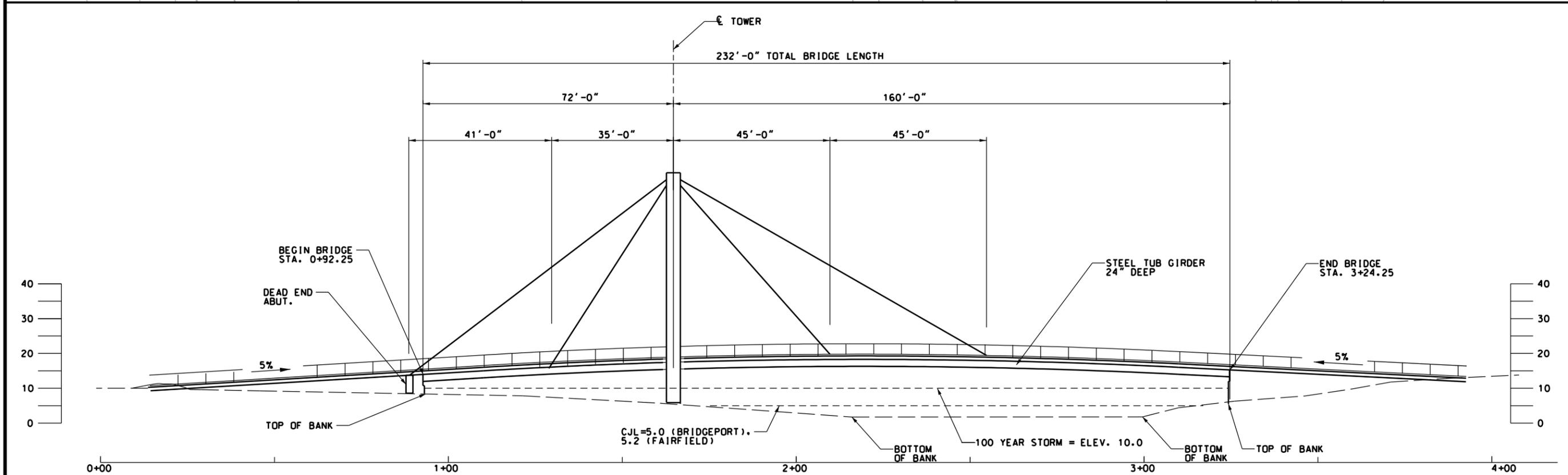
**CROSS SECTION - APPROACH SPAN  
 PLATE GIRDER OPTION**



**CROSS SECTION - APPROACH SPANS  
 TRUSS OPTION**



**PLAN - FOX STREET CROSSING-CABLE STAYED OPTION**

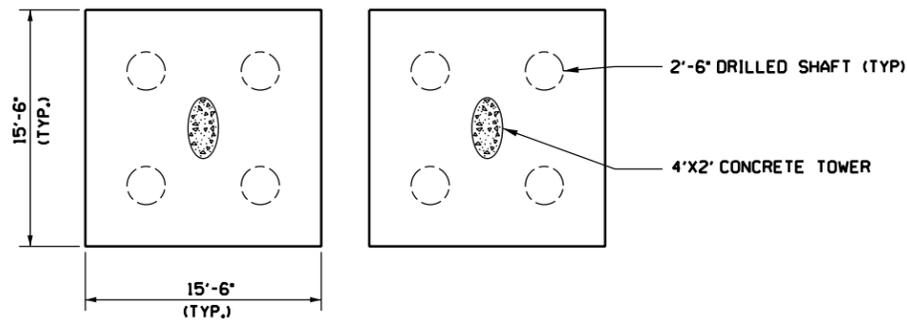


**ELEVATION - FOX STREET CROSSING- CABLE STAYED OPTION**

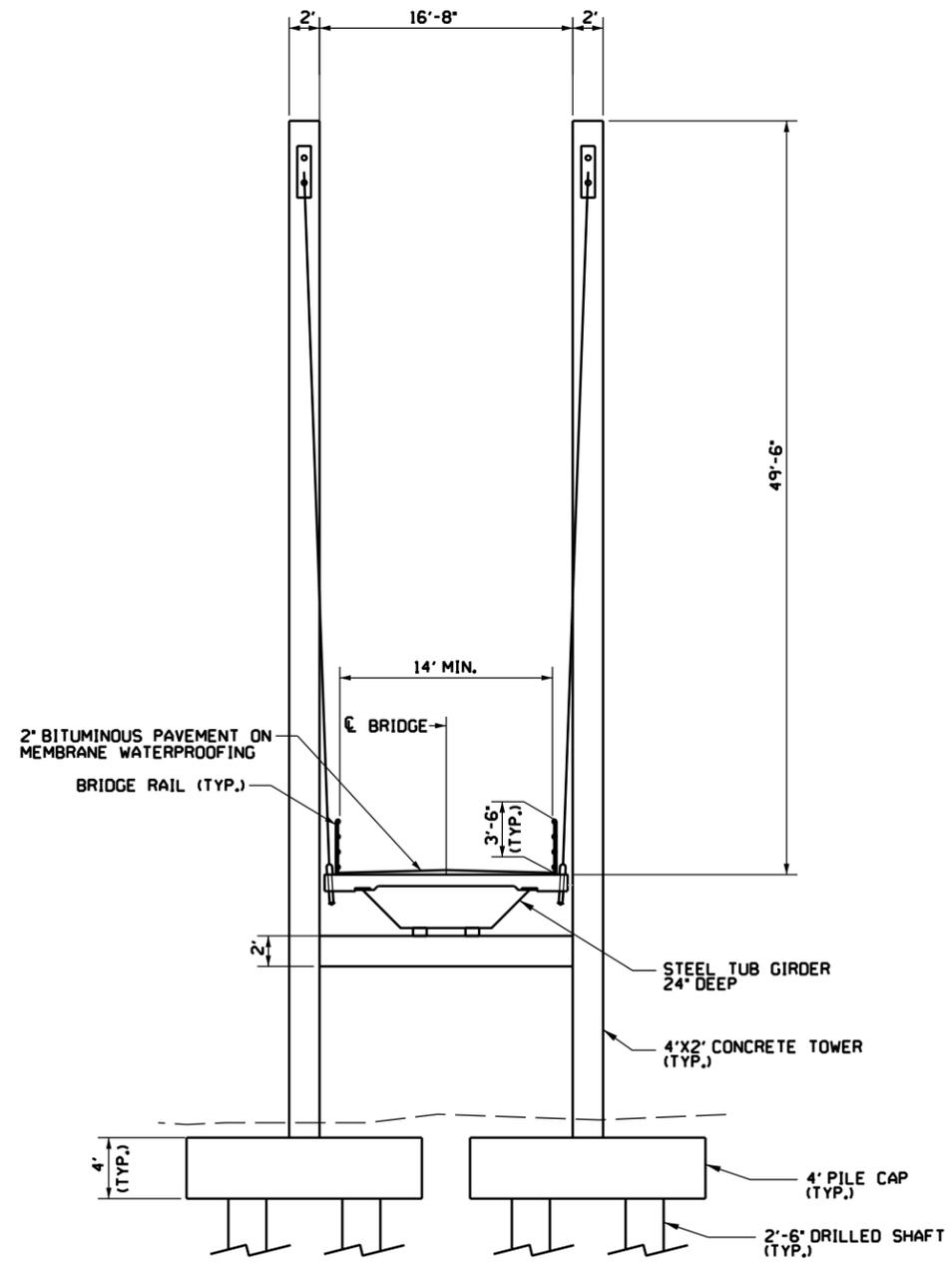
PRELIMINARY CABLE STAYED BRIDGE

ASH CREEK  
 PEDESTRIAN BRIDGE

| DR. | CHK. | DATE | DESCRIPTION |
|-----|------|------|-------------|
|     |      |      |             |
|     |      |      |             |
|     |      |      |             |



PILE CAP - CABLE STAYED BRIDGE



CROSS SECTION - CABLE STAYED BRIDGE

PRELIMINARY CABLE STAYED BRIDGE

ASH CREEK  
PEDESTRIAN BRIDGE

| DR. | CHK. | DATE | DESCRIPTION |
|-----|------|------|-------------|
|     |      |      |             |
|     |      |      |             |
|     |      |      |             |
|     |      |      |             |
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|     |      |      |             |
|     |      |      |             |

# Appendix E

## PRELIMINARY COST ESTIMATES (SITE FEATURES)

# COST ESTIMATE

| <b>CREEK TRAIL IMPROVEMENTS</b>                      |   |            |             |              |              |
|--|---|------------|-------------|--------------|--------------|
| <b>ASH CREEK PEDESTRIAN BRIDGE FEASIBILITY STUDY</b> |   |            |             |              |              |
| Bridgeport and Fairfield, Connecticut                |   |            |             |              |              |
| Prepared by: TPA DESIGN GROUP                        |   |            |             |              |              |
| Date: 8/21/13 - See Overall Concept Plan 1"= 60'     |   |            |             |              |              |
| <u>ITEM</u>  | <u>Description</u>                                | <u>QTY</u> | <u>UNIT</u> | <u>PRICE</u> | <u>TOTAL</u> |
|  | Bond & Mobilization                               |            | 2% of Total |              | \$2,654.00   |
| 2230   | <u>SITE CLEARING AND PREP.</u>                    |            |             |              |              |
|  | Eradicate Invasive Vegetation, Clear, Grubbing    | 0.75       | AC          | \$6,000.00   | \$4,500.00   |
| 2231   | <u>TREE PROTECTION AND TRIMMING</u>               |            |             |              |              |
|  | Tree Protection, Prune & Fertilize Existing Trees |            | ALLOW       |              | \$3,000.00   |
| 2230   | <u>DEMOLITION</u>                                 |            |             |              |              |
|  | Remove Walks / Pavement                           | 2800       | SF          | \$2.00       | \$5,600.00   |
|  | Sawcut  | 200        | LF          | \$5.00       | \$1,000.00   |
| 2300   | <u>EARTHWORK</u>                                  |            |             |              |              |
|  | Rough Grading                                     |            | ALLOW       |              | \$5,000.00   |
| 2370   | <u>SEDIMENTATION AND EROSION CONTROLS</u>         |            |             |              |              |
|  | Silt Fencing                                      | 800        | LF          | \$4.00       | \$3,200.00   |
|  | Anti-Tracking Pad                                 | 2          | EA          | \$1,000.00   | \$2,000.00   |
| 2511   | <u>BITUMINOUS PAVING</u>                          |            |             |              |              |
|  | Bituminous Walk                                   | 650        | SY          | \$22.00      | \$14,300.00  |
| 2751   | <u>CONCRETE PAVEMENT</u>                          |            |             |              |              |
|  | Concrete Walk                                     | 1200       | SF          | \$8.00       | \$9,600.00   |
| 2870   | <u>SITE FURNISHINGS</u>                           |            |             |              |              |
|  | Bench   | 3          | EA          | \$2,500.00   | \$7,500.00   |
|  | Traffic / Directional Sign                        | 2          | EA          | \$125.00     | \$250.00     |
|  | Stone Retaining Wall                              | 200        | FF          | \$50.00      | \$10,000.00  |
|  | Concrete Steps                                    |            | ALLOW       |              | \$10,000.00  |

## COST ESTIMATE

| <u>ITEM</u>  | <u>Description</u>         | <u>QTY</u> | <u>UNIT</u> | <u>PRICE</u> | <u>TOTAL</u>        |
|--|----------------------------|------------|-------------|--------------|---------------------|
| 2900   | <u>LANDSCAPING</u>         |            |             |              |                     |
|  | Street Trees               | 5          | EA          | \$600.00     | \$3,000.00          |
|  | Flowering Trees            | 5          | EA          | \$300.00     | \$1,500.00          |
|  | Shrubs                     | 100        | EA          | \$60.00      | \$6,000.00          |
|  | Upland Meadow              | 22000      | SF          | \$2.00       | \$44,000.00         |
| 2920   | <u>LAWNS &amp; GRASSES</u> |            |             |              |                     |
|  | Topsoil and Seed           | 1500       | SF          | \$1.50       | <u>\$2,250.00</u>   |
| SUBTOTAL   |                            |            |             |              | \$135,354.00        |
| CONTINGENCY (15%)  |                            |            |             |              | <u>\$20,303.10</u>  |
| <b>TOTAL</b>   |                            |            |             |              | <b>\$155,657.10</b> |
| Estimated consulting fees, wetland flagging, testing, survey, etc. (15%) |                            |            |             |              | <u>\$23,348.57</u>  |
| <b>GRAND TOTAL</b>   |                            |            |             |              | <b>\$179,005.67</b> |

# COST ESTIMATE

| <b>FOX STREET IMPROVEMENTS (between Canfield and Fairfield Avenues)</b>  |   |            |             |              |                           |
|--|---|------------|-------------|--------------|---------------------------|
| <b>ASH CREEK PEDESTRIAN BRIDGE FEASIBILITY STUDY</b>                     |   |            |             |              |                           |
| Bridgeport and Fairfield, Connecticut                                    |   |            |             |              |                           |
| Prepared by: TPA DESIGN GROUP  |   |            |             |              |                           |
| Date: 8/21/13 -See Overall Concept Plan 1"= 60'                          |   |            |             |              |                           |
| <u>ITEM</u>  | <u>Description</u>                                | <u>QTY</u> | <u>UNIT</u> | <u>PRICE</u> | <u>TOTAL</u>              |
|  | Bond & Mobilization                               |            | 2% of Total |              | \$6,092.00                |
| 2231   | <u>TREE PROTECTION AND TRIMMING</u>               |            |             |              |                           |
|  | Tree Protection, Prune & Fertilize Existing Trees |            | ALLOW       |              | \$4,000.00                |
| 2230   | <u>DEMOLITION</u>                                 |            |             |              |                           |
|  | Remove Walks / Pavement                           | 13500      | SF          | \$2.00       | \$27,000.00               |
|  | Remove Curb                                       | 2300       | LF          | \$2.50       | \$5,750.00                |
|  | Sawcut  | 500        | LF          | \$5.00       | \$2,500.00                |
| 2370   | <u>SEDIMENTATION AND EROSION CONTROLS</u>         |            |             |              |                           |
|  | Silt Fencing                                      | 2300       | LF          | \$4.00       | \$9,200.00                |
| 2512   | <u>MISC CURBING</u>                               |            |             |              |                           |
|  | Granite Curb                                      | 2300       | LF          | \$40.00      | \$92,000.00               |
| 2751   | <u>CONCRETE PAVEMENT</u>                          |            |             |              |                           |
|  | Concrete Walk                                     | 9150       | SF          | \$8.00       | \$73,200.00               |
|  | Concrete Driveway Apron                           | 4700       | SF          | \$12.00      | \$56,400.00               |
| 2870   | <u>SITE FURNISHINGS</u>                           |            |             |              |                           |
|  | Traffic / Directional Sign                        | 2          | EA          | \$125.00     | \$250.00                  |
|  | Pavement Marking                                  |            | ALLOW       |              | \$1,000.00                |
| 2900   | <u>LANDSCAPING</u>                                |            |             |              |                           |
|  | Street Trees                                      | 38         | EA          | \$600.00     | \$22,800.00               |
| 2920   | <u>LAWNS &amp; GRASSES</u>                        |            |             |              |                           |
|  | Topsoil and Seed                                  | 7000       | SF          | \$1.50       | <u>\$10,500.00</u>        |
| <b>SUBTOTAL</b>  |   |            |             |              | <b>\$310,692.00</b>       |
| <b>CONTINGENCY (15%)</b>   |   |            |             |              | <b><u>\$46,603.80</u></b> |
| <b>TOTAL</b>   |   |            |             |              | <b>\$357,295.80</b>       |
| Estimated consulting fees, wetland flagging, testing, survey, etc. (15%) |   |            |             |              | <b><u>\$53,594.37</u></b> |
| <b>GRAND TOTAL</b>   |   |            |             |              | <b>\$410,890.17</b>       |

# COST ESTIMATE

| Site Work for bridge Improvements (excluding bridge) - includes Canfield St., plaza and Fairfield side |   |            |             |              |              |
|--|---|------------|-------------|--------------|--------------|
| <b>ASH CREEK PEDESTRIAN BRIDGE FEASIBILITY STUDY</b>   |   |            |             |              |              |
| Bridgeport and Fairfield, Connecticut  |   |            |             |              |              |
| Prepared by: TPA DESIGN GROUP  |   |            |             |              |              |
| Date: 8/21/13 - See Concept Plan 1"=40'  |   |            |             |              |              |
| <u>ITEM</u>  | <u>Description</u>                                | <u>QTY</u> | <u>UNIT</u> | <u>PRICE</u> | <u>TOTAL</u> |
|  | Bond & Mobilization                               |            | 2% of Total |              | \$5,637.90   |
| 2230   | <u>SITE CLEARING AND PREP.</u>                    |            |             |              |              |
|  | Eradicate Invasive Vegetation                     | 0.3        | AC          | \$6,000.00   | \$1,800.00   |
| 2231   | <u>TREE PROTECTION AND TRIMMING</u>               |            |             |              |              |
|  | Tree Protection, Prune & Fertilize Existing Trees |            | ALLOW       |              | \$3,000.00   |
| 2230   | <u>DEMOLITION</u>                                 |            |             |              |              |
|  | Remove Walks / Pavement                           | 6400       | SF          | \$2.00       | \$12,800.00  |
|  | Remove Curb                                       | 550        | LF          | \$2.50       | \$1,375.00   |
|  | Remove Chain Link Fence                           | 175        | LF          | \$3.00       | \$525.00     |
|  | Sawcut  | 525        | LF          | \$5.00       | \$2,625.00   |
| 2300   | <u>EARTHWORK</u>                                  |            |             |              |              |
|  | Rough Grading                                     |            | ALLOW       |              | \$3,000.00   |
| 2370   | <u>SEDIMENTATION AND EROSION CONTROLS</u>         |            |             |              |              |
|  | Silt Fencing                                      | 1200       | LF          | \$4.00       | \$4,800.00   |
|  | Anti-Tracking Pad                                 | 2          | EA          | \$1,000.00   | \$2,000.00   |
| 2511   | <u>BITUMINOUS PAVING</u>                          |            |             |              |              |
|  | Bituminous Walk                                   | 310        | SY          | 22           | \$6,820.00   |
| 2512   | <u>MISC CURBING</u>                               |            |             |              |              |
|  | Granite Curb                                      | 690        | LF          | \$40.00      | \$27,600.00  |
| 2751   | <u>CONCRETE PAVEMENT</u>                          |            |             |              |              |
|  | Concrete Walk                                     | 7500       | SF          | \$8.00       | \$60,000.00  |
|  | Decorative Concrete Pavement                      | 2300       | SF          | \$15.00      | \$34,500.00  |
| 2870   | <u>SITE FURNISHINGS</u>                           |            |             |              |              |
|  | Bench   | 6          | EA          | \$2,500.00   | \$15,000.00  |
|  | Bollard   | 1          | EA          | \$1,500.00   | \$1,500.00   |
|  | Traffic / Directional Sign                        | 4          | EA          | \$125.00     | \$500.00     |
|  | Pavement Marking                                  | 1000       | LF          | \$1.00       | \$1,000.00   |
|  | Bike Rack   | 1          | EA          | \$1,500.00   | \$1,500.00   |

## COST ESTIMATE

| <u>ITEM</u>  | <u>Description</u>                          | <u>QTY</u> | <u>UNIT</u> | <u>PRICE</u> | <u>TOTAL</u>        |
|--|---|------------|-------------|--------------|---------------------|
| 2900   | <u>LANDSCAPING</u>                          |            |             |              |                     |
|  | Street Trees                                | 14         | EA          | \$600.00     | \$8,400.00          |
|  | Flowering Trees                             | 6          | EA          | \$300.00     | \$1,800.00          |
|  | Evergreen Tree                              | 12         | EA          | \$300.00     | \$3,600.00          |
|  | Shrubs                                      | 200        | EA          | \$60.00      | \$12,000.00         |
|  | Perennials                                  | 500        | EA          | \$20.00      | \$10,000.00         |
|  | Upland Meadow                               | 10000      | SF          | \$2.00       | \$20,000.00         |
| 2920   | <u>LAWNS &amp; GRASSES</u>                  |            |             |              |                     |
|  | Topsoil and Seed                            | 6000       | SF          | \$1.50       | \$9,000.00          |
| 5700   | <u>ORNAMENTAL METAL FENCING &amp; GATES</u> |            |             |              |                     |
|  | Steel Fence                                 | 175        | LF          | \$90.00      | \$15,750.00         |
| 16521  | <u>SITE ELECTRICAL</u>                      |            |             |              |                     |
|  | Ornamental Street Lights (14' ht)           | 3          | EA          | \$6,000.00   | \$18,000.00         |
|  | Bollard Light                               | 1          | EA          | \$3,000.00   | \$3,000.00          |
| SUBTOTAL   |   |            |             |              | \$287,532.90        |
| CONTINGENCY (15%)  |   |            |             |              | \$43,129.94         |
| <b>TOTAL</b>   |   |            |             |              | <b>\$330,662.84</b> |
| Estimated consulting fees, wetland flagging, testing, survey, etc. (15%) |   |            |             |              | \$49,599.43         |
| <b>GRAND TOTAL</b>   |   |            |             |              | <b>\$380,262.26</b> |

# Appendix F

## PRELIMINARY COST ESTIMATES (STRUCTURES)

Ash Creek Pedestrian Bridge Feasibility Study

City of Bridgeport / Town of Fairfield

Project No.: 70002.00

Date: 08/25/13

By: SJD/SL



Fox Street Bridge Crossing - Girder Bridge Structure

| Item #  | Description                                | Unit | Estimated Quantity | Unit Cost                               | Total Cost            |
|---------|--|------|--------------------|---|-----------------------|
| 0101157 | CONTAMINATED SOIL MANAGEMENT               | L.S. | 1                  | \$60,000.00                             | \$60,000.00           |
| 0203000 | STRUCTURE EXCAVATION-EARTH (COMPLETE)      | C.Y. | 85                 | \$30.00                                 | \$2,550.00            |
| 0203202 | STRUCTURE EXCAVATION-EARTH (EXCLUDING C&D) | C.Y. | 80                 | \$45.00                                 | \$3,600.00            |
| 0204001 | COFFERDAM AND DEWATERING                   | L.F. | 150                | \$320.00                                | \$48,000.00           |
| 0213100 | GRANULAR FILL                              | C.Y. | 40                 | \$30.00                                 | \$1,200.00            |
| 0216000 | PERVIOUS STRUCTURE BACKFILL                | C.Y. | 120                | \$43.00                                 | \$5,160.00            |
| 0406010 | BITUMINOUS CONCRETE                        | TON  | 50                 | \$200.00                                | \$10,000.00           |
| 0506017 | RETAINING WALL                             | EA.  | 2                  | \$15,000.00                             | \$30,000.00           |
| 0521001 | ELASTOMERIC BEARING PADS                   | C.I. | 12,000             | \$1.20                                  | \$14,400.00           |
| 0601000 | CLASS "A" CONCRETE                         | C.Y. | 95                 | \$650.00                                | \$61,750.00           |
| 0601201 | CLASS "F" CONCRETE                         | C.Y. | 90                 | \$950.00                                | \$85,500.00           |
| 0602000 | DEFORMED STEEL BARS                        | LB.  | 15,000             | \$1.20                                  | \$18,000.00           |
| 0602006 | DEFORMED STEEL BARS - EPOXY COATED         | LB.  | 18,000             | \$1.40                                  | \$25,200.00           |
| 0603801 | STRUCTURE STEEL                            | L.S. | 1                  | \$850,000.00                            | \$850,000.00          |
| 0702101 | FURNISHING STEEL PILES                     | LB.  | 40,000             | \$0.80                                  | \$32,000.00           |
| 0702111 | DRIVING STEEL PILES                        | L.F. | 1,000              | \$40.00                                 | \$40,000.00           |
| 0702798 | PILE TESTS                                 | EA.  | 3                  | \$10,000.00                             | \$30,000.00           |
| 0703012 | MODIFIED RIPRAP                            | C.Y. | 175                | \$80.00                                 | \$14,000.00           |
| 0707009 | MEMBRANE WATERPROOFING                     | S.Y. | 375                | \$72.00                                 | \$27,000.00           |
| 0904603 | BRIDGE RAIL                                | L.F. | 450                | \$225.00                                | \$101,250.00          |
|         |  |      |                    |   |                       |
|         |  |      |                    | SUBTOTAL:                               | \$1,459,610.00        |
| 0201001 | CLEARING & GRUBBING (2%)                   | L.S. | 1                  | \$29,192.20                             | \$29,192.20           |
| 0971001 | M&PT (1%)                                  | L.S. | 1                  | \$14,596.10                             | \$14,596.10           |
| 0975002 | MOBILIZATION (7.5%)                        | L.S. | 1                  | \$109,470.75                            | \$109,470.75          |
| 0980001 | CONSTRUCTION STAKING (1%)                  | L.S. | 1                  | \$14,596.10                             | \$14,596.10           |
|         |  |      |                    |   |                       |
|         |  |      |                    | SUBTOTAL:                               | \$1,627,465.15        |
|         | MINOR ITEMS (20%)                          | L.S. | 1                  | \$325,493.03                            | \$325,493.03          |
|         |  |      |                    |   |                       |
|         |  |      |                    | SUBTOTAL:                               | \$1,952,958.18        |
|         | CONTINGENCY ITEMS (25%)                    | L.S. | 1                  | \$488,239.55                            | \$488,239.55          |
|         |  |      |                    |   |                       |
|         |  |      |                    | <b>TOTAL:</b>                           | <b>\$2,441,000.00</b> |
|         | ESTIMATED DESIGN COST (10%)                |      |                    |   | <b>\$244,000.00</b>   |
|         |  |      |                    | <b>TOTAL CONSTRUCTION &amp; DESIGN:</b> | <b>\$2,685,000.00</b> |

\*Note that construction costs provided are preliminary and based on limited available information at the time of the study. These numbers are subject to change based on further development of design and future site investigations (survey / environmental testing / subsurface investigation).



Ash Creek Pedestrian Bridge Feasibility Study  
 City of Bridgeport / Town of Fairfield

Project No.: 70002.00  
 Date: 08/25/13  
 By: SJD/SL



Fox Street Bridge Crossing - Truss Bridge

| Item #  | Description                                | Unit | Estimated Quantity | Unit Cost                               | Total Cost            |
|---------|--|------|--------------------|---|-----------------------|
| 0101157 | CONTAMINATED SOIL MANAGEMENT               | L.S. | 1                  | \$60,000.00                             | \$60,000.00           |
| 0203000 | STRUCTURE EXCAVATION-EARTH (COMPLETE)      | C.Y. | 95                 | \$30.00                                 | \$2,850.00            |
| 0203202 | STRUCTURE EXCAVATION-EARTH (EXCLUDING C&D) | C.Y. | 80                 | \$45.00                                 | \$3,600.00            |
| 0204001 | COFFERDAM AND DEWATERING                   | L.F. | 150                | \$320.00                                | \$48,000.00           |
| 0213100 | GRANULAR FILL                              | C.Y. | 45                 | \$30.00                                 | \$1,350.00            |
| 0216000 | PERVIOUS STRUCTURE BACKFILL                | C.Y. | 120                | \$43.00                                 | \$5,160.00            |
| 0406010 | BITUMINOUS CONCRETE                        | TON  | 50                 | \$200.00                                | \$10,000.00           |
| 0506017 | RETAINING WALL                             | EA.  | 2                  | \$15,000.00                             | \$30,000.00           |
| 0521001 | ELASTOMERIC BEARING PADS                   | C.I. | 10,000             | \$1.20                                  | \$12,000.00           |
| 0601000 | CLASS 'A' CONCRETE                         | C.Y. | 110                | \$650.00                                | \$71,500.00           |
| 0601201 | CLASS 'F' CONCRETE                         | C.Y. | 65                 | \$950.00                                | \$61,750.00           |
| 0602000 | DEFORMED STEEL BARS                        | LB.  | 16,500             | \$1.20                                  | \$19,800.00           |
| 0602006 | DEFORMED STEEL BARS - EPOXY COATED         | LB.  | 13,000             | \$1.40                                  | \$18,200.00           |
| 0603801 | STRUCTURE STEEL                            | L.S. | 1                  | \$950,000.00                            | \$950,000.00          |
| 0702101 | FURNISHING STEEL PILES                     | LB.  | 48,000             | \$0.80                                  | \$38,400.00           |
| 0702111 | DRIVING STEEL PILES                        | L.F. | 1,200              | \$40.00                                 | \$48,000.00           |
| 0702798 | PILE TESTS                                 | EA.  | 4                  | \$10,000.00                             | \$40,000.00           |
| 0703012 | MODIFIED RIPRAP                            | C.Y. | 175                | \$80.00                                 | \$14,000.00           |
| 0707009 | MEMBRANE WATERPROOFING                     | S.Y. | 375                | \$72.00                                 | \$20,000.00           |
| 0904603 | BRIDGE RAIL                                | L.F. | 450                | \$225.00                                | \$101,250.00          |
|         |  |      |                    | SUBTOTAL:                               | \$1,555,860.00        |
| 0201001 | CLEARING & GRUBBING (2%)                   | L.S. | 1                  | \$31,117.20                             | \$31,117.20           |
| 0971001 | M&PT (1%)                                  | L.S. | 1                  | \$15,558.60                             | \$15,558.60           |
| 0975002 | MOBILIZATION (7.5%)                        | L.S. | 1                  | \$116,689.50                            | \$116,689.50          |
| 0980001 | CONSTRUCTION STAKING (1%)                  | L.S. | 1                  | \$15,558.60                             | \$15,558.60           |
|         |  |      |                    | SUBTOTAL:                               | \$1,734,783.90        |
|         | MINOR ITEMS (20%)                          | L.S. | 1                  | \$346,956.78                            | \$346,956.78          |
|         |  |      |                    | SUBTOTAL:                               | \$2,081,740.68        |
|         | CONTINGENCY ITEMS (25%)                    | L.S. | 1                  | \$520,435.17                            | \$520,435.17          |
|         |  |      |                    | <b>TOTAL:</b>                           | <b>\$2,602,000.00</b> |
|         | ESTIMATED DESIGN COST (12%)                |      |                    |   | <b>\$312,000.00</b>   |
|         |  |      |                    | <b>TOTAL CONSTRUCTION &amp; DESIGN:</b> | <b>\$2,914,000.00</b> |

\*Note that construction costs provided are preliminary and based on limited available information at the time of the study. These numbers are subject to change based on further development of design and future site investigations (survey / environmental testing / subsurface investigation).





# Appendix G

## SITE FURNISHINGS OPTIONS

# Ash Creek Pedestrian Bridge Feasibility Study

## Site Furnishings Options - Bridgeport and Fairfield, Connecticut



### Bench and Trash Receptacle



Conceptual Site – Kenton  
(colored, powdercoat or stainless steel)



Conceptual Site – Kenton  
(stainless steel and recycled solid surface or IEP wood)



Dumor 58  
(powdercoat metal)



Victor Stanley or Dumor  
(powdercoat colored metal)



Timberform 2817  
(powdercoat color)



Timberform Restoration  
(IPE or Purpleheart wood)



Landscapeforms-custom  
Studio 431



Timberform – 2815  
(powdercoat color)

# Ash Creek Pedestrian Bridge Feasibility Study

## Site Furnishings Options - Bridgeport and Fairfield, Connecticut



### Bench and Trash Receptacle



Landscapeforms-Plainwell (colored, powdercoat or stainless steel)



Landscapeforms – Plainwell (color powdercoated, optional IPE or purpleheart wood)



Downtown Bridgeport (color powdercoated metal)



Victor Stanley PRS36 (powdercoated metal)



Dumor 170 (powdercoat color)



Dumor 169 (metal)



Landscapeforms-Neoromantico Purpleheart Wood – aluminum frame



Landscapeforms-Chase Park - aluminum

# Ash Creek Pedestrian Bridge Feasibility Study

## Site Furnishings Options - Bridgeport and Fairfield, Connecticut



### Bike Rack



Fairfield Metro Center rack  
(Landscapeforms-Pi-powdercoated metal)



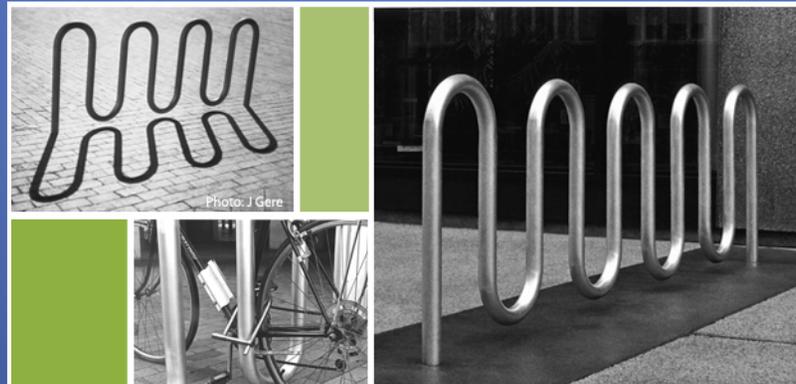
Fairfield Metro Center rack  
(Landscapeforms-Pi-powdercoated metal)



CycLoops Circulo-Columbia Cascade  
(powdercoat color/galvanized/polished stainless steel)



Conceptual Site - Velo  
(galvanized or stainless steel)



Ribbon Rack  
(stainless steel, powdercoated metal, or galvanized)



Landscapeforms-Ring-(stainless steel  
or color powdercoat)

# Ash Creek Pedestrian Bridge Feasibility Study

## Site Furnishings Options - Bridgeport and Fairfield, Connecticut



### Lighting



Saint Mary's  
Waterfront Light



Bridgeport Acorn  
with banner



Waterfront style  
light with banner



AAL – Promenade  
Clear Globe LED



AAL - Providence-LED



Landscapeforms-Annapolis  
(security, removable or solar LED)



LED Lighting (under rail)



Lumec Domus – various  
mounting options



AAL - Providence-LED

# Ash Creek Pedestrian Bridge Feasibility Study

Site Furnishings Options - Bridgeport and Fairfield, Connecticut



## Decorative Crosswalk



Scored Concrete



Concrete Pavers  
(herringbone pattern)

# Ash Creek Pedestrian Bridge Feasibility Study

Site Furnishings Options - Bridgeport and Fairfield, Connecticut



## Ornamental Fence and Railing



# Ash Creek Pedestrian Bridge Feasibility Study

## Site Furnishings Options - Bridgeport and Fairfield, Connecticut



### Structures



Neighborhood Boat Storage Rack



Ash Creek Canoe/Kayak Access Ramp



Existing Stone Walls (Fairfield)



Shade Structure along Canfield Avenue Trail

# Ash Creek Pedestrian Bridge Feasibility Study

## Site Furnishings Options - Bridgeport and Fairfield, Connecticut



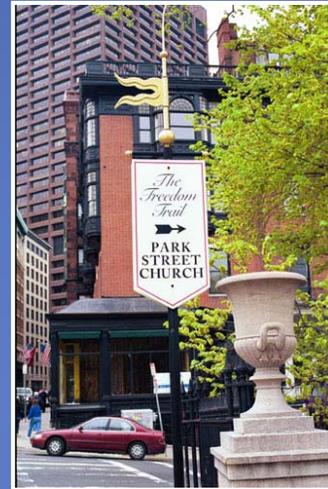
# Signage



Banners with Directional Signage



Waterfront Banner



Directional



Directional



Historic – Informational/Educational



Ecological - Educational



Ecological - Educational

# Ash Creek Pedestrian Bridge Feasibility Study

Site Furnishings Options - Bridgeport and Fairfield, Connecticut



## Art / Sculpture



Stationary



Kinetic

# Appendix H

## TRAFFIC COUNTS



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

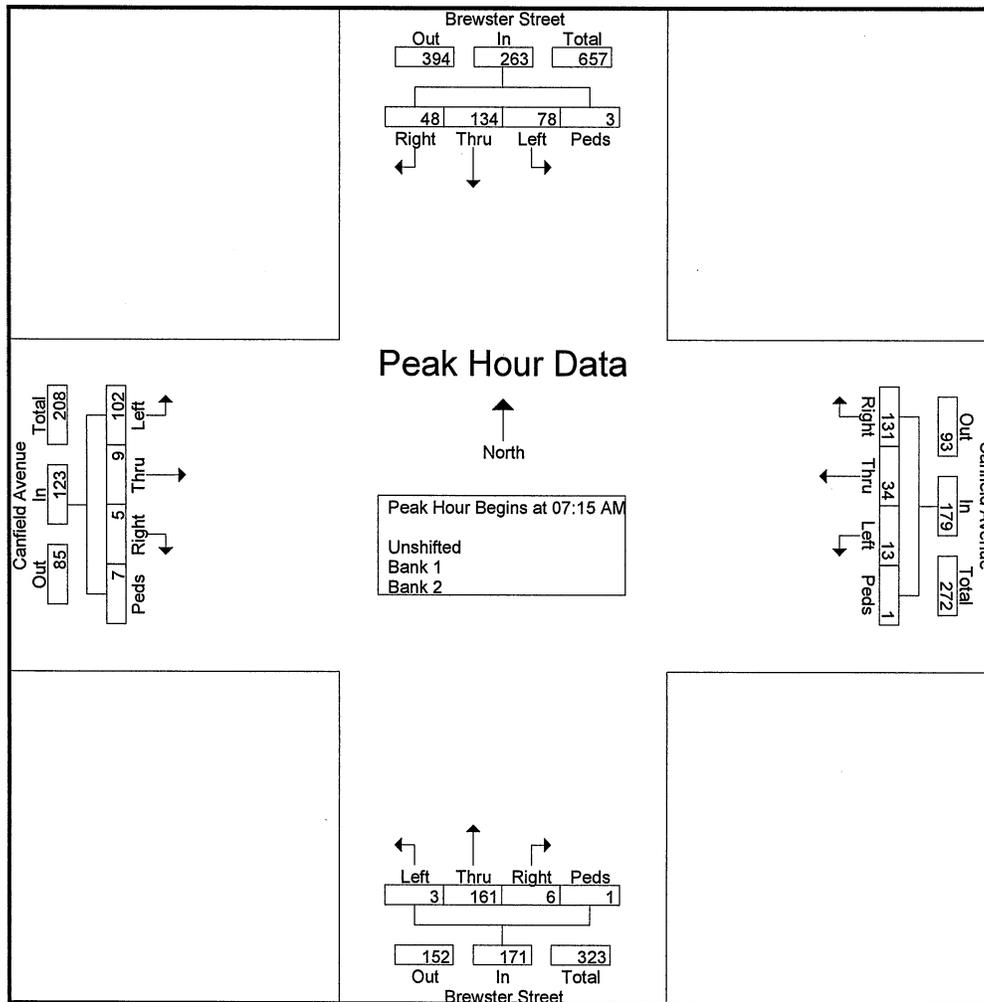
File Name : 11834

Site Code : 11834

Start Date : 3/28/2013

Page No : 2

| Start Time   | Brewster Street From North |      |      |      |            | Canfield Avenue From East |      |      |      |            | Brewster Street From South |      |      |      |            | Canfield Avenue From West |      |      |      |            | Int. Total |
|--|----------------------------|------|------|------|------------|---------------------------|------|------|------|------------|----------------------------|------|------|------|------------|---------------------------|------|------|------|------------|------------|
|  | Right                      | Thru | Left | Peds | App. Total | Right                     | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                     | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 06:30 AM to 08:00 AM - Peak 1 of 1 |                            |      |      |      |            |                           |      |      |      |            |                            |      |      |      |            |                           |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                            |      |      |      |            |                           |      |      |      |            |                            |      |      |      |            |                           |      |      |      |            |            |
| 07:15 AM   | 13                         | 41   | 18   | 1    | 73         | 41                        | 16   | 1    | 0    | 58         | 3                          | 42   | 0    | 0    | 45         | 1                         | 0    | 31   | 1    | 33         | 209        |
| 07:30 AM   | 15                         | 21   | 16   | 0    | 52         | 19                        | 6    | 1    | 1    | 27         | 0                          | 48   | 0    | 1    | 49         | 2                         | 4    | 23   | 1    | 30         | 158        |
| 07:45 AM   | 7                          | 36   | 25   | 1    | 69         | 32                        | 5    | 8    | 0    | 45         | 2                          | 32   | 1    | 0    | 35         | 0                         | 3    | 26   | 3    | 32         | 181        |
| 08:00 AM   | 13                         | 36   | 19   | 1    | 69         | 39                        | 7    | 3    | 0    | 49         | 1                          | 39   | 2    | 0    | 42         | 2                         | 2    | 22   | 2    | 28         | 188        |
| Total Volume   | 48                         | 134  | 78   | 3    | 263        | 131                       | 34   | 13   | 1    | 179        | 6                          | 161  | 3    | 1    | 171        | 5                         | 9    | 102  | 7    | 123        | 736        |
| % App. Total   | 18.3                       | 51   | 29.7 | 1.1  |            | 73.2                      | 19   | 7.3  | 0.6  |            | 3.5                        | 94.2 | 1.8  | 0.6  |            | 4.1                       | 7.3  | 82.9 | 5.7  |            |            |
| PHF  | .800                       | .817 | .780 | .750 | .901       | .799                      | .531 | .406 | .250 | .772       | .500                       | .839 | .375 | .250 | .872       | .625                      | .563 | .823 | .583 | .932       | .880       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

Brewster Street at Canfield Avenue  
Fairfield, Connecticut

File Name : 11835  
Site Code : 11835  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

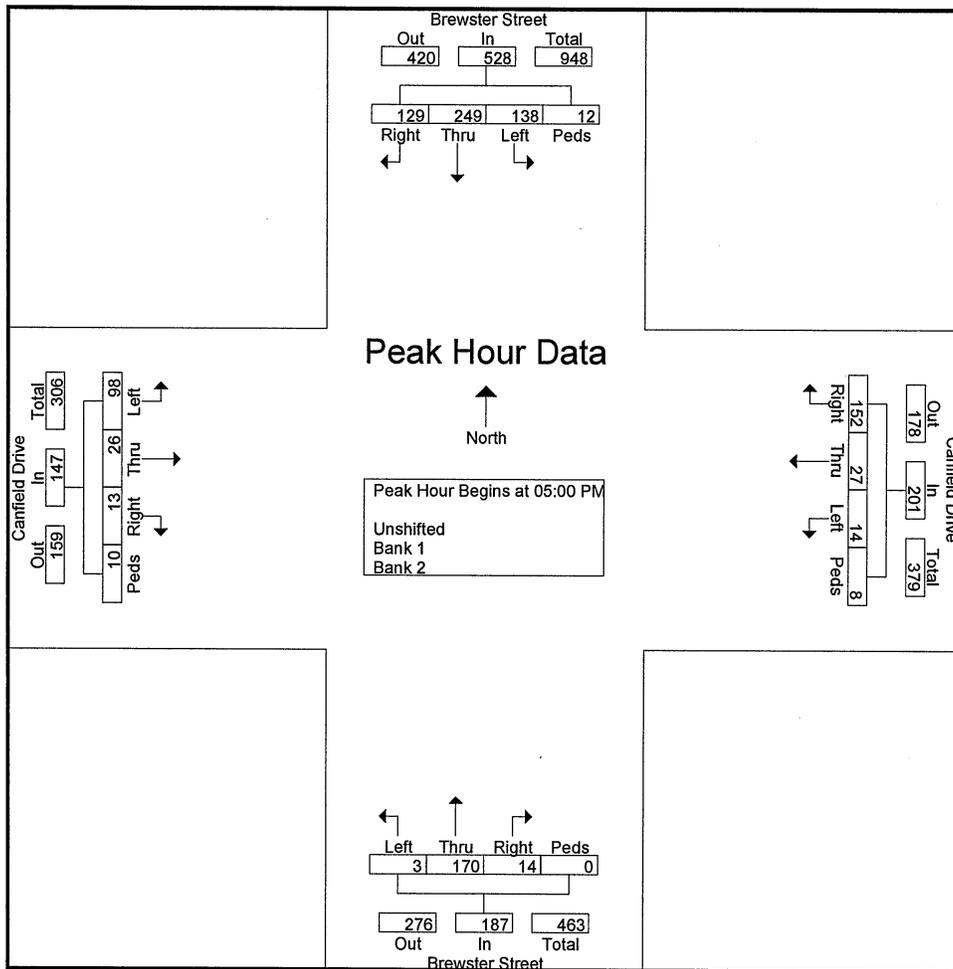
| Start Time            | Brewster Street<br>From North |      |      |      |            | Canfield Drive<br>From East |      |      |      |            | Brewster Street<br>From South |      |      |      |            | Canfield Drive<br>From West |      |      |      |            | Int. Total |
|-----------------------|-------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|                       | Right                         | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 04:00 PM              | 27                            | 52   | 37   | 0    | 116        | 27                          | 1    | 2    | 2    | 32         | 1                             | 43   | 3    | 1    | 48         | 3                           | 4    | 15   | 4    | 26         | 222        |
| 04:15 PM              | 25                            | 47   | 47   | 0    | 119        | 27                          | 7    | 1    | 0    | 35         | 3                             | 42   | 1    | 0    | 46         | 3                           | 8    | 24   | 0    | 35         | 235        |
| 04:30 PM              | 18                            | 49   | 36   | 1    | 104        | 33                          | 3    | 2    | 2    | 40         | 3                             | 43   | 0    | 2    | 48         | 2                           | 3    | 17   | 2    | 24         | 216        |
| 04:45 PM              | 23                            | 63   | 28   | 0    | 114        | 26                          | 5    | 2    | 3    | 36         | 1                             | 36   | 3    | 0    | 40         | 2                           | 5    | 27   | 1    | 35         | 225        |
| Total                 | 93                            | 211  | 148  | 1    | 453        | 113                         | 16   | 7    | 7    | 143        | 8                             | 164  | 7    | 3    | 182        | 10                          | 20   | 83   | 7    | 120        | 898        |
| 05:00 PM              | 31                            | 52   | 39   | 5    | 127        | 42                          | 6    | 5    | 2    | 55         | 4                             | 48   | 0    | 0    | 52         | 3                           | 5    | 27   | 5    | 40         | 274        |
| 05:15 PM              | 31                            | 60   | 27   | 0    | 118        | 38                          | 7    | 1    | 0    | 46         | 3                             | 43   | 2    | 0    | 48         | 3                           | 4    | 19   | 2    | 28         | 240        |
| 05:30 PM              | 44                            | 68   | 40   | 1    | 153        | 38                          | 8    | 4    | 3    | 53         | 0                             | 39   | 1    | 0    | 40         | 4                           | 2    | 33   | 0    | 39         | 285        |
| 05:45 PM              | 23                            | 69   | 32   | 6    | 130        | 34                          | 6    | 4    | 3    | 47         | 7                             | 40   | 0    | 0    | 47         | 3                           | 15   | 19   | 3    | 40         | 264        |
| Total                 | 129                           | 249  | 138  | 12   | 528        | 152                         | 27   | 14   | 8    | 201        | 14                            | 170  | 3    | 0    | 187        | 13                          | 26   | 98   | 10   | 147        | 1063       |
| Grand Total           | 222                           | 460  | 286  | 13   | 981        | 265                         | 43   | 21   | 15   | 344        | 22                            | 334  | 10   | 3    | 369        | 23                          | 46   | 181  | 17   | 267        | 1961       |
| Apprch %              | 22.6                          | 46.9 | 29.2 | 1.3  |            | 77                          | 12.5 | 6.1  | 4.4  |            | 6                             | 90.5 | 2.7  | 0.8  |            | 8.6                         | 17.2 | 67.8 | 6.4  |            |            |
| Total %               | 11.3                          | 23.5 | 14.6 | 0.7  | 50         | 13.5                        | 2.2  | 1.1  | 0.8  | 17.5       | 1.1                           | 17   | 0.5  | 0.2  | 18.8       | 1.2                         | 2.3  | 9.2  | 0.9  | 13.6       |            |
| Unshifted % Unshifted | 221                           | 458  | 282  | 13   | 974        | 260                         | 43   | 16   | 15   | 334        | 22                            | 332  | 10   | 3    | 367        | 23                          | 46   | 181  | 17   | 267        | 1942       |
| Bank 1                | 0                             | 1    | 0    | 0    | 1          | 0                           | 0    | 5    | 0    | 5          | 0                             | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 6          |
| % Bank 1              | 0                             | 0.2  | 0    | 0    | 0.1        | 0                           | 0    | 23.8 | 0    | 1.5        | 0                             | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0.3        |
| Bank 2                | 1                             | 1    | 4    | 0    | 6          | 5                           | 0    | 0    | 0    | 5          | 0                             | 2    | 0    | 0    | 2          | 0                           | 0    | 0    | 0    | 0          | 13         |
| % Bank 2              | 0.5                           | 0.2  | 1.4  | 0    | 0.6        | 1.9                         | 0    | 0    | 0    | 1.5        | 0                             | 0.6  | 0    | 0    | 0.5        | 0                           | 0    | 0    | 0    | 0          | 0.7        |

# Connecticut Counts LLC

Kensington, Connecticut 06037  
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File Name : 11835  
 Site Code : 11835  
 Start Date : 3/28/2013  
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| Start Time   | Brewster Street From North |      |      |      |            | Canfield Drive From East |      |      |      |            | Brewster Street From South |      |      |      |            | Canfield Drive From West |      |      |      |            | Int. Total |
|--|----------------------------|------|------|------|------------|--------------------------|------|------|------|------------|----------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                      | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                            |      |      |      |            |                          |      |      |      |            |                            |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                            |      |      |      |            |                          |      |      |      |            |                            |      |      |      |            |                          |      |      |      |            |            |
| 05:00 PM   | 31                         | 52   | 39   | 5    | 127        | 42                       | 6    | 5    | 2    | 55         | 4                          | 48   | 0    | 0    | 52         | 3                        | 5    | 27   | 5    | 40         | 274        |
| 05:15 PM   | 31                         | 60   | 27   | 0    | 118        | 38                       | 7    | 1    | 0    | 46         | 3                          | 43   | 2    | 0    | 48         | 3                        | 4    | 19   | 2    | 28         | 240        |
| 05:30 PM   | 44                         | 68   | 40   | 1    | 153        | 38                       | 8    | 4    | 3    | 53         | 0                          | 39   | 1    | 0    | 40         | 4                        | 2    | 33   | 0    | 39         | 285        |
| 05:45 PM   | 23                         | 69   | 32   | 6    | 130        | 34                       | 6    | 4    | 3    | 47         | 7                          | 40   | 0    | 0    | 47         | 3                        | 15   | 19   | 3    | 40         | 264        |
| Total Volume   | 129                        | 249  | 138  | 12   | 528        | 152                      | 27   | 14   | 8    | 201        | 14                         | 170  | 3    | 0    | 187        | 13                       | 26   | 98   | 10   | 147        | 1063       |
| % App. Total   | 24.4                       | 47.2 | 26.1 | 2.3  |            | 75.6                     | 13.4 | 7    | 4    |            | 7.5                        | 90.9 | 1.6  | 0    |            | 8.8                      | 17.7 | 66.7 | 6.8  |            |            |
| PHF  | .733                       | .902 | .863 | .500 | .863       | .905                     | .844 | .700 | .667 | .914       | .500                       | .885 | .375 | .000 | .899       | .813                     | .433 | .742 | .500 | .919       | .932       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

Black Rock Tpk at Ash Creek Blvd  
Fairfield, Connecticut

(860) 828-1693

File Name : 11836  
Site Code : 11836  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time         | Black Rock Tpk<br>From North |      |      |      |            | Movie Theater Dr<br>From East |      |      |      |            | Black Rock Tpk<br>From South |      |      |      |            | Ash Creek Blvd<br>From West |      |      |      |            | Int. Total |
|--------------------|------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|                    | Right                        | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                        | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 06:30 AM           | 17                           | 39   | 0    | 0    | 56         | 0                             | 0    | 0    | 0    | 0          | 0                            | 45   | 18   | 7    | 70         | 9                           | 0    | 1    | 0    | 10         | 136        |
| 06:45 AM           | 27                           | 55   | 0    | 0    | 82         | 0                             | 0    | 0    | 0    | 0          | 0                            | 56   | 35   | 1    | 92         | 13                          | 0    | 3    | 0    | 16         | 190        |
| <b>Total</b>       | 44                           | 94   | 0    | 0    | 138        | 0                             | 0    | 0    | 0    | 0          | 0                            | 101  | 53   | 8    | 162        | 22                          | 0    | 4    | 0    | 26         | 326        |
| 07:00 AM           | 25                           | 45   | 0    | 0    | 70         | 0                             | 0    | 0    | 0    | 0          | 0                            | 48   | 26   | 2    | 76         | 10                          | 0    | 0    | 0    | 10         | 156        |
| 07:15 AM           | 18                           | 71   | 0    | 0    | 89         | 0                             | 0    | 0    | 0    | 0          | 0                            | 68   | 22   | 0    | 90         | 9                           | 0    | 2    | 0    | 11         | 190        |
| 07:30 AM           | 20                           | 51   | 0    | 0    | 71         | 0                             | 0    | 0    | 0    | 0          | 0                            | 89   | 17   | 0    | 106        | 7                           | 0    | 0    | 4    | 11         | 188        |
| 07:45 AM           | 16                           | 39   | 0    | 0    | 55         | 0                             | 0    | 0    | 0    | 0          | 0                            | 87   | 18   | 1    | 106        | 6                           | 0    | 1    | 0    | 7          | 168        |
| <b>Total</b>       | 79                           | 206  | 0    | 0    | 285        | 0                             | 0    | 0    | 0    | 0          | 0                            | 292  | 83   | 3    | 378        | 32                          | 0    | 3    | 4    | 39         | 702        |
| 08:00 AM           | 5                            | 56   | 0    | 0    | 61         | 0                             | 0    | 0    | 0    | 0          | 0                            | 61   | 11   | 1    | 73         | 7                           | 0    | 1    | 0    | 8          | 142        |
| 08:15 AM           | 7                            | 39   | 0    | 0    | 46         | 0                             | 0    | 0    | 0    | 0          | 0                            | 86   | 15   | 1    | 102        | 7                           | 0    | 1    | 0    | 8          | 156        |
| <b>Grand Total</b> | 135                          | 395  | 0    | 0    | 530        | 0                             | 0    | 0    | 0    | 0          | 0                            | 540  | 162  | 13   | 715        | 68                          | 0    | 9    | 4    | 81         | 1326       |
| Apprch %           | 25.5                         | 74.5 | 0    | 0    |            | 0                             | 0    | 0    | 0    | 0          | 0                            | 75.5 | 22.7 | 1.8  |            | 84                          | 0    | 11.1 | 4.9  |            |            |
| <b>Total %</b>     | 10.2                         | 29.8 | 0    | 0    | 40         | 0                             | 0    | 0    | 0    | 0          | 0                            | 40.7 | 12.2 | 1    | 53.9       | 5.1                         | 0    | 0.7  | 0.3  | 6.1        |            |
| <b>Unshifted</b>   | 135                          | 385  | 0    | 0    | 520        | 0                             | 0    | 0    | 0    | 0          | 0                            | 527  | 162  | 13   | 702        | 68                          | 0    | 9    | 4    | 81         | 1303       |
| <b>% Unshifted</b> |                              |      |      |      |            |                               |      |      |      |            |                              |      |      |      |            |                             |      |      |      |            |            |
| Bank 1             | 0                            | 0    | 0    | 0    | 0          | 0                             | 0    | 0    | 0    | 0          | 0                            | 3    | 0    | 0    | 3          | 0                           | 0    | 0    | 0    | 0          | 3          |
| <b>% Bank 1</b>    | 0                            | 0    | 0    | 0    | 0          | 0                             | 0    | 0    | 0    | 0          | 0                            | 0.6  | 0    | 0    | 0.4        | 0                           | 0    | 0    | 0    | 0          | 0.2        |
| Bank 2             | 0                            | 10   | 0    | 0    | 10         | 0                             | 0    | 0    | 0    | 0          | 0                            | 10   | 0    | 0    | 10         | 0                           | 0    | 0    | 0    | 0          | 20         |
| <b>% Bank 2</b>    | 0                            | 2.5  | 0    | 0    | 1.9        | 0                             | 0    | 0    | 0    | 0          | 0                            | 1.9  | 0    | 0    | 1.4        | 0                           | 0    | 0    | 0    | 0          | 1.5        |

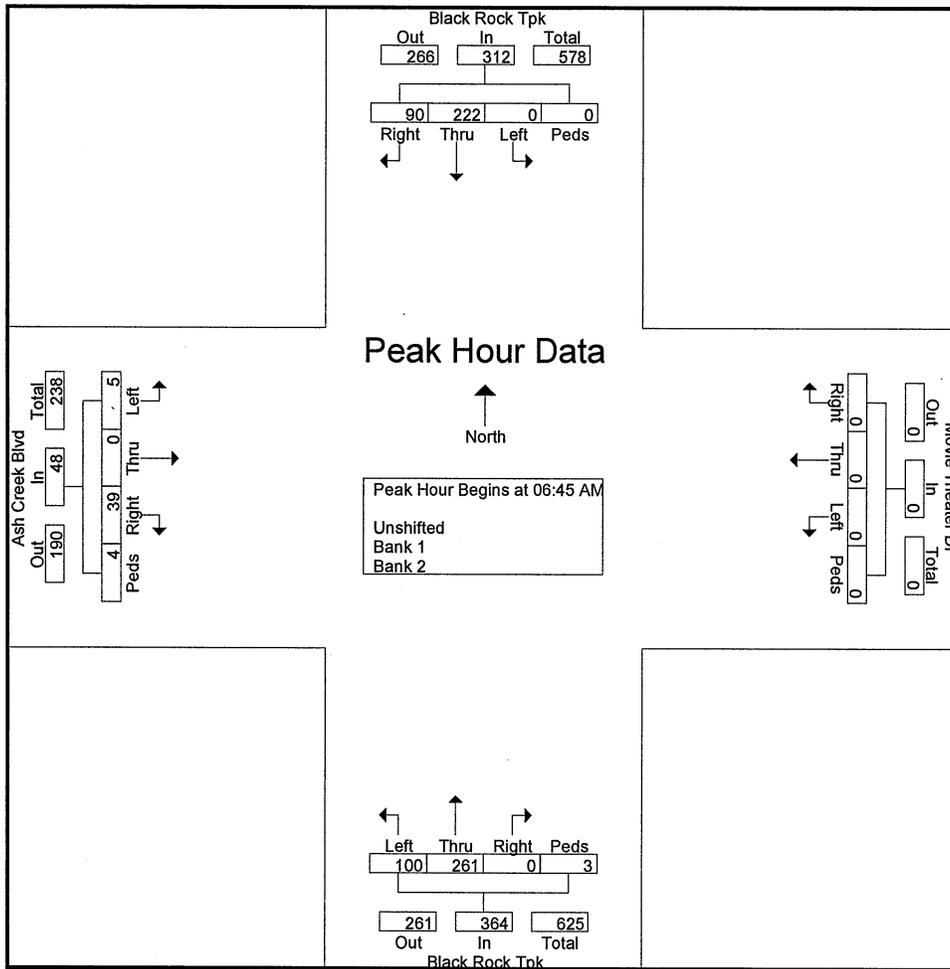
# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

File Name : 11836  
 Site Code : 11836  
 Start Date : 3/28/2013  
 Page No : 2

| Start Time   | Black Rock Tpk From North |      |      |      |            | Movie Theater Dr From East |      |      |      |            | Black Rock Tpk From South |      |      |      |            | Ash Creek Blvd From West |      |      |      |            | Int. Total |
|--|---------------------------|------|------|------|------------|----------------------------|------|------|------|------------|---------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                     | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                     | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1 |                           |      |      |      |            |                            |      |      |      |            |                           |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 06:45 AM       |                           |      |      |      |            |                            |      |      |      |            |                           |      |      |      |            |                          |      |      |      |            |            |
| 06:45 AM   | 27                        | 55   | 0    | 0    | 82         | 0                          | 0    | 0    | 0    | 0          | 0                         | 56   | 35   | 1    | 92         | 13                       | 0    | 3    | 0    | 16         | 190        |
| 07:00 AM   | 25                        | 45   | 0    | 0    | 70         | 0                          | 0    | 0    | 0    | 0          | 0                         | 48   | 26   | 2    | 76         | 10                       | 0    | 0    | 0    | 10         | 156        |
| 07:15 AM   | 18                        | 71   | 0    | 0    | 89         | 0                          | 0    | 0    | 0    | 0          | 0                         | 68   | 22   | 0    | 90         | 9                        | 0    | 2    | 0    | 11         | 190        |
| 07:30 AM   | 20                        | 51   | 0    | 0    | 71         | 0                          | 0    | 0    | 0    | 0          | 0                         | 89   | 17   | 0    | 106        | 7                        | 0    | 0    | 4    | 11         | 188        |
| Total Volume   | 90                        | 222  | 0    | 0    | 312        | 0                          | 0    | 0    | 0    | 0          | 0                         | 261  | 100  | 3    | 364        | 39                       | 0    | 5    | 4    | 48         | 724        |
| % App. Total   | 28.8                      | 71.2 | 0    | 0    |            | 0                          | 0    | 0    | 0    | 0          | 0                         | 71.7 | 27.5 | 0.8  |            | 81.2                     | 0    | 10.4 | 8.3  |            |            |
| PHF  | .833                      | .782 | .000 | .000 | .876       | .000                       | .000 | .000 | .000 | .000       | .000                      | .733 | .714 | .375 | .858       | .750                     | .000 | .417 | .250 | .750       | .953       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

Black Rock Tpk at Ash Creek Blvd  
Fairfield, Connecticut

(860) 828-1693

File Name : 11837  
Site Code : 11837  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time         | Black Rock Turnpike<br>From North |      |      |      |            | Movie Theater Dr<br>From East |      |      |      |            | Black Rock Turnpike<br>From South |      |      |      |            | Ash Creek Blvd<br>From West |      |      |      |            | Int. Total |
|--------------------|-----------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|-----------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|                    | Right                             | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                             | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 04:00 PM           | 4                                 | 103  | 3    | 0    | 110        | 2                             | 1    | 0    | 0    | 3          | 0                                 | 78   | 11   | 0    | 89         | 13                          | 0    | 2    | 0    | 15         | 217        |
| 04:15 PM           | 6                                 | 104  | 8    | 0    | 118        | 3                             | 1    | 2    | 0    | 6          | 1                                 | 86   | 9    | 3    | 99         | 15                          | 0    | 6    | 2    | 23         | 246        |
| 04:30 PM           | 2                                 | 105  | 16   | 0    | 123        | 2                             | 1    | 0    | 0    | 3          | 3                                 | 71   | 12   | 3    | 89         | 23                          | 0    | 5    | 1    | 29         | 244        |
| 04:45 PM           | 3                                 | 95   | 3    | 0    | 101        | 3                             | 0    | 0    | 0    | 3          | 1                                 | 77   | 10   | 2    | 90         | 19                          | 0    | 4    | 1    | 24         | 218        |
| <b>Total</b>       | 15                                | 407  | 30   | 0    | 452        | 10                            | 3    | 2    | 0    | 15         | 5                                 | 312  | 42   | 8    | 367        | 70                          | 0    | 17   | 4    | 91         | 925        |
| 05:00 PM           | 3                                 | 97   | 1    | 1    | 102        | 1                             | 0    | 0    | 0    | 1          | 1                                 | 94   | 7    | 0    | 102        | 10                          | 0    | 3    | 1    | 14         | 219        |
| 05:15 PM           | 6                                 | 84   | 1    | 0    | 91         | 1                             | 0    | 1    | 0    | 2          | 4                                 | 83   | 10   | 0    | 97         | 15                          | 0    | 16   | 0    | 31         | 221        |
| 05:30 PM           | 2                                 | 93   | 1    | 0    | 96         | 3                             | 0    | 3    | 0    | 6          | 0                                 | 102  | 11   | 0    | 113        | 20                          | 0    | 23   | 2    | 45         | 260        |
| 05:45 PM           | 3                                 | 89   | 3    | 0    | 95         | 0                             | 0    | 1    | 0    | 1          | 1                                 | 97   | 9    | 1    | 108        | 20                          | 0    | 1    | 0    | 21         | 225        |
| <b>Total</b>       | 14                                | 363  | 6    | 1    | 384        | 5                             | 0    | 5    | 0    | 10         | 6                                 | 376  | 37   | 1    | 420        | 65                          | 0    | 43   | 3    | 111        | 925        |
| <b>Grand Total</b> | 29                                | 770  | 36   | 1    | 836        | 15                            | 3    | 7    | 0    | 25         | 11                                | 688  | 79   | 9    | 787        | 135                         | 0    | 60   | 7    | 202        | 1850       |
| Apprch %           | 3.5                               | 92.1 | 4.3  | 0.1  |            | 60                            | 12   | 28   | 0    |            | 1.4                               | 87.4 | 10   | 1.1  |            | 66.8                        | 0    | 29.7 | 3.5  |            |            |
| Total %            | 1.6                               | 41.6 | 1.9  | 0.1  | 45.2       | 0.8                           | 0.2  | 0.4  | 0    | 1.4        | 0.6                               | 37.2 | 4.3  | 0.5  | 42.5       | 7.3                         | 0    | 3.2  | 0.4  | 10.9       |            |
| Unshifted          | 29                                | 766  | 36   | 1    | 832        | 15                            | 3    | 7    | 0    | 25         | 11                                | 682  | 79   | 9    | 781        | 135                         | 0    | 60   | 7    | 202        | 1840       |
| % Unshifted        |                                   |      |      |      |            |                               |      |      |      |            |                                   |      |      |      |            |                             |      |      |      |            |            |
| Bank 1             | 0                                 | 0    | 0    | 0    | 0          | 0                             | 0    | 0    | 0    | 0          | 0                                 | 1    | 0    | 0    | 1          | 0                           | 0    | 0    | 0    | 0          | 1          |
| % Bank 1           | 0                                 | 0    | 0    | 0    | 0          | 0                             | 0    | 0    | 0    | 0          | 0                                 | 0.1  | 0    | 0    | 0.1        | 0                           | 0    | 0    | 0    | 0          | 0.1        |
| Bank 2             | 0                                 | 4    | 0    | 0    | 4          | 0                             | 0    | 0    | 0    | 0          | 0                                 | 5    | 0    | 0    | 5          | 0                           | 0    | 0    | 0    | 0          | 9          |
| % Bank 2           | 0                                 | 0.5  | 0    | 0    | 0.5        | 0                             | 0    | 0    | 0    | 0          | 0                                 | 0.7  | 0    | 0    | 0.6        | 0                           | 0    | 0    | 0    | 0          | 0.5        |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

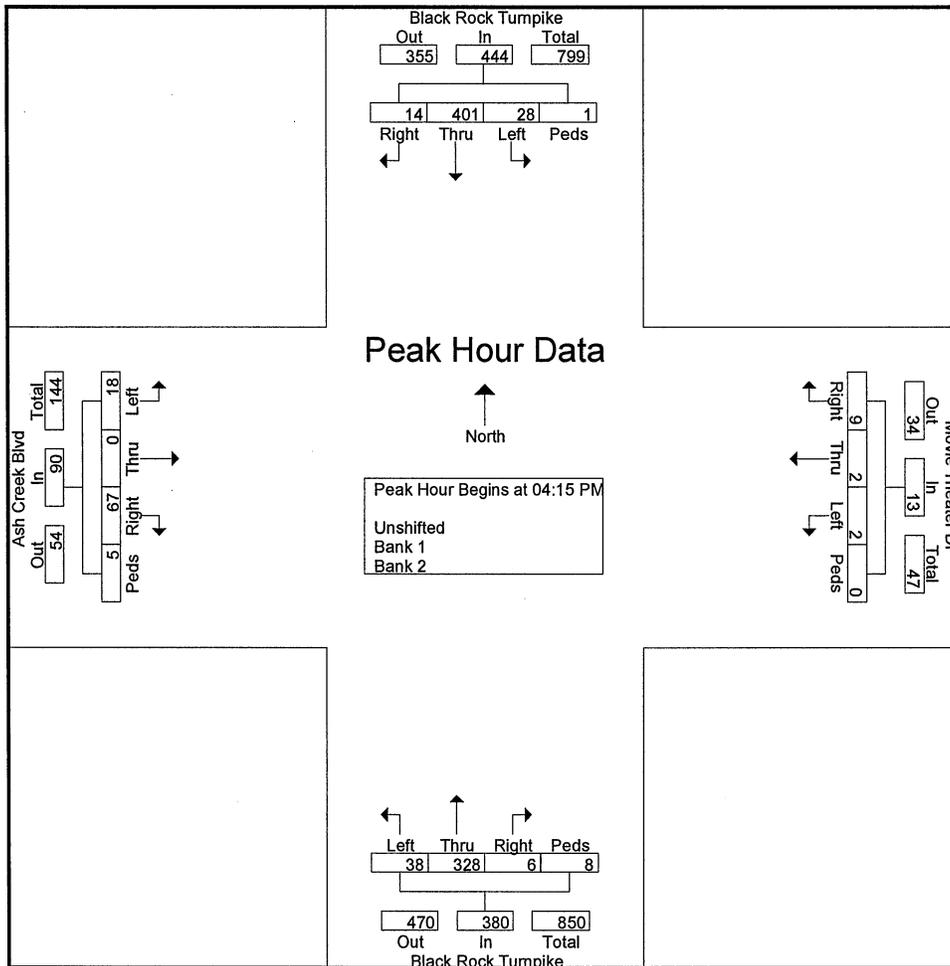
File Name : 11837

Site Code : 11837

Start Date : 3/28/2013

Page No : 2

| Start Time   | Black Rock Turnpike From North |      |      |      |            | Movie Theater Dr From East |      |      |      |            | Black Rock Turnpike From South |      |      |      |            | Ash Creek Blvd From West |      |      |      |            | Int. Total |
|--|--------------------------------|------|------|------|------------|----------------------------|------|------|------|------------|--------------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                          | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                          | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                |      |      |      |            |                            |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:15 PM       |                                |      |      |      |            |                            |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| 04:15 PM   | 6                              | 104  | 8    | 0    | 118        | 3                          | 1    | 2    | 0    | 6          | 1                              | 86   | 9    | 3    | 99         | 15                       | 0    | 6    | 2    | 23         | 246        |
| 04:30 PM   | 2                              | 105  | 16   | 0    | 123        | 2                          | 1    | 0    | 0    | 3          | 3                              | 71   | 12   | 3    | 89         | 23                       | 0    | 5    | 1    | 29         | 244        |
| 04:45 PM   | 3                              | 95   | 3    | 0    | 101        | 3                          | 0    | 0    | 0    | 3          | 1                              | 77   | 10   | 2    | 90         | 19                       | 0    | 4    | 1    | 24         | 218        |
| 05:00 PM   | 3                              | 97   | 1    | 1    | 102        | 1                          | 0    | 0    | 0    | 1          | 1                              | 94   | 7    | 0    | 102        | 10                       | 0    | 3    | 1    | 14         | 219        |
| Total Volume   | 14                             | 401  | 28   | 1    | 444        | 9                          | 2    | 2    | 0    | 13         | 6                              | 328  | 38   | 8    | 380        | 67                       | 0    | 18   | 5    | 90         | 927        |
| % App. Total   | 3.2                            | 90.3 | 6.3  | 0.2  |            | 69.2                       | 15.4 | 15.4 | 0    |            | 1.6                            | 86.3 | 10   | 2.1  |            | 74.4                     | 0    | 20   | 5.6  |            |            |
| PHF  | .583                           | .955 | .438 | .250 | .902       | .750                       | .500 | .250 | .000 | .542       | .500                           | .872 | .792 | .667 | .931       | .728                     | .000 | .750 | .625 | .776       | .942       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

Black Rock Tpk at Ash Creek Blvd  
Fairfield, Connecticut

(860) 828-1693

File Name : 11836  
Site Code : 11836  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

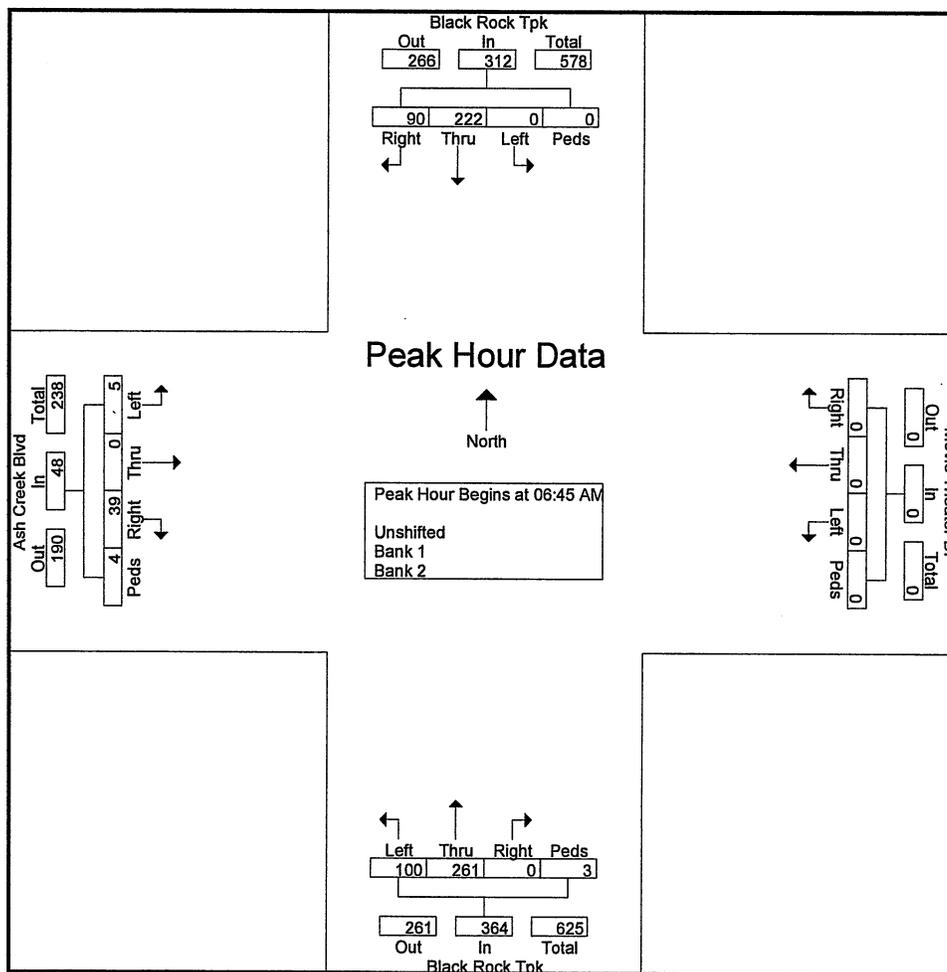
| Start Time         | Black Rock Tpk<br>From North |      |      |      |            | Movie Theater Dr<br>From East |      |      |      |            | Black Rock Tpk<br>From South |      |      |      |            | Ash Creek Blvd<br>From West |      |      |      |            | Int. Total |
|--------------------|------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|                    | Right                        | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                        | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 06:30 AM           | 17                           | 39   | 0    | 0    | 56         | 0                             | 0    | 0    | 0    | 0          | 0                            | 45   | 18   | 7    | 70         | 9                           | 0    | 1    | 0    | 10         | 136        |
| 06:45 AM           | 27                           | 55   | 0    | 0    | 82         | 0                             | 0    | 0    | 0    | 0          | 0                            | 56   | 35   | 1    | 92         | 13                          | 0    | 3    | 0    | 16         | 190        |
| <b>Total</b>       | 44                           | 94   | 0    | 0    | 138        | 0                             | 0    | 0    | 0    | 0          | 0                            | 101  | 53   | 8    | 162        | 22                          | 0    | 4    | 0    | 26         | 326        |
| 07:00 AM           | 25                           | 45   | 0    | 0    | 70         | 0                             | 0    | 0    | 0    | 0          | 0                            | 48   | 26   | 2    | 76         | 10                          | 0    | 0    | 0    | 10         | 156        |
| 07:15 AM           | 18                           | 71   | 0    | 0    | 89         | 0                             | 0    | 0    | 0    | 0          | 0                            | 68   | 22   | 0    | 90         | 9                           | 0    | 2    | 0    | 11         | 190        |
| 07:30 AM           | 20                           | 51   | 0    | 0    | 71         | 0                             | 0    | 0    | 0    | 0          | 0                            | 89   | 17   | 0    | 106        | 7                           | 0    | 0    | 4    | 11         | 188        |
| 07:45 AM           | 16                           | 39   | 0    | 0    | 55         | 0                             | 0    | 0    | 0    | 0          | 0                            | 87   | 18   | 1    | 106        | 6                           | 0    | 1    | 0    | 7          | 168        |
| <b>Total</b>       | 79                           | 206  | 0    | 0    | 285        | 0                             | 0    | 0    | 0    | 0          | 0                            | 292  | 83   | 3    | 378        | 32                          | 0    | 3    | 4    | 39         | 702        |
| 08:00 AM           | 5                            | 56   | 0    | 0    | 61         | 0                             | 0    | 0    | 0    | 0          | 0                            | 61   | 11   | 1    | 73         | 7                           | 0    | 1    | 0    | 8          | 142        |
| 08:15 AM           | 7                            | 39   | 0    | 0    | 46         | 0                             | 0    | 0    | 0    | 0          | 0                            | 86   | 15   | 1    | 102        | 7                           | 0    | 1    | 0    | 8          | 156        |
| <b>Grand Total</b> | 135                          | 395  | 0    | 0    | 530        | 0                             | 0    | 0    | 0    | 0          | 0                            | 540  | 162  | 13   | 715        | 68                          | 0    | 9    | 4    | 81         | 1326       |
| <b>Apprch %</b>    | 25.5                         | 74.5 | 0    | 0    |            | 0                             | 0    | 0    | 0    | 0          | 0                            | 75.5 | 22.7 | 1.8  |            | 84                          | 0    | 11.1 | 4.9  |            |            |
| <b>Total %</b>     | 10.2                         | 29.8 | 0    | 0    | 40         | 0                             | 0    | 0    | 0    | 0          | 0                            | 40.7 | 12.2 | 1    | 53.9       | 5.1                         | 0    | 0.7  | 0.3  | 6.1        |            |
| <b>Unshifted</b>   | 135                          | 385  | 0    | 0    | 520        | 0                             | 0    | 0    | 0    | 0          | 0                            | 527  | 162  | 13   | 702        | 68                          | 0    | 9    | 4    | 81         | 1303       |
| <b>% Unshifted</b> |                              |      |      |      |            |                               |      |      |      |            |                              |      |      |      |            |                             |      |      |      |            |            |
| Bank 1             | 0                            | 0    | 0    | 0    | 0          | 0                             | 0    | 0    | 0    | 0          | 0                            | 3    | 0    | 0    | 3          | 0                           | 0    | 0    | 0    | 0          | 3          |
| <b>% Bank 1</b>    | 0                            | 0    | 0    | 0    | 0          | 0                             | 0    | 0    | 0    | 0          | 0                            | 0.6  | 0    | 0    | 0.4        | 0                           | 0    | 0    | 0    | 0          | 0.2        |
| Bank 2             | 0                            | 10   | 0    | 0    | 10         | 0                             | 0    | 0    | 0    | 0          | 0                            | 10   | 0    | 0    | 10         | 0                           | 0    | 0    | 0    | 0          | 20         |
| <b>% Bank 2</b>    | 0                            | 2.5  | 0    | 0    | 1.9        | 0                             | 0    | 0    | 0    | 0          | 0                            | 1.9  | 0    | 0    | 1.4        | 0                           | 0    | 0    | 0    | 0          | 1.5        |

# Connecticut Counts LLC

Kensington, Connecticut 06037  
(860) 828-1693

File Name : 11836  
Site Code : 11836  
Start Date : 3/28/2013  
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| Start Time   | Black Rock Tpk From North |      |      |      |            | Movie Theater Dr From East |      |      |      |            | Black Rock Tpk From South |      |      |      |            | Ash Creek Blvd From West |      |      |      |            | Int. Total |
|--|---------------------------|------|------|------|------------|----------------------------|------|------|------|------------|---------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                     | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                     | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1 |                           |      |      |      |            |                            |      |      |      |            |                           |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 06:45 AM       |                           |      |      |      |            |                            |      |      |      |            |                           |      |      |      |            |                          |      |      |      |            |            |
| 06:45 AM   | 27                        | 55   | 0    | 0    | 82         | 0                          | 0    | 0    | 0    | 0          | 0                         | 56   | 35   | 1    | 92         | 13                       | 0    | 3    | 0    | 16         | 190        |
| 07:00 AM   | 25                        | 45   | 0    | 0    | 70         | 0                          | 0    | 0    | 0    | 0          | 0                         | 48   | 26   | 2    | 76         | 10                       | 0    | 0    | 0    | 10         | 156        |
| 07:15 AM   | 18                        | 71   | 0    | 0    | 89         | 0                          | 0    | 0    | 0    | 0          | 0                         | 68   | 22   | 0    | 90         | 9                        | 0    | 2    | 0    | 11         | 190        |
| 07:30 AM   | 20                        | 51   | 0    | 0    | 71         | 0                          | 0    | 0    | 0    | 0          | 0                         | 89   | 17   | 0    | 106        | 7                        | 0    | 0    | 4    | 11         | 188        |
| Total Volume   | 90                        | 222  | 0    | 0    | 312        | 0                          | 0    | 0    | 0    | 0          | 0                         | 261  | 100  | 3    | 364        | 39                       | 0    | 5    | 4    | 48         | 724        |
| % App. Total   | 28.8                      | 71.2 | 0    | 0    |            | 0                          | 0    | 0    | 0    | 0          | 0                         | 71.7 | 27.5 | 0.8  |            | 81.2                     | 0    | 10.4 | 8.3  |            |            |
| PHF  | .833                      | .782 | .000 | .000 | .876       | .000                       | .000 | .000 | .000 | .000       | .000                      | .733 | .714 | .375 | .858       | .750                     | .000 | .417 | .250 | .750       | .953       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

Black Rock Tpk at Ash Creek Blvd  
Fairfield, Connecticut

File Name : 11837  
Site Code : 11837  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

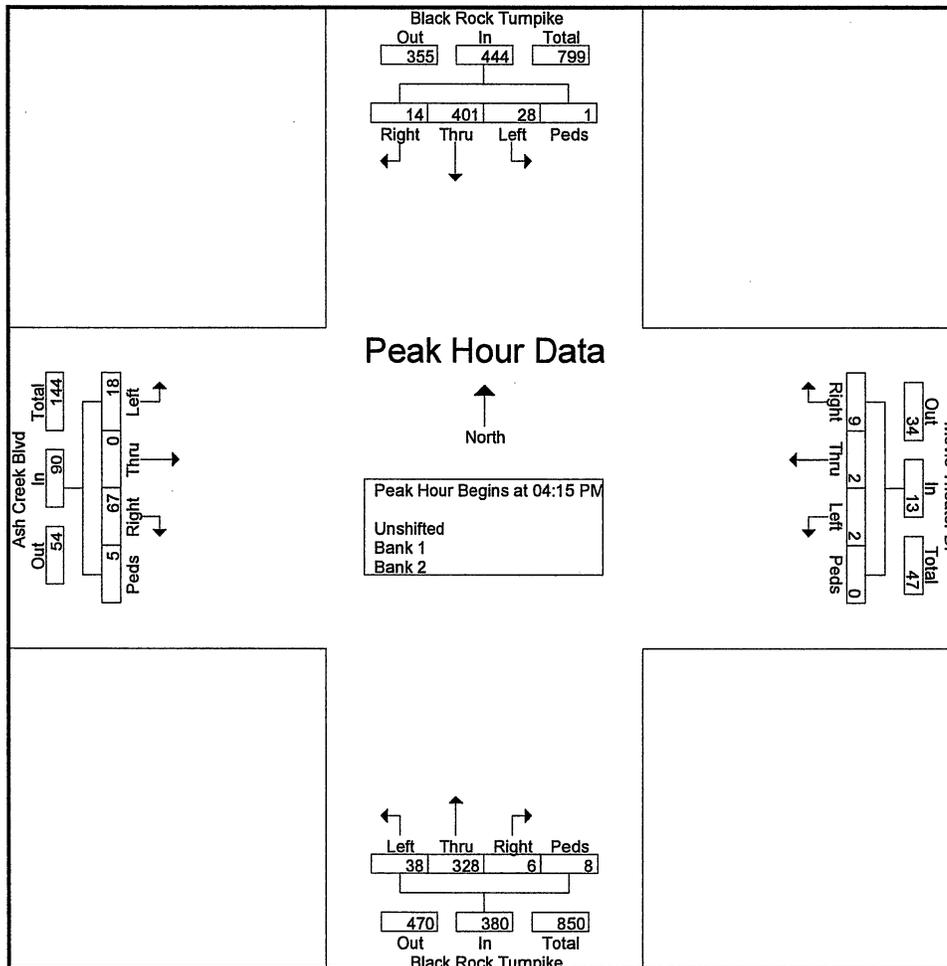
| Start Time   | Black Rock Turnpike<br>From North |            |           |          |            | Movie Theater Dr<br>From East |          |          |          |            | Black Rock Turnpike<br>From South |            |           |          |            | Ash Creek Blvd<br>From West |          |           |          |            | Int. Total |
|--------------|-----------------------------------|------------|-----------|----------|------------|-------------------------------|----------|----------|----------|------------|-----------------------------------|------------|-----------|----------|------------|-----------------------------|----------|-----------|----------|------------|------------|
|              | Right                             | Thru       | Left      | Peds     | App. Total | Right                         | Thru     | Left     | Peds     | App. Total | Right                             | Thru       | Left      | Peds     | App. Total | Right                       | Thru     | Left      | Peds     | App. Total |            |
| 04:00 PM     | 4                                 | 103        | 3         | 0        | 110        | 2                             | 1        | 0        | 0        | 3          | 0                                 | 78         | 11        | 0        | 89         | 13                          | 0        | 2         | 0        | 15         | 217        |
| 04:15 PM     | 6                                 | 104        | 8         | 0        | 118        | 3                             | 1        | 2        | 0        | 6          | 1                                 | 86         | 9         | 3        | 99         | 15                          | 0        | 6         | 2        | 23         | 246        |
| 04:30 PM     | 2                                 | 105        | 16        | 0        | 123        | 2                             | 1        | 0        | 0        | 3          | 3                                 | 71         | 12        | 3        | 89         | 23                          | 0        | 5         | 1        | 29         | 244        |
| 04:45 PM     | 3                                 | 95         | 3         | 0        | 101        | 3                             | 0        | 0        | 0        | 3          | 1                                 | 77         | 10        | 2        | 90         | 19                          | 0        | 4         | 1        | 24         | 218        |
| <b>Total</b> | <b>15</b>                         | <b>407</b> | <b>30</b> | <b>0</b> | <b>452</b> | <b>10</b>                     | <b>3</b> | <b>2</b> | <b>0</b> | <b>15</b>  | <b>5</b>                          | <b>312</b> | <b>42</b> | <b>8</b> | <b>367</b> | <b>70</b>                   | <b>0</b> | <b>17</b> | <b>4</b> | <b>91</b>  | <b>925</b> |
|              |                                   |            |           |          |            |                               |          |          |          |            |                                   |            |           |          |            |                             |          |           |          |            |            |
| 05:00 PM     | 3                                 | 97         | 1         | 1        | 102        | 1                             | 0        | 0        | 0        | 1          | 1                                 | 94         | 7         | 0        | 102        | 10                          | 0        | 3         | 1        | 14         | 219        |
| 05:15 PM     | 6                                 | 84         | 1         | 0        | 91         | 1                             | 0        | 1        | 0        | 2          | 4                                 | 83         | 10        | 0        | 97         | 15                          | 0        | 16        | 0        | 31         | 221        |
| 05:30 PM     | 2                                 | 93         | 1         | 0        | 96         | 3                             | 0        | 3        | 0        | 6          | 0                                 | 102        | 11        | 0        | 113        | 20                          | 0        | 23        | 2        | 45         | 260        |
| 05:45 PM     | 3                                 | 89         | 3         | 0        | 95         | 0                             | 0        | 1        | 0        | 1          | 1                                 | 97         | 9         | 1        | 108        | 20                          | 0        | 1         | 0        | 21         | 225        |
| <b>Total</b> | <b>14</b>                         | <b>363</b> | <b>6</b>  | <b>1</b> | <b>384</b> | <b>5</b>                      | <b>0</b> | <b>5</b> | <b>0</b> | <b>10</b>  | <b>6</b>                          | <b>376</b> | <b>37</b> | <b>1</b> | <b>420</b> | <b>65</b>                   | <b>0</b> | <b>43</b> | <b>3</b> | <b>111</b> | <b>925</b> |
|              |                                   |            |           |          |            |                               |          |          |          |            |                                   |            |           |          |            |                             |          |           |          |            |            |
| Grand Total  | 29                                | 770        | 36        | 1        | 836        | 15                            | 3        | 7        | 0        | 25         | 11                                | 688        | 79        | 9        | 787        | 135                         | 0        | 60        | 7        | 202        | 1850       |
| Apprch %     | 3.5                               | 92.1       | 4.3       | 0.1      |            | 60                            | 12       | 28       | 0        |            | 1.4                               | 87.4       | 10        | 1.1      |            | 66.8                        | 0        | 29.7      | 3.5      |            |            |
| Total %      | 1.6                               | 41.6       | 1.9       | 0.1      | 45.2       | 0.8                           | 0.2      | 0.4      | 0        | 1.4        | 0.6                               | 37.2       | 4.3       | 0.5      | 42.5       | 7.3                         | 0        | 3.2       | 0.4      | 10.9       |            |
| Unshifted    | 29                                | 766        | 36        | 1        | 832        | 15                            | 3        | 7        | 0        | 25         | 11                                | 682        | 79        | 9        | 781        | 135                         | 0        | 60        | 7        | 202        | 1840       |
| % Unshifted  |                                   |            |           |          |            |                               |          |          |          |            |                                   |            |           |          |            |                             |          |           |          |            |            |
| Bank 1       | 0                                 | 0          | 0         | 0        | 0          | 0                             | 0        | 0        | 0        | 0          | 0                                 | 1          | 0         | 0        | 1          | 0                           | 0        | 0         | 0        | 0          | 1          |
| % Bank 1     | 0                                 | 0          | 0         | 0        | 0          | 0                             | 0        | 0        | 0        | 0          | 0                                 | 0.1        | 0         | 0        | 0.1        | 0                           | 0        | 0         | 0        | 0          | 0.1        |
| Bank 2       | 0                                 | 4          | 0         | 0        | 4          | 0                             | 0        | 0        | 0        | 0          | 0                                 | 5          | 0         | 0        | 5          | 0                           | 0        | 0         | 0        | 0          | 9          |
| % Bank 2     | 0                                 | 0.5        | 0         | 0        | 0.5        | 0                             | 0        | 0        | 0        | 0          | 0                                 | 0.7        | 0         | 0        | 0.6        | 0                           | 0        | 0         | 0        | 0          | 0.5        |

# Connecticut Counts LLC

Kensington, Connecticut 06037  
(860) 828-1693

File Name : 11837  
Site Code : 11837  
Start Date : 3/28/2013  
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| Start Time   | Black Rock Turnpike From North |      |      |      |            | Movie Theater Dr From East |      |      |      |            | Black Rock Turnpike From South |      |      |      |            | Ash Creek Blvd From West |      |      |      |            | Int. Total |
|--|--------------------------------|------|------|------|------------|----------------------------|------|------|------|------------|--------------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                          | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                          | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                |      |      |      |            |                            |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:15 PM       |                                |      |      |      |            |                            |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| 04:15 PM   | 6                              | 104  | 8    | 0    | 118        | 3                          | 1    | 2    | 0    | 6          | 1                              | 86   | 9    | 3    | 99         | 15                       | 0    | 6    | 2    | 23         | 246        |
| 04:30 PM   | 2                              | 105  | 16   | 0    | 123        | 2                          | 1    | 0    | 0    | 3          | 3                              | 71   | 12   | 3    | 89         | 23                       | 0    | 5    | 1    | 29         | 244        |
| 04:45 PM   | 3                              | 95   | 3    | 0    | 101        | 3                          | 0    | 0    | 0    | 3          | 1                              | 77   | 10   | 2    | 90         | 19                       | 0    | 4    | 1    | 24         | 218        |
| 05:00 PM   | 3                              | 97   | 1    | 1    | 102        | 1                          | 0    | 0    | 0    | 1          | 1                              | 94   | 7    | 0    | 102        | 10                       | 0    | 3    | 1    | 14         | 219        |
| Total Volume   | 14                             | 401  | 28   | 1    | 444        | 9                          | 2    | 2    | 0    | 13         | 6                              | 328  | 38   | 8    | 380        | 67                       | 0    | 18   | 5    | 90         | 927        |
| % App. Total   | 3.2                            | 90.3 | 6.3  | 0.2  |            | 69.2                       | 15.4 | 15.4 | 0    |            | 1.6                            | 86.3 | 10   | 2.1  |            | 74.4                     | 0    | 20   | 5.6  |            |            |
| PHF  | .583                           | .955 | .438 | .250 | .902       | .750                       | .500 | .250 | .000 | .542       | .500                           | .872 | .792 | .667 | .931       | .728                     | .000 | .750 | .625 | .776       | .942       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

Commerce Dr at Black Rock Tpk  
Fairfield, Connecticut

File Name : 11838  
Site Code : 11838  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time  | Black Rock Turnpike<br>From North |      |      |      |            | Commerce Drive<br>From East |      |      |      |            | Black Rock Turnpike<br>From South |      |      |      |            | Commerce Drive<br>From West |      |      |      |            | Int. Total |
|-------------|-----------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|-----------------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|             | Right                             | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total | Right                             | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 06:30 AM    | 0                                 | 20   | 1    | 0    | 21         | 9                           | 55   | 43   | 2    | 109        | 17                                | 27   | 3    | 0    | 47         | 0                           | 14   | 1    | 0    | 15         | 192        |
| 06:45 AM    | 1                                 | 32   | 5    | 0    | 38         | 15                          | 89   | 73   | 0    | 177        | 23                                | 35   | 3    | 0    | 61         | 3                           | 24   | 1    | 0    | 28         | 304        |
| Total       | 1                                 | 52   | 6    | 0    | 59         | 24                          | 144  | 116  | 2    | 286        | 40                                | 62   | 6    | 0    | 108        | 3                           | 38   | 2    | 0    | 43         | 496        |
| 07:00 AM    | 2                                 | 23   | 3    | 0    | 28         | 8                           | 96   | 58   | 0    | 162        | 24                                | 49   | 3    | 3    | 79         | 6                           | 27   | 1    | 0    | 34         | 303        |
| 07:15 AM    | 3                                 | 31   | 4    | 0    | 38         | 13                          | 120  | 64   | 2    | 199        | 30                                | 52   | 6    | 1    | 89         | 5                           | 27   | 2    | 0    | 34         | 360        |
| 07:30 AM    | 0                                 | 37   | 11   | 0    | 48         | 11                          | 99   | 41   | 0    | 151        | 27                                | 41   | 7    | 2    | 77         | 2                           | 25   | 0    | 0    | 27         | 303        |
| 07:45 AM    | 0                                 | 25   | 14   | 0    | 39         | 11                          | 71   | 40   | 0    | 122        | 13                                | 55   | 6    | 1    | 75         | 6                           | 22   | 1    | 0    | 29         | 265        |
| Total       | 5                                 | 116  | 32   | 0    | 153        | 43                          | 386  | 203  | 2    | 634        | 94                                | 197  | 22   | 7    | 320        | 19                          | 101  | 4    | 0    | 124        | 1231       |
| 08:00 AM    | 4                                 | 31   | 13   | 1    | 49         | 5                           | 83   | 45   | 0    | 133        | 24                                | 41   | 4    | 3    | 72         | 4                           | 19   | 1    | 1    | 25         | 279        |
| 08:15 AM    | 1                                 | 18   | 11   | 1    | 31         | 11                          | 54   | 34   | 0    | 99         | 24                                | 62   | 4    | 0    | 90         | 5                           | 34   | 3    | 0    | 42         | 262        |
| Grand Total | 11                                | 217  | 62   | 2    | 292        | 83                          | 667  | 398  | 4    | 1152       | 182                               | 362  | 36   | 10   | 590        | 31                          | 192  | 10   | 1    | 234        | 2268       |
| Apprch %    | 3.8                               | 74.3 | 21.2 | 0.7  |            | 7.2                         | 57.9 | 34.5 | 0.3  |            | 30.8                              | 61.4 | 6.1  | 1.7  |            | 13.2                        | 82.1 | 4.3  | 0.4  |            |            |
| Total %     | 0.5                               | 9.6  | 2.7  | 0.1  | 12.9       | 3.7                         | 29.4 | 17.5 | 0.2  | 50.8       | 8                                 | 16   | 1.6  | 0.4  | 26         | 1.4                         | 8.5  | 0.4  | 0    | 10.3       |            |
| Unshifted   | 11                                | 210  | 57   | 2    | 280        | 77                          | 656  | 388  | 4    | 1125       | 176                               | 354  | 36   | 10   | 576        | 31                          | 178  | 8    | 1    | 218        | 2199       |
| % Unshifted |                                   |      |      |      |            |                             |      |      |      |            |                                   |      |      |      |            |                             |      |      |      |            |            |
| Bank 1      | 0                                 | 1    | 1    | 0    | 2          | 0                           | 7    | 3    | 0    | 10         | 3                                 | 1    | 0    | 0    | 4          | 0                           | 5    | 2    | 0    | 7          | 23         |
| % Bank 1    | 0                                 | 0.5  | 1.6  | 0    | 0.7        | 0                           | 1    | 0.8  | 0    | 0.9        | 1.6                               | 0.3  | 0    | 0    | 0.7        | 0                           | 2.6  | 20   | 0    | 3          | 1          |
| Bank 2      | 0                                 | 6    | 4    | 0    | 10         | 6                           | 4    | 7    | 0    | 17         | 3                                 | 7    | 0    | 0    | 10         | 0                           | 9    | 0    | 0    | 9          | 46         |
| % Bank 2    | 0                                 | 2.8  | 6.5  | 0    | 3.4        | 7.2                         | 0.6  | 1.8  | 0    | 1.5        | 1.6                               | 1.9  | 0    | 0    | 1.7        | 0                           | 4.7  | 0    | 0    | 3.8        | 2          |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

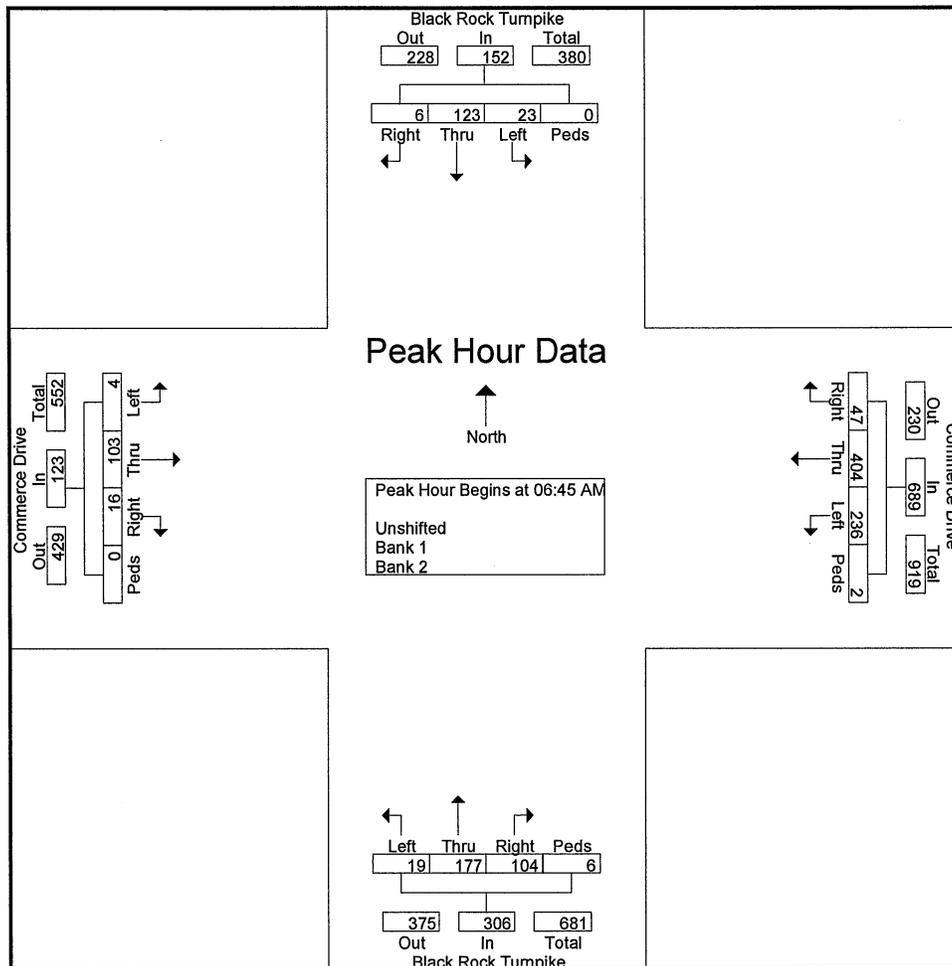
File Name : 11838

Site Code : 11838

Start Date : 3/28/2013

Page No : 2

| Start Time   | Black Rock Turnpike From North |      |      |      |            | Commerce Drive From East |      |      |      |            | Black Rock Turnpike From South |      |      |      |            | Commerce Drive From West |      |      |      |            | Int. Total |
|--|--------------------------------|------|------|------|------------|--------------------------|------|------|------|------------|--------------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                          | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total | Right                          | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1 |                                |      |      |      |            |                          |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 06:45 AM       |                                |      |      |      |            |                          |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| 06:45 AM   | 1                              | 32   | 5    | 0    | 38         | 15                       | 89   | 73   | 0    | 177        | 23                             | 35   | 3    | 0    | 61         | 3                        | 24   | 1    | 0    | 28         | 304        |
| 07:00 AM   | 2                              | 23   | 3    | 0    | 28         | 8                        | 96   | 58   | 0    | 162        | 24                             | 49   | 3    | 3    | 79         | 6                        | 27   | 1    | 0    | 34         | 303        |
| 07:15 AM   | 3                              | 31   | 4    | 0    | 38         | 13                       | 120  | 64   | 2    | 199        | 30                             | 52   | 6    | 1    | 89         | 5                        | 27   | 2    | 0    | 34         | 360        |
| 07:30 AM   | 0                              | 37   | 11   | 0    | 48         | 11                       | 99   | 41   | 0    | 151        | 27                             | 41   | 7    | 2    | 77         | 2                        | 25   | 0    | 0    | 27         | 303        |
| Total Volume   | 6                              | 123  | 23   | 0    | 152        | 47                       | 404  | 236  | 2    | 689        | 104                            | 177  | 19   | 6    | 306        | 16                       | 103  | 4    | 0    | 123        | 1270       |
| % App. Total   | 3.9                            | 80.9 | 15.1 | 0    |            | 6.8                      | 58.6 | 34.3 | 0.3  |            | 34                             | 57.8 | 6.2  | 2    |            | 13                       | 83.7 | 3.3  | 0    |            |            |
| PHF  | .500                           | .831 | .523 | .000 | .792       | .783                     | .842 | .808 | .250 | .866       | .867                           | .851 | .679 | .500 | .860       | .667                     | .954 | .500 | .000 | .904       | .882       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

Commerce Drive at Black Rock Tpk  
Fairfield, Connecticut

(860) 828-1693

File Name : 11839  
Site Code : 11839  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time         | Black Rock Turnpike<br>From North |             |             |            |             | Commerce Drive<br>From East |             |             |            |            | Black Rock Turnpike<br>From South |             |            |            |             | Commerce Drive<br>From West |             |            |            |             | Int. Total  |
|--------------------|-----------------------------------|-------------|-------------|------------|-------------|-----------------------------|-------------|-------------|------------|------------|-----------------------------------|-------------|------------|------------|-------------|-----------------------------|-------------|------------|------------|-------------|-------------|
|                    | Right                             | Thru        | Left        | Peds       | App. Total  | Right                       | Thru        | Left        | Peds       | App. Total | Right                             | Thru        | Left       | Peds       | App. Total  | Right                       | Thru        | Left       | Peds       | App. Total  |             |
| 04:00 PM           | 0                                 | 67          | 15          | 3          | 85          | 4                           | 38          | 49          | 0          | 91         | 40                                | 67          | 7          | 0          | 114         | 8                           | 53          | 3          | 0          | 64          | 114         |
| 04:15 PM           | 1                                 | 60          | 15          | 1          | 77          | 15                          | 40          | 45          | 0          | 100        | 35                                | 68          | 8          | 1          | 112         | 13                          | 53          | 6          | 0          | 72          | 361         |
| 04:30 PM           | 2                                 | 47          | 15          | 4          | 68          | 11                          | 36          | 55          | 0          | 102        | 59                                | 71          | 7          | 0          | 137         | 6                           | 55          | 6          | 0          | 67          | 374         |
| 04:45 PM           | 0                                 | 69          | 6           | 6          | 81          | 19                          | 44          | 62          | 0          | 125        | 54                                | 74          | 7          | 4          | 139         | 10                          | 69          | 5          | 0          | 84          | 429         |
| <b>Total</b>       | <b>3</b>                          | <b>243</b>  | <b>51</b>   | <b>14</b>  | <b>311</b>  | <b>49</b>                   | <b>158</b>  | <b>211</b>  | <b>0</b>   | <b>418</b> | <b>188</b>                        | <b>280</b>  | <b>29</b>  | <b>5</b>   | <b>502</b>  | <b>37</b>                   | <b>230</b>  | <b>20</b>  | <b>0</b>   | <b>287</b>  | <b>1518</b> |
|                    |                                   |             |             |            |             |                             |             |             |            |            |                                   |             |            |            |             |                             |             |            |            |             |             |
| 05:00 PM           | 1                                 | 46          | 12          | 1          | 60          | 15                          | 28          | 74          | 1          | 118        | 61                                | 73          | 4          | 3          | 141         | 7                           | 53          | 7          | 0          | 67          | 386         |
| 05:15 PM           | 1                                 | 45          | 15          | 1          | 62          | 10                          | 29          | 47          | 0          | 86         | 48                                | 78          | 3          | 5          | 134         | 8                           | 60          | 5          | 0          | 73          | 355         |
| 05:30 PM           | 1                                 | 64          | 11          | 4          | 80          | 12                          | 21          | 53          | 0          | 86         | 43                                | 75          | 4          | 4          | 126         | 6                           | 45          | 4          | 0          | 55          | 347         |
| 05:45 PM           | 0                                 | 60          | 15          | 0          | 75          | 12                          | 31          | 52          | 0          | 95         | 52                                | 74          | 4          | 2          | 132         | 9                           | 52          | 6          | 1          | 68          | 370         |
| <b>Total</b>       | <b>3</b>                          | <b>215</b>  | <b>53</b>   | <b>6</b>   | <b>277</b>  | <b>49</b>                   | <b>109</b>  | <b>226</b>  | <b>1</b>   | <b>385</b> | <b>204</b>                        | <b>300</b>  | <b>15</b>  | <b>14</b>  | <b>533</b>  | <b>30</b>                   | <b>210</b>  | <b>22</b>  | <b>1</b>   | <b>263</b>  | <b>1458</b> |
|                    |                                   |             |             |            |             |                             |             |             |            |            |                                   |             |            |            |             |                             |             |            |            |             |             |
| <b>Grand Total</b> | <b>6</b>                          | <b>458</b>  | <b>104</b>  | <b>20</b>  | <b>588</b>  | <b>98</b>                   | <b>267</b>  | <b>437</b>  | <b>1</b>   | <b>803</b> | <b>392</b>                        | <b>580</b>  | <b>44</b>  | <b>19</b>  | <b>1035</b> | <b>67</b>                   | <b>440</b>  | <b>42</b>  | <b>1</b>   | <b>550</b>  | <b>2976</b> |
| <b>Apprch %</b>    | <b>1</b>                          | <b>77.9</b> | <b>17.7</b> | <b>3.4</b> |             | <b>12.2</b>                 | <b>33.3</b> | <b>54.4</b> | <b>0.1</b> |            | <b>37.9</b>                       | <b>56</b>   | <b>4.3</b> | <b>1.8</b> |             | <b>12.2</b>                 | <b>80</b>   | <b>7.6</b> | <b>0.2</b> |             |             |
| <b>Total %</b>     | <b>0.2</b>                        | <b>15.4</b> | <b>3.5</b>  | <b>0.7</b> | <b>19.8</b> | <b>3.3</b>                  | <b>9</b>    | <b>14.7</b> | <b>0</b>   | <b>27</b>  | <b>13.2</b>                       | <b>19.5</b> | <b>1.5</b> | <b>0.6</b> | <b>34.8</b> | <b>2.3</b>                  | <b>14.8</b> | <b>1.4</b> | <b>0</b>   | <b>18.5</b> |             |
| <b>Unshifted</b>   | <b>6</b>                          | <b>457</b>  | <b>104</b>  | <b>20</b>  | <b>587</b>  | <b>97</b>                   | <b>261</b>  | <b>436</b>  | <b>1</b>   | <b>795</b> | <b>389</b>                        | <b>576</b>  | <b>44</b>  | <b>19</b>  | <b>1028</b> | <b>67</b>                   | <b>438</b>  | <b>41</b>  | <b>1</b>   | <b>547</b>  | <b>2957</b> |
| <b>% Unshifted</b> |                                   |             |             |            |             |                             |             |             |            |            |                                   |             |            |            |             |                             |             |            |            |             |             |
| <b>Bank 1</b>      | <b>0</b>                          | <b>0</b>    | <b>0</b>    | <b>0</b>   | <b>0</b>    | <b>0</b>                    | <b>3</b>    | <b>0</b>    | <b>0</b>   | <b>3</b>   | <b>0</b>                          | <b>0</b>    | <b>0</b>   | <b>0</b>   | <b>0</b>    | <b>0</b>                    | <b>1</b>    | <b>1</b>   | <b>0</b>   | <b>2</b>    | <b>5</b>    |
| <b>% Bank 1</b>    | <b>0</b>                          | <b>0</b>    | <b>0</b>    | <b>0</b>   | <b>0</b>    | <b>0</b>                    | <b>1.1</b>  | <b>0</b>    | <b>0</b>   | <b>0.4</b> | <b>0</b>                          | <b>0</b>    | <b>0</b>   | <b>0</b>   | <b>0</b>    | <b>0</b>                    | <b>0.2</b>  | <b>2.4</b> | <b>0</b>   | <b>0.4</b>  | <b>0.2</b>  |
| <b>Bank 2</b>      | <b>0</b>                          | <b>1</b>    | <b>0</b>    | <b>0</b>   | <b>1</b>    | <b>1</b>                    | <b>3</b>    | <b>1</b>    | <b>0</b>   | <b>5</b>   | <b>3</b>                          | <b>4</b>    | <b>0</b>   | <b>0</b>   | <b>7</b>    | <b>0</b>                    | <b>1</b>    | <b>0</b>   | <b>0</b>   | <b>1</b>    | <b>14</b>   |
| <b>% Bank 2</b>    | <b>0</b>                          | <b>0.2</b>  | <b>0</b>    | <b>0</b>   | <b>0.2</b>  | <b>1</b>                    | <b>1.1</b>  | <b>0.2</b>  | <b>0</b>   | <b>0.6</b> | <b>0.8</b>                        | <b>0.7</b>  | <b>0</b>   | <b>0</b>   | <b>0.7</b>  | <b>0</b>                    | <b>0.2</b>  | <b>0</b>   | <b>0</b>   | <b>0.2</b>  | <b>0.5</b>  |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

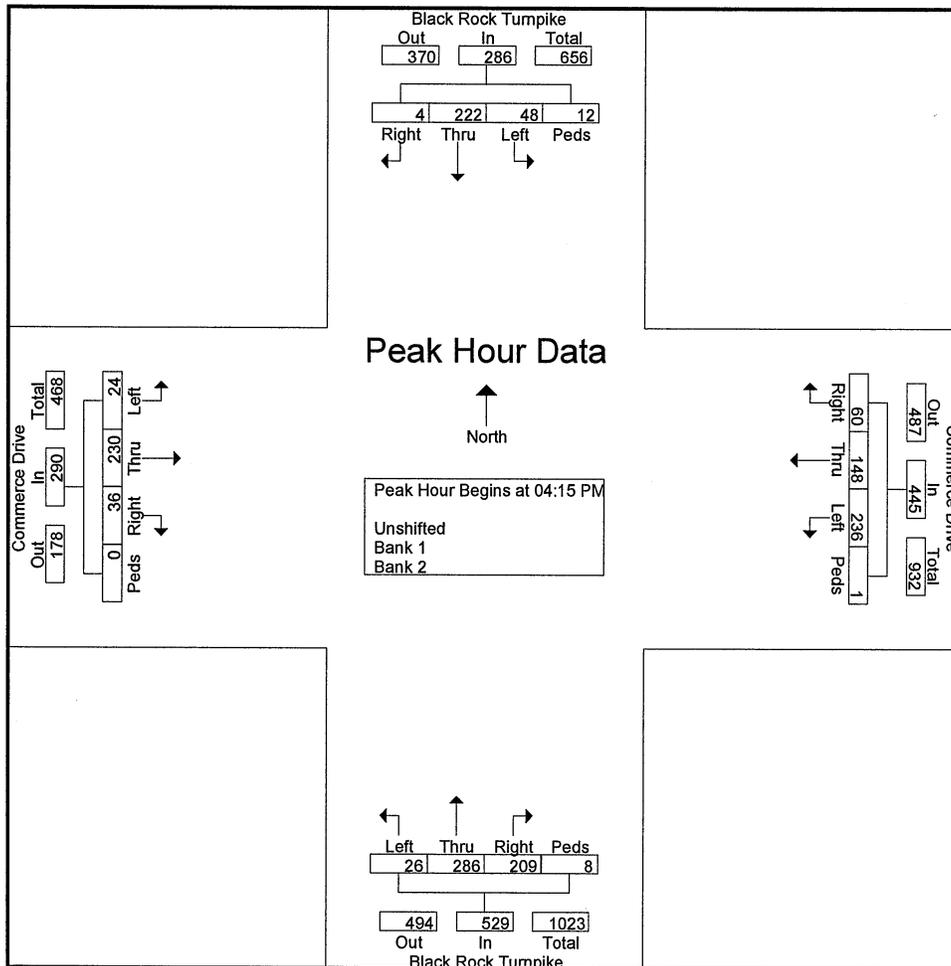
File Name : 11839

Site Code : 11839

Start Date : 3/28/2013

Page No : 2

| Start Time   | Black Rock Turnpike From North |      |      |      |            | Commerce Drive From East |      |      |      |            | Black Rock Turnpike From South |      |      |      |            | Commerce Drive From West |      |      |      |            | Int. Total |
|--|--------------------------------|------|------|------|------------|--------------------------|------|------|------|------------|--------------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                          | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total | Right                          | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                |      |      |      |            |                          |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:15 PM       |                                |      |      |      |            |                          |      |      |      |            |                                |      |      |      |            |                          |      |      |      |            |            |
| 04:15 PM   | 1                              | 60   | 15   | 1    | 77         | 15                       | 40   | 45   | 0    | 100        | 35                             | 68   | 8    | 1    | 112        | 13                       | 53   | 6    | 0    | 72         | 361        |
| 04:30 PM   | 2                              | 47   | 15   | 4    | 68         | 11                       | 36   | 55   | 0    | 102        | 59                             | 71   | 7    | 0    | 137        | 6                        | 55   | 6    | 0    | 67         | 374        |
| 04:45 PM   | 0                              | 69   | 6    | 6    | 81         | 19                       | 44   | 62   | 0    | 125        | 54                             | 74   | 7    | 4    | 139        | 10                       | 69   | 5    | 0    | 84         | 429        |
| 05:00 PM   | 1                              | 46   | 12   | 1    | 60         | 15                       | 28   | 74   | 1    | 118        | 61                             | 73   | 4    | 3    | 141        | 7                        | 53   | 7    | 0    | 67         | 386        |
| Total Volume   | 4                              | 222  | 48   | 12   | 286        | 60                       | 148  | 236  | 1    | 445        | 209                            | 286  | 26   | 8    | 529        | 36                       | 230  | 24   | 0    | 290        | 1550       |
| % App. Total   | 1.4                            | 77.6 | 16.8 | 4.2  |            | 13.5                     | 33.3 | 53   | 0.2  |            | 39.5                           | 54.1 | 4.9  | 1.5  |            | 12.4                     | 79.3 | 8.3  | 0    |            |            |
| PHF  | .500                           | .804 | .800 | .500 | .883       | .789                     | .841 | .797 | .250 | .890       | .857                           | .966 | .813 | .500 | .938       | .692                     | .833 | .857 | .000 | .863       | .903       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

Brewster Street at Fairfield Avenue  
Fairfield, Connecticut

(860) 828-1693

File Name : 11840  
Site Code : 11840  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time   | Brewster Street<br>From North |      |      |      |            | Fairfield Avenue<br>From East |      |      |      |            | Brewster Street<br>From South |      |      |      |            | Fairfield Avenue<br>From West |      |      |      |            | Int. Total |
|--------------|-------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|------------|
|              | Right                         | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total |            |
| 06:30 AM     | 6                             | 18   | 11   | 9    | 44         | 16                            | 217  | 4    | 2    | 239        | 11                            | 16   | 11   | 3    | 41         | 3                             | 44   | 12   | 1    | 60         | 384        |
| 06:45 AM     | 10                            | 16   | 14   | 4    | 44         | 17                            | 238  | 12   | 1    | 268        | 9                             | 19   | 2    | 4    | 34         | 1                             | 57   | 5    | 3    | 66         | 412        |
| <b>Total</b> | 16                            | 34   | 25   | 13   | 88         | 33                            | 455  | 16   | 3    | 507        | 20                            | 35   | 13   | 7    | 75         | 4                             | 101  | 17   | 4    | 126        | 796        |
| 07:00 AM     | 15                            | 29   | 12   | 3    | 59         | 18                            | 240  | 11   | 2    | 271        | 26                            | 23   | 15   | 1    | 65         | 5                             | 82   | 6    | 1    | 94         | 489        |
| 07:15 AM     | 7                             | 11   | 11   | 0    | 29         | 17                            | 200  | 10   | 0    | 227        | 12                            | 16   | 11   | 4    | 43         | 4                             | 72   | 12   | 1    | 89         | 388        |
| 07:30 AM     | 17                            | 18   | 6    | 9    | 50         | 17                            | 215  | 12   | 1    | 245        | 5                             | 9    | 2    | 2    | 18         | 6                             | 53   | 6    | 1    | 66         | 379        |
| 07:45 AM     | 17                            | 18   | 15   | 2    | 52         | 26                            | 212  | 13   | 4    | 255        | 15                            | 2    | 12   | 18   | 47         | 4                             | 74   | 9    | 3    | 90         | 444        |
| <b>Total</b> | 56                            | 76   | 44   | 14   | 190        | 78                            | 867  | 46   | 7    | 998        | 58                            | 50   | 40   | 25   | 173        | 19                            | 281  | 33   | 6    | 339        | 1700       |
| 08:00 AM     | 7                             | 9    | 5    | 11   | 32         | 18                            | 157  | 6    | 1    | 182        | 9                             | 16   | 4    | 5    | 34         | 2                             | 71   | 10   | 3    | 86         | 334        |
| 08:15 AM     | 5                             | 11   | 8    | 0    | 24         | 17                            | 126  | 7    | 2    | 152        | 5                             | 13   | 5    | 1    | 24         | 2                             | 51   | 10   | 2    | 65         | 265        |
| Grand Total  | 84                            | 130  | 82   | 38   | 334        | 146                           | 1605 | 75   | 13   | 1839       | 92                            | 114  | 62   | 38   | 306        | 27                            | 504  | 70   | 15   | 616        | 3095       |
| Apprch %     | 25.1                          | 38.9 | 24.6 | 11.4 |            | 7.9                           | 87.3 | 4.1  | 0.7  |            | 30.1                          | 37.3 | 20.3 | 12.4 |            | 4.4                           | 81.8 | 11.4 | 2.4  |            |            |
| Total %      | 2.7                           | 4.2  | 2.6  | 1.2  | 10.8       | 4.7                           | 51.9 | 2.4  | 0.4  | 59.4       | 3                             | 3.7  | 2    | 1.2  | 9.9        | 0.9                           | 16.3 | 2.3  | 0.5  | 19.9       |            |
| Unshifted    | 81                            | 130  | 75   | 38   | 324        | 144                           | 1576 |      |      |            | 96.7                          | 100  | 100  | 100  | 99         | 100                           | 97.8 | 100  | 100  | 98.2       | 98.1       |
| % Unshifted  | 96.4                          | 100  | 91.5 | 100  | 97         | 98.6                          | 98.2 | 96   | 100  | 98.2       |                               |      |      |      |            |                               |      |      |      |            |            |
| Bank 1       | 2                             | 0    | 5    | 0    | 7          | 0                             | 16   | 3    | 0    | 19         | 3                             | 0    | 0    | 0    | 3          | 0                             | 10   | 0    | 0    | 10         | 39         |
| % Bank 1     | 2.4                           | 0    | 6.1  | 0    | 2.1        | 0                             | 1    | 4    | 0    | 1          | 3.3                           | 0    | 0    | 0    | 1          | 0                             | 2    | 0    | 0    | 1.6        | 1.3        |
| Bank 2       | 1                             | 0    | 2    | 0    | 3          | 2                             | 13   | 0    | 0    | 15         | 0                             | 0    | 0    | 0    | 0          | 0                             | 1    | 0    | 0    | 1          | 19         |
| % Bank 2     | 1.2                           | 0    | 2.4  | 0    | 0.9        | 1.4                           | 0.8  | 0    | 0    | 0.8        | 0                             | 0    | 0    | 0    | 0          | 0                             | 0.2  | 0    | 0    | 0.2        | 0.6        |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

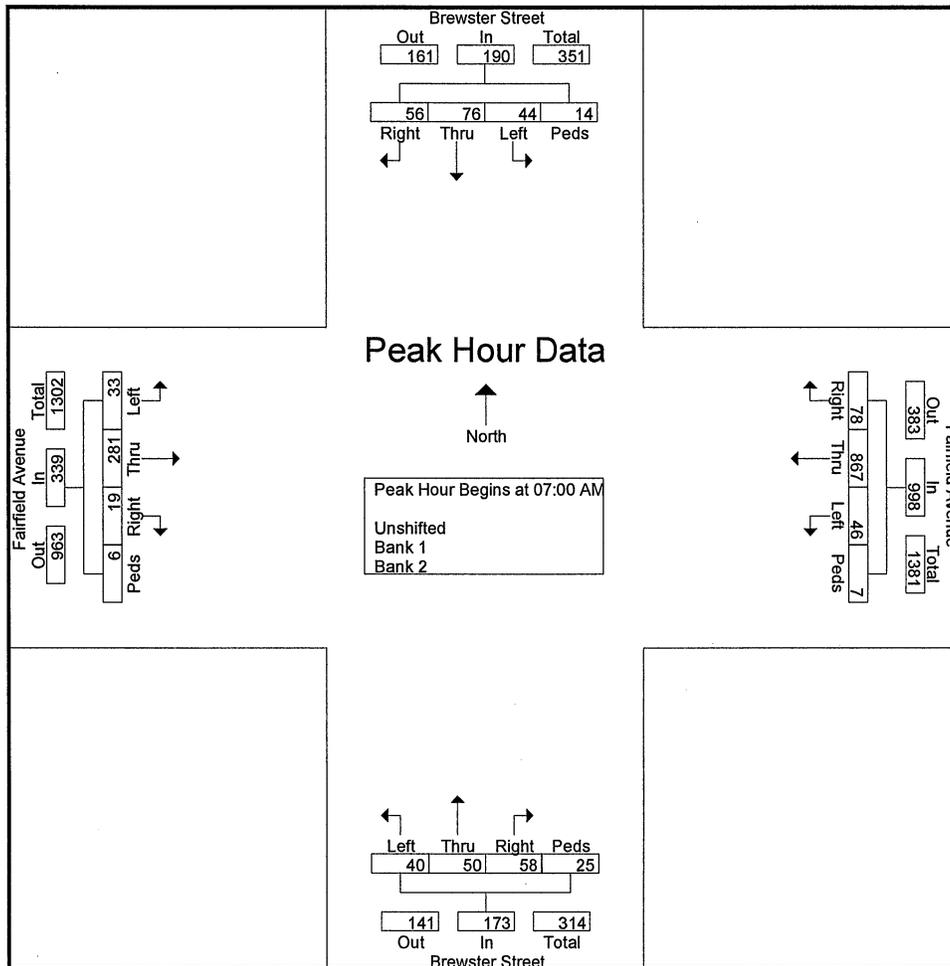
File Name : 11840

Site Code : 11840

Start Date : 3/28/2013

Page No : 2

| Start Time   | Brewster Street From North |      |      |      |            | Fairfield Avenue From East |      |      |      |            | Brewster Street From South |      |      |      |            | Fairfield Avenue From West |      |      |      |            | Int. Total |
|--|----------------------------|------|------|------|------------|----------------------------|------|------|------|------------|----------------------------|------|------|------|------------|----------------------------|------|------|------|------------|------------|
|  | Right                      | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1 |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |            |
| 07:00 AM   | 15                         | 29   | 12   | 3    | 59         | 18                         | 240  | 11   | 2    | 271        | 26                         | 23   | 15   | 1    | 65         | 5                          | 82   | 6    | 1    | 94         | 489        |
| 07:15 AM   | 7                          | 11   | 11   | 0    | 29         | 17                         | 200  | 10   | 0    | 227        | 12                         | 16   | 11   | 4    | 43         | 4                          | 72   | 12   | 1    | 89         | 388        |
| 07:30 AM   | 17                         | 18   | 6    | 9    | 50         | 17                         | 215  | 12   | 1    | 245        | 5                          | 9    | 2    | 2    | 18         | 6                          | 53   | 6    | 1    | 66         | 379        |
| 07:45 AM   | 17                         | 18   | 15   | 2    | 52         | 26                         | 212  | 13   | 4    | 255        | 15                         | 2    | 12   | 18   | 47         | 4                          | 74   | 9    | 3    | 90         | 444        |
| Total Volume   | 56                         | 76   | 44   | 14   | 190        | 78                         | 867  | 46   | 7    | 998        | 58                         | 50   | 40   | 25   | 173        | 19                         | 281  | 33   | 6    | 339        | 1700       |
| % App. Total   | 29.5                       | 40   | 23.2 | 7.4  |            | 7.8                        | 86.9 | 4.6  | 0.7  |            | 33.5                       | 28.9 | 23.1 | 14.5 |            | 5.6                        | 82.9 | 9.7  | 1.8  |            |            |
| PHF  | .824                       | .655 | .733 | .389 | .805       | .750                       | .903 | .885 | .438 | .921       | .558                       | .543 | .667 | .347 | .665       | .792                       | .857 | .688 | .500 | .902       | .869       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

Brewster Street at Fairfield Avenue  
Fairfield, Connecticut

File Name : 11841  
Site Code : 11841  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time  | Brewster Street<br>From North |      |      |      |            | Fairfield Avenue<br>From East |      |      |      |            | Brewster Street<br>From South |      |      |      |            | Fairfield Avenue<br>From West |      |      |      |            | Int. Total |
|-------------|-------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|-------------------------------|------|------|------|------------|------------|
|             | Right                         | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total | Right                         | Thru | Left | Peds | App. Total |            |
| 04:00 PM    | 16                            | 19   | 18   | 5    | 58         | 15                            | 48   | 11   | 0    | 74         | 7                             | 14   | 7    | 7    | 35         | 3                             | 93   | 16   | 1    | 113        | 280        |
| 04:15 PM    | 23                            | 18   | 20   | 4    | 65         | 14                            | 75   | 8    | 0    | 97         | 9                             | 16   | 10   | 3    | 38         | 11                            | 105  | 24   | 1    | 141        | 341        |
| 04:30 PM    | 10                            | 20   | 13   | 8    | 51         | 23                            | 80   | 14   | 0    | 117        | 13                            | 20   | 7    | 4    | 44         | 9                             | 117  | 13   | 0    | 139        | 351        |
| 04:45 PM    | 12                            | 28   | 26   | 3    | 69         | 15                            | 73   | 11   | 0    | 99         | 13                            | 18   | 9    | 9    | 49         | 14                            | 115  | 8    | 2    | 139        | 356        |
| Total       | 61                            | 85   | 77   | 20   | 243        | 67                            | 276  | 44   | 0    | 387        | 42                            | 68   | 33   | 23   | 166        | 37                            | 430  | 61   | 4    | 532        | 1328       |
| 05:00 PM    | 16                            | 26   | 18   | 9    | 69         | 19                            | 90   | 11   | 0    | 120        | 8                             | 14   | 8    | 9    | 39         | 12                            | 113  | 17   | 0    | 142        | 370        |
| 05:15 PM    | 11                            | 24   | 18   | 3    | 56         | 24                            | 70   | 9    | 0    | 103        | 11                            | 13   | 9    | 8    | 41         | 15                            | 115  | 14   | 4    | 148        | 348        |
| 05:30 PM    | 18                            | 22   | 22   | 8    | 70         | 14                            | 77   | 10   | 0    | 101        | 11                            | 10   | 9    | 8    | 38         | 16                            | 128  | 18   | 3    | 165        | 374        |
| 05:45 PM    | 20                            | 35   | 24   | 8    | 87         | 23                            | 81   | 19   | 1    | 124        | 11                            | 28   | 8    | 9    | 56         | 11                            | 120  | 12   | 12   | 155        | 422        |
| Total       | 65                            | 107  | 82   | 28   | 282        | 80                            | 318  | 49   | 1    | 448        | 41                            | 65   | 34   | 34   | 174        | 54                            | 476  | 61   | 19   | 610        | 1514       |
| Grand Total | 126                           | 192  | 159  | 48   | 525        | 147                           | 594  | 93   | 1    | 835        | 83                            | 133  | 67   | 57   | 340        | 91                            | 906  | 122  | 23   | 1142       | 2842       |
| Apprch %    | 24                            | 36.6 | 30.3 | 9.1  |            | 17.6                          | 71.1 | 11.1 | 0.1  |            | 24.4                          | 39.1 | 19.7 | 16.8 |            | 8                             | 79.3 | 10.7 | 2    |            |            |
| Total %     | 4.4                           | 6.8  | 5.6  | 1.7  | 18.5       | 5.2                           | 20.9 | 3.3  | 0    | 29.4       | 2.9                           | 4.7  | 2.4  | 2    | 12         | 3.2                           | 31.9 | 4.3  | 0.8  | 40.2       |            |
| Unshifted   | 124                           | 192  | 154  | 48   | 518        | 146                           | 582  | 91   | 1    | 820        | 80                            | 133  | 67   | 57   | 337        | 91                            | 893  | 121  | 23   | 1128       | 2803       |
| % Unshifted |                               |      |      |      |            |                               |      |      |      |            |                               |      |      |      |            |                               |      |      |      |            |            |
| Bank 1      | 1                             | 0    | 5    | 0    | 6          | 0                             | 6    | 2    | 0    | 8          | 1                             | 0    | 0    | 0    | 1          | 0                             | 7    | 0    | 0    | 7          | 22         |
| % Bank 1    | 0.8                           | 0    | 3.1  | 0    | 1.1        | 0                             | 1    | 2.2  | 0    | 1          | 1.2                           | 0    | 0    | 0    | 0.3        | 0                             | 0.8  | 0    | 0    | 0.6        | 0.8        |
| Bank 2      | 1                             | 0    | 0    | 0    | 1          | 1                             | 6    | 0    | 0    | 7          | 2                             | 0    | 0    | 0    | 2          | 0                             | 6    | 1    | 0    | 7          | 17         |
| % Bank 2    | 0.8                           | 0    | 0    | 0    | 0.2        | 0.7                           | 1    | 0    | 0    | 0.8        | 2.4                           | 0    | 0    | 0    | 0.6        | 0                             | 0.7  | 0.8  | 0    | 0.6        | 0.6        |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

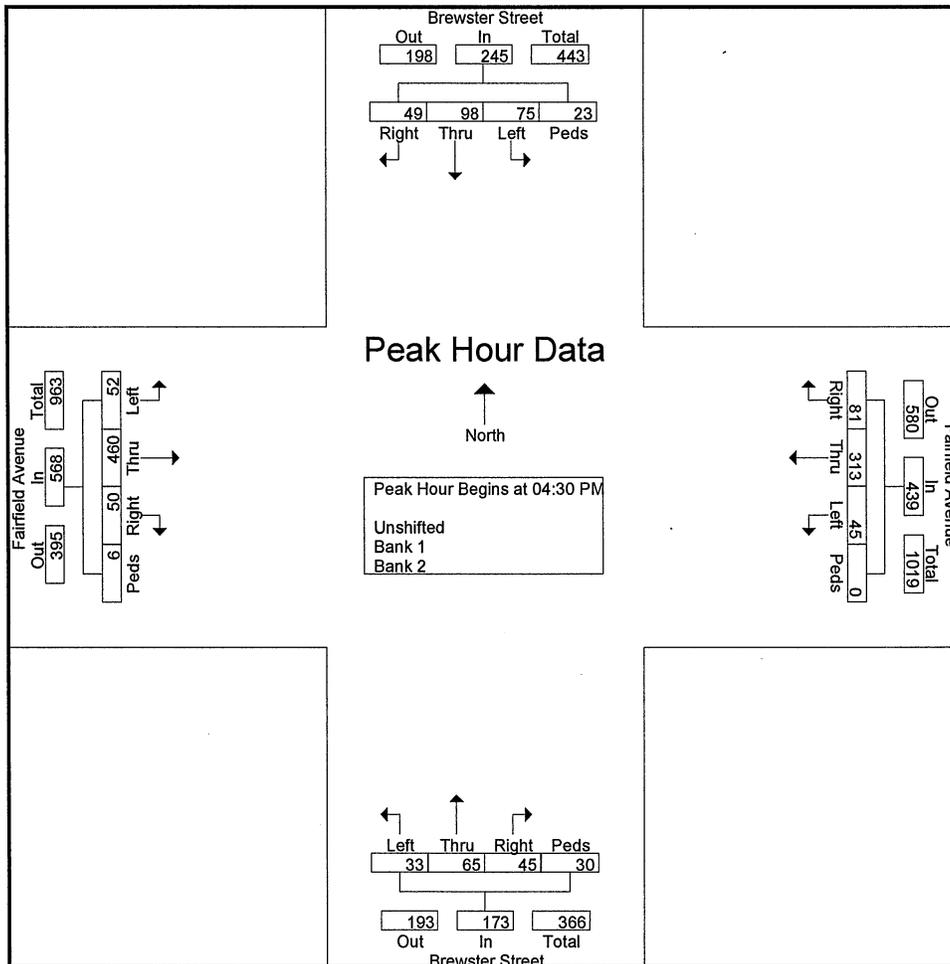
File Name : 11841

Site Code : 11841

Start Date : 3/28/2013

Page No : 2

| Start Time   | Brewster Street From North |      |      |      |            | Fairfield Avenue From East |      |      |      |            | Brewster Street From South |      |      |      |            | Fairfield Avenue From West |      |      |      |            | Int. Total |
|--|----------------------------|------|------|------|------------|----------------------------|------|------|------|------------|----------------------------|------|------|------|------------|----------------------------|------|------|------|------------|------------|
|  | Right                      | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total | Right                      | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1 |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |                            |      |      |      |            |            |
| 04:30 PM   | 10                         | 20   | 13   | 8    | 51         | 23                         | 80   | 14   | 0    | 117        | 13                         | 20   | 7    | 4    | 44         | 9                          | 117  | 13   | 0    | 139        | 351        |
| 04:45 PM   | 12                         | 28   | 26   | 3    | 69         | 15                         | 73   | 11   | 0    | 99         | 13                         | 18   | 9    | 9    | 49         | 14                         | 115  | 8    | 2    | 139        | 356        |
| 05:00 PM   | 16                         | 26   | 18   | 9    | 69         | 19                         | 90   | 11   | 0    | 120        | 8                          | 14   | 8    | 9    | 39         | 12                         | 113  | 17   | 0    | 142        | 370        |
| 05:15 PM   | 11                         | 24   | 18   | 3    | 56         | 24                         | 70   | 9    | 0    | 103        | 11                         | 13   | 9    | 8    | 41         | 15                         | 115  | 14   | 4    | 148        | 348        |
| Total Volume   | 49                         | 98   | 75   | 23   | 245        | 81                         | 313  | 45   | 0    | 439        | 45                         | 65   | 33   | 30   | 173        | 50                         | 460  | 52   | 6    | 568        | 1425       |
| % App. Total   | 20                         | 40   | 30.6 | 9.4  |            | 18.5                       | 71.3 | 10.3 | 0    |            | 26                         | 37.6 | 19.1 | 17.3 |            | 8.8                        | 81   | 9.2  | 1.1  |            |            |
| PHF  | .766                       | .875 | .721 | .639 | .888       | .844                       | .869 | .804 | .000 | .915       | .865                       | .813 | .917 | .833 | .883       | .833                       | .983 | .765 | .375 | .959       | .963       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

Ash Creek at Metro Drive  
Fairfield, Connecticut

File Name : 11910  
Site Code : 11910  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time  | Metro Drive<br>From North |      |      |      |            | Ash Creek Blvd<br>From East |      |      |      |            | From South |      |      |      |            | Ash Creek Blvd<br>From West |      |      |      |            | Int. Total |
|-------------|---------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|             | Right                     | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total | Right      | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 06:30 AM    | 0                         | 0    | 1    | 0    | 1          | 13                          | 11   | 0    | 0    | 24         | 0          | 0    | 0    | 0    | 0          | 0                           | 7    | 5    | 0    | 12         | 37         |
| 06:45 AM    | 0                         | 0    | 1    | 3    | 4          | 17                          | 27   | 0    | 0    | 44         | 0          | 0    | 0    | 0    | 0          | 0                           | 7    | 5    | 3    | 15         | 63         |
| Total       | 0                         | 0    | 2    | 3    | 5          | 30                          | 38   | 0    | 0    | 68         | 0          | 0    | 0    | 0    | 0          | 0                           | 14   | 10   | 3    | 27         | 100        |
| 07:00 AM    | 1                         | 0    | 2    | 0    | 3          | 14                          | 22   | 0    | 2    | 38         | 0          | 0    | 0    | 0    | 0          | 0                           | 9    | 2    | 2    | 13         | 54         |
| 07:15 AM    | 1                         | 0    | 2    | 1    | 4          | 14                          | 25   | 0    | 0    | 39         | 0          | 0    | 0    | 0    | 0          | 0                           | 10   | 1    | 6    | 17         | 60         |
| 07:30 AM    | 0                         | 0    | 0    | 0    | 0          | 13                          | 25   | 0    | 1    | 39         | 0          | 0    | 0    | 0    | 0          | 0                           | 9    | 4    | 3    | 16         | 55         |
| 07:45 AM    | 0                         | 0    | 3    | 2    | 5          | 13                          | 27   | 0    | 2    | 42         | 0          | 0    | 0    | 0    | 0          | 0                           | 9    | 0    | 0    | 9          | 56         |
| Total       | 2                         | 0    | 7    | 3    | 12         | 54                          | 99   | 0    | 5    | 158        | 0          | 0    | 0    | 0    | 0          | 0                           | 37   | 7    | 11   | 55         | 225        |
| 08:00 AM    | 0                         | 0    | 1    | 0    | 1          | 11                          | 26   | 0    | 0    | 37         | 0          | 0    | 0    | 0    | 0          | 0                           | 6    | 1    | 0    | 7          | 45         |
| 08:15 AM    | 1                         | 0    | 1    | 0    | 2          | 12                          | 14   | 0    | 0    | 26         | 0          | 0    | 0    | 0    | 0          | 0                           | 7    | 3    | 0    | 10         | 38         |
| Grand Total | 3                         | 0    | 11   | 6    | 20         | 107                         | 177  | 0    | 5    | 289        | 0          | 0    | 0    | 0    | 0          | 0                           | 64   | 21   | 14   | 99         | 408        |
| Apprch %    | 15                        | 0    | 55   | 30   |            | 37                          | 61.2 | 0    | 1.7  |            | 0          | 0    | 0    | 0    |            | 0                           | 64.6 | 21.2 | 14.1 |            |            |
| Total %     | 0.7                       | 0    | 2.7  | 1.5  | 4.9        | 26.2                        | 43.4 | 0    | 1.2  | 70.8       | 0          | 0    | 0    | 0    | 0          | 0                           | 15.7 | 5.1  | 3.4  | 24.3       |            |
| Unshifted   | 3                         | 0    | 10   | 6    | 19         | 107                         | 177  | 0    | 5    | 289        | 0          | 0    | 0    | 0    | 0          | 0                           | 64   | 21   | 14   | 99         | 407        |
| % Unshifted |                           |      |      |      |            |                             |      |      |      |            |            |      |      |      |            |                             |      |      |      |            |            |
| Bank 1      | 0                         | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          |
| % Bank 1    | 0                         | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          |
| Bank 2      | 0                         | 0    | 1    | 0    | 1          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 1          |
| % Bank 2    | 0                         | 0    | 9.1  | 0    | 5          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0.2        |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

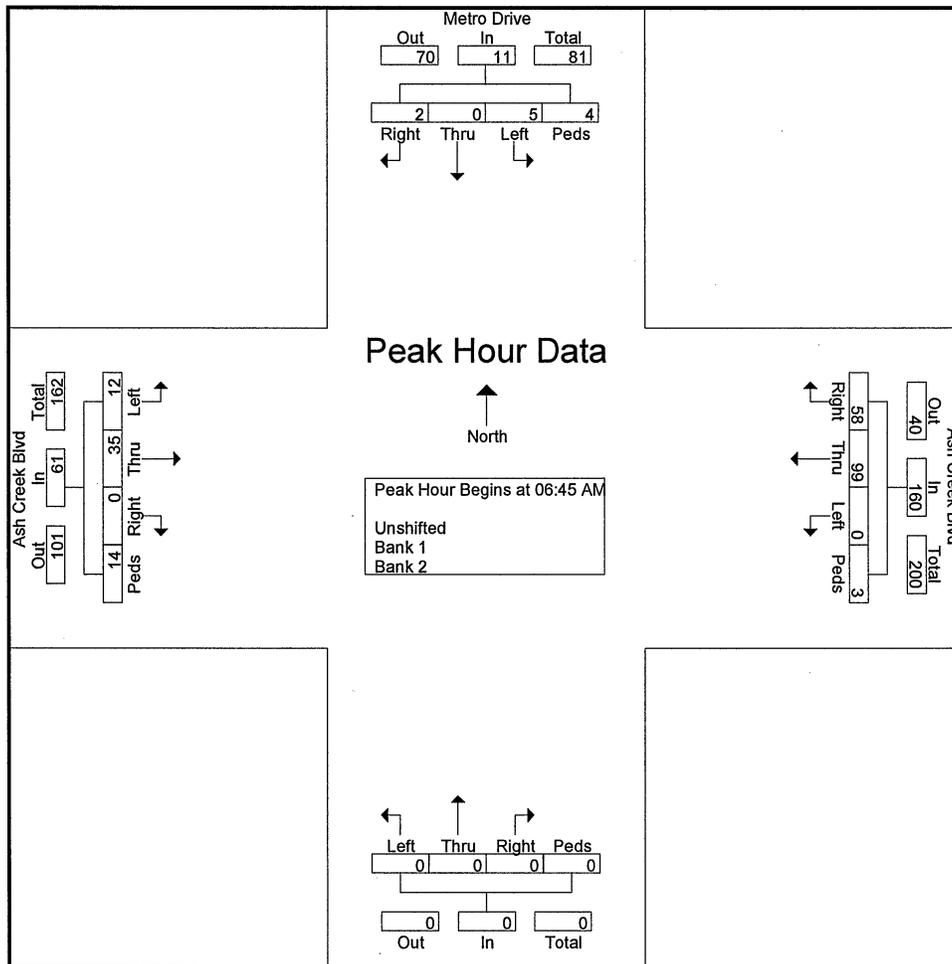
File Name : 11910

Site Code : 11910

Start Date : 3/28/2013

Page No : 2

| Start Time   | Metro Drive From North |      |      |      |            | Ash Creek Blvd From East |      |      |      |            | From South |      |      |      |            | Ash Creek Blvd From West |      |      |      |            | Int. Total |
|--|------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                  | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total | Right      | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1 |                        |      |      |      |            |                          |      |      |      |            |            |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 06:45 AM       |                        |      |      |      |            |                          |      |      |      |            |            |      |      |      |            |                          |      |      |      |            |            |
| 06:45 AM   | 0                      | 0    | 1    | 3    | 4          | 17                       | 27   | 0    | 0    | 44         | 0          | 0    | 0    | 0    | 0          | 0                        | 7    | 5    | 3    | 15         | 63         |
| 07:00 AM   | 1                      | 0    | 2    | 0    | 3          | 14                       | 22   | 0    | 2    | 38         | 0          | 0    | 0    | 0    | 0          | 0                        | 9    | 2    | 2    | 13         | 54         |
| 07:15 AM   | 1                      | 0    | 2    | 1    | 4          | 14                       | 25   | 0    | 0    | 39         | 0          | 0    | 0    | 0    | 0          | 0                        | 10   | 1    | 6    | 17         | 60         |
| 07:30 AM   | 0                      | 0    | 0    | 0    | 0          | 13                       | 25   | 0    | 1    | 39         | 0          | 0    | 0    | 0    | 0          | 0                        | 9    | 4    | 3    | 16         | 55         |
| Total Volume   | 2                      | 0    | 5    | 4    | 11         | 58                       | 99   | 0    | 3    | 160        | 0          | 0    | 0    | 0    | 0          | 0                        | 35   | 12   | 14   | 61         | 232        |
| % App. Total   | 18.2                   | 0    | 45.5 | 36.4 |            | 36.2                     | 61.9 | 0    | 1.9  |            | 0          | 0    | 0    | 0    |            | 0                        | 57.4 | 19.7 | 23   |            |            |
| PHF  | .500                   | .000 | .625 | .333 | .688       | .853                     | .917 | .000 | .375 | .909       | .000       | .000 | .000 | .000 | .000       | .000                     | .875 | .600 | .583 | .897       | .921       |



# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

Ash Creek Blvd at Metro Drive  
Fairfield, Connecticut

File Name : 11911  
Site Code : 11911  
Start Date : 3/28/2013  
Page No : 1

## Groups Printed- Unshifted - Bank 1 - Bank 2

| Start Time         | Metro Drive<br>From North |      |      |      |            | Ash Creek Blvd<br>From East |      |      |      |            | From South |      |      |      |            | Ash Creek Blvd<br>From West |      |      |      |            | Int. Total |
|--------------------|---------------------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|------|------|------|------------|-----------------------------|------|------|------|------------|------------|
|                    | Right                     | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total | Right      | Thru | Left | Peds | App. Total | Right                       | Thru | Left | Peds | App. Total |            |
| 04:00 PM           | 8                         | 0    | 7    | 0    | 15         | 2                           | 9    | 0    | 0    | 11         | 0          | 0    | 0    | 0    | 0          | 0                           | 13   | 4    | 1    | 18         | 44         |
| 04:15 PM           | 1                         | 0    | 6    | 0    | 7          | 2                           | 8    | 0    | 0    | 10         | 0          | 0    | 0    | 0    | 0          | 0                           | 9    | 7    | 0    | 16         | 33         |
| 04:30 PM           | 10                        | 0    | 9    | 0    | 19         | 2                           | 8    | 0    | 1    | 11         | 0          | 0    | 0    | 0    | 0          | 0                           | 11   | 2    | 1    | 14         | 44         |
| 04:45 PM           | 0                         | 0    | 0    | 0    | 0          | 3                           | 8    | 0    | 0    | 11         | 0          | 0    | 0    | 0    | 0          | 0                           | 16   | 1    | 2    | 19         | 30         |
| <b>Total</b>       | 19                        | 0    | 22   | 0    | 41         | 9                           | 33   | 0    | 1    | 43         | 0          | 0    | 0    | 0    | 0          | 0                           | 49   | 14   | 4    | 67         | 151        |
| 05:00 PM           | 7                         | 0    | 12   | 0    | 19         | 6                           | 4    | 0    | 0    | 10         | 0          | 0    | 0    | 0    | 0          | 0                           | 14   | 3    | 0    | 17         | 46         |
| 05:15 PM           | 12                        | 0    | 30   | 3    | 45         | 5                           | 5    | 0    | 3    | 13         | 0          | 0    | 0    | 0    | 0          | 0                           | 14   | 2    | 6    | 22         | 80         |
| 05:30 PM           | 0                         | 0    | 0    | 0    | 0          | 1                           | 8    | 0    | 0    | 9          | 0          | 0    | 0    | 0    | 0          | 0                           | 12   | 3    | 1    | 16         | 25         |
| 05:45 PM           | 3                         | 0    | 11   | 0    | 14         | 8                           | 15   | 0    | 5    | 28         | 0          | 0    | 0    | 0    | 0          | 0                           | 16   | 5    | 5    | 26         | 68         |
| <b>Total</b>       | 22                        | 0    | 53   | 3    | 78         | 20                          | 32   | 0    | 8    | 60         | 0          | 0    | 0    | 0    | 0          | 0                           | 56   | 13   | 12   | 81         | 219        |
| <b>Grand Total</b> | 41                        | 0    | 75   | 3    | 119        | 29                          | 65   | 0    | 9    | 103        | 0          | 0    | 0    | 0    | 0          | 0                           | 105  | 27   | 16   | 148        | 370        |
| Apprch %           | 34.5                      | 0    | 63   | 2.5  |            | 28.2                        | 63.1 | 0    | 8.7  |            | 0          | 0    | 0    | 0    |            | 0                           | 70.9 | 18.2 | 10.8 |            |            |
| Total %            | 11.1                      | 0    | 20.3 | 0.8  | 32.2       | 7.8                         | 17.6 | 0    | 2.4  | 27.8       | 0          | 0    | 0    | 0    | 0          | 0                           | 28.4 | 7.3  | 4.3  | 40         |            |
| Unshifted          | 41                        | 0    | 75   | 3    | 119        | 29                          | 65   | 0    | 9    | 103        | 0          | 0    | 0    | 0    | 0          | 0                           | 105  | 27   | 16   | 148        | 370        |
| % Unshifted        |                           |      |      |      |            |                             |      |      |      |            |            |      |      |      |            |                             |      |      |      |            |            |
| Bank 1             | 0                         | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          |
| % Bank 1           | 0                         | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          |
| Bank 2             | 0                         | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          |
| % Bank 2           | 0                         | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          | 0    | 0    | 0    | 0          | 0                           | 0    | 0    | 0    | 0          | 0          |

# Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

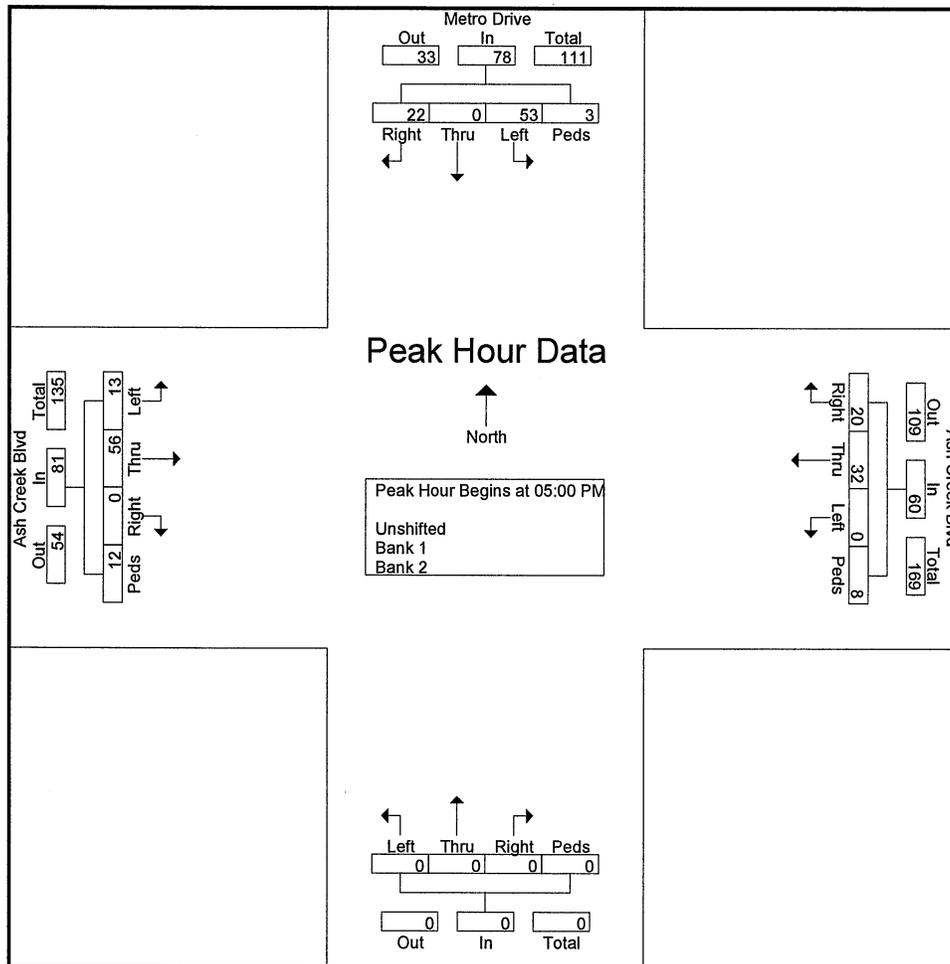
File Name : 11911

Site Code : 11911

Start Date : 3/28/2013

Page No : 2

| Start Time   | Metro Drive From North |      |      |      |            | Ash Creek Blvd From East |      |      |      |            | From South |      |      |      |            | Ash Creek Blvd From West |      |      |      |            | Int. Total |
|--|------------------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|------|------|------|------------|--------------------------|------|------|------|------------|------------|
|  | Right                  | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total | Right      | Thru | Left | Peds | App. Total | Right                    | Thru | Left | Peds | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |      |      |      |            |                          |      |      |      |            |            |      |      |      |            |                          |      |      |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                        |      |      |      |            |                          |      |      |      |            |            |      |      |      |            |                          |      |      |      |            |            |
| 05:00 PM   | 7                      | 0    | 12   | 0    | 19         | 6                        | 4    | 0    | 0    | 10         | 0          | 0    | 0    | 0    | 0          | 0                        | 14   | 3    | 0    | 17         | 46         |
| 05:15 PM   | 12                     | 0    | 30   | 3    | 45         | 5                        | 5    | 0    | 3    | 13         | 0          | 0    | 0    | 0    | 0          | 0                        | 14   | 2    | 6    | 22         | 80         |
| 05:30 PM   | 0                      | 0    | 0    | 0    | 0          | 1                        | 8    | 0    | 0    | 9          | 0          | 0    | 0    | 0    | 0          | 0                        | 12   | 3    | 1    | 16         | 25         |
| 05:45 PM   | 3                      | 0    | 11   | 0    | 14         | 8                        | 15   | 0    | 5    | 28         | 0          | 0    | 0    | 0    | 0          | 0                        | 16   | 5    | 5    | 26         | 68         |
| Total Volume   | 22                     | 0    | 53   | 3    | 78         | 20                       | 32   | 0    | 8    | 60         | 0          | 0    | 0    | 0    | 0          | 0                        | 56   | 13   | 12   | 81         | 219        |
| % App. Total   | 28.2                   | 0    | 67.9 | 3.8  |            | 33.3                     | 53.3 | 0    | 13.3 |            | 0          | 0    | 0    | 0    | 0          | 0                        | 69.1 | 16   | 14.8 |            |            |
| PHF  | .458                   | .000 | .442 | .250 | .433       | .625                     | .533 | .000 | .400 | .536       | .000       | .000 | .000 | .000 | .000       | .000                     | .875 | .650 | .500 | .779       | .684       |



**Connecticut Counts LLC**  
 63 Sugar Maple Lane  
 Kensington, Connecticut 06037  
 (860) 828-1693

Brewster Street West of Fairfield Avenue  
 Fairfield, Connecticut

Site Code: 2937  
 Station ID:

Latitude: 0' 0.000 Undefined

| Start Time   | 25-Mar-13 |           | Tue       |           | Wed       |           | Thu       |           | Fri       |           | Sat       |           | Sun       |           | Week Average |           |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|-----------|
|              | Westbound | Eastbound | Westbound    | Eastbound |
| 12:00 AM     | *         | *         | *         | *         | *         | *         | 43        | 34        | 48        | 37        | *         | *         | *         | *         | 46           | 36        |
| 01:00        | *         | *         | *         | *         | *         | *         | 21        | 11        | 19        | 9         | *         | *         | *         | *         | 20           | 10        |
| 02:00        | *         | *         | *         | *         | *         | *         | 7         | 10        | 14        | 13        | *         | *         | *         | *         | 10           | 12        |
| 03:00        | *         | *         | *         | *         | *         | *         | 7         | 5         | 5         | 4         | *         | *         | *         | *         | 6            | 4         |
| 04:00        | *         | *         | *         | *         | *         | *         | 15        | 3         | 12        | 6         | *         | *         | *         | *         | 14           | 4         |
| 05:00        | *         | *         | *         | *         | *         | *         | 40        | 22        | 35        | 21        | *         | *         | *         | *         | 38           | 22        |
| 06:00        | *         | *         | *         | *         | *         | *         | 117       | 65        | 62        | 44        | *         | *         | *         | *         | 90           | 54        |
| 07:00        | *         | *         | *         | *         | *         | *         | 183       | 158       | 132       | 92        | *         | *         | *         | *         | 158          | 125       |
| 08:00        | *         | *         | *         | *         | *         | *         | 163       | 137       | 144       | 119       | *         | *         | *         | *         | 154          | 128       |
| 09:00        | *         | *         | *         | *         | *         | *         | 135       | 114       | 156       | 140       | *         | *         | *         | *         | 146          | 127       |
| 10:00        | *         | *         | *         | *         | *         | *         | 173       | 157       | *         | *         | *         | *         | *         | *         | 173          | 157       |
| 11:00        | *         | *         | *         | *         | *         | *         | 133       | 204       | *         | *         | *         | *         | *         | *         | 133          | 204       |
| 12:00 PM     | *         | *         | *         | *         | *         | *         | 178       | 212       | *         | *         | *         | *         | *         | *         | 178          | 212       |
| 01:00        | *         | *         | *         | *         | *         | *         | 190       | 207       | *         | *         | *         | *         | *         | *         | 190          | 207       |
| 02:00        | *         | *         | *         | *         | *         | *         | 168       | 188       | *         | *         | *         | *         | *         | *         | 176          | 204       |
| 03:00        | *         | *         | *         | *         | *         | *         | 200       | 227       | *         | *         | *         | *         | *         | *         | 182          | 216       |
| 04:00        | *         | *         | *         | *         | *         | *         | 192       | 239       | *         | *         | *         | *         | *         | *         | 194          | 244       |
| 05:00        | *         | *         | *         | *         | *         | *         | 208       | 290       | *         | *         | *         | *         | *         | *         | 212          | 302       |
| 06:00        | *         | *         | *         | *         | *         | *         | 201       | 310       | *         | *         | *         | *         | *         | *         | 201          | 308       |
| 07:00        | *         | *         | *         | *         | *         | *         | 156       | 207       | *         | *         | *         | *         | *         | *         | 184          | 215       |
| 08:00        | *         | *         | *         | *         | *         | *         | 131       | 170       | *         | *         | *         | *         | *         | *         | 135          | 178       |
| 09:00        | *         | *         | *         | *         | *         | *         | 72        | 128       | *         | *         | *         | *         | *         | *         | 93           | 132       |
| 10:00        | *         | *         | *         | *         | *         | *         | 78        | 74        | *         | *         | *         | *         | *         | *         | 84           | 84        |
| 11:00        | *         | *         | *         | *         | *         | *         | 32        | 51        | *         | *         | *         | *         | *         | *         | 37           | 59        |
| Lane         | 0         | 0         | 0         | 0         | 0         | 0         | 2940      | 3306      | 627       | 485       | 0         | 0         | 0         | 0         | 2852         | 3244      |
| Day          | 0         | 0         | 0         | 0         | 0         | 0         | 6246      | 6246      | 1112      | 1112      | 0         | 0         | 0         | 0         | 6096         | 6096      |
| AM Peak Vol. |           |           |           |           |           |           | 07:00     | 11:00     | 09:00     | 09:00     |           |           |           |           | 10:00        | 11:00     |
|              |           |           |           |           |           |           | 183       | 204       | 156       | 140       |           |           |           |           | 173          | 204       |
| PM Peak Vol. |           |           |           |           |           |           | 17:00     | 17:00     | 17:00     | 17:00     |           |           |           |           | 17:00        | 18:00     |
|              |           |           |           |           |           |           | 208       | 310       | 215       | 314       |           |           |           |           | 212          | 308       |
| Comb. Total  | 0         | 0         | 0         | 0         | 0         | 0         | 3370      | 3370      | 1112      | 1112      | 0         | 0         | 0         | 0         | 6096         | 6096      |
| ADT          |           |           |           |           |           |           | ADT 5,994 | ADT 5,994 | ADT 5,994 | ADT 5,994 |           |           |           |           |              |           |

**Connecticut Counts LLC**  
 63 Sugar Maple Lane  
 Kensington, Connecticut 06037  
 (860) 828-1693

Brewster Street West of Fairfield Avenue  
 Fairfield, Connecticut

Site Code: 2937  
 Station ID:

Latitude: 0' 0.000 Undefined

| Start Time | 27-Mar-13<br>Wed | Westbound | Eastbound | Combined<br>Total |
|------------|------------------|-----------|-----------|-------------------|
| 12:00 AM   | *                | *         | *         | *                 |
| 01:00      | *                | *         | *         | *                 |
| 02:00      | *                | *         | *         | *                 |
| 03:00      | *                | *         | *         | *                 |
| 04:00      | *                | *         | *         | *                 |
| 05:00      | *                | *         | *         | *                 |
| 06:00      | *                | *         | *         | *                 |
| 07:00      | *                | *         | *         | *                 |
| 08:00      | *                | *         | *         | *                 |
| 09:00      | *                | *         | *         | *                 |
| 10:00      | *                | *         | *         | *                 |
| 11:00      | *                | *         | *         | *                 |
| 12:00 PM   | *                | *         | *         | *                 |
| 01:00      | *                | *         | *         | *                 |
| 02:00      | 183              | 221       | 404       |                   |
| 03:00      | 200              | 227       | 427       |                   |
| 04:00      | 192              | 239       | 431       |                   |
| 05:00      | 208              | 290       | 498       |                   |
| 06:00      | 201              | 310       | 511       |                   |
| 07:00      | 156              | 207       | 363       |                   |
| 08:00      | 131              | 170       | 301       |                   |
| 09:00      | 72               | 128       | 200       |                   |
| 10:00      | 78               | 74        | 152       |                   |
| 11:00      | 32               | 51        | 83        |                   |
| Total      | 1453             | 1917      | 3370      |                   |
| Percent    | 43.1%            | 56.9%     |           |                   |

**Connecticut Counts LLC**  
 63 Sugar Maple Lane  
 Kensington, Connecticut 06037  
 (860) 828-1693

Brewster Street West of Fairfield Avenue  
 Fairfield, Connecticut

Site Code: 2937  
 Station ID:

Latitude: 0' 0.000 Undefined

| Start Time     | 28-Mar-13 Thu | Westbound    | Eastbound   | Combined Total |
|----------------|---------------|--------------|-------------|----------------|
| 12:00 AM       | 43            | 34           | 77          |                |
| 01:00          | 21            | 11           | 32          |                |
| 02:00          | 7             | 10           | 17          |                |
| 03:00          | 7             | 5            | 12          |                |
| 04:00          | 15            | 3            | 18          |                |
| 05:00          | 40            | 22           | 62          |                |
| 06:00          | 117           | 65           | 182         |                |
| 07:00          | 183           | 158          | 341         |                |
| 08:00          | 163           | 137          | 300         |                |
| 09:00          | 135           | 114          | 249         |                |
| 10:00          | 173           | 157          | 330         |                |
| 11:00          | 133           | 204          | 337         |                |
| 12:00 PM       | 178           | 212          | 390         |                |
| 01:00          | 190           | 207          | 397         |                |
| 02:00          | 168           | 188          | 356         |                |
| 03:00          | 165           | 205          | 370         |                |
| 04:00          | 195           | 250          | 445         |                |
| 05:00          | 215           | 314          | 529         |                |
| 06:00          | 201           | 305          | 506         |                |
| 07:00          | 211           | 223          | 434         |                |
| 08:00          | 139           | 187          | 326         |                |
| 09:00          | 114           | 135          | 249         |                |
| 10:00          | 85            | 93           | 178         |                |
| 11:00          | 42            | 67           | 109         |                |
| <b>Total</b>   | <b>2940</b>   | <b>3306</b>  | <b>6246</b> |                |
| <b>Percent</b> | <b>47.1%</b>  | <b>52.9%</b> |             |                |

**Connecticut Counts LLC**  
 63 Sugar Maple Lane  
 Kensington, Connecticut 06037  
 (860) 828-1693

Brewster Street West of Fairfield Avenue  
 Fairfield, Connecticut

Site Code: 2937  
 Station ID:

Latitude: 0' 0.000 Undefined

| Start Time         | 29-Mar-13<br>Fri | Westbound    | Eastbound    | Combined Total |
|--------------------|------------------|--------------|--------------|----------------|
| 12:00 AM           |                  | 48           | 37           | 85             |
| 01:00              |                  | 19           | 9            | 28             |
| 02:00              |                  | 14           | 13           | 27             |
| 03:00              |                  | 5            | 4            | 9              |
| 04:00              |                  | 12           | 6            | 18             |
| 05:00              |                  | 35           | 21           | 56             |
| 06:00              |                  | 62           | 44           | 106            |
| 07:00              |                  | 132          | 92           | 224            |
| 08:00              |                  | 144          | 119          | 263            |
| 09:00              |                  | 156          | 140          | 296            |
| 10:00              |                  | *            | *            | *              |
| 11:00              |                  | *            | *            | *              |
| 12:00 PM           |                  | *            | *            | *              |
| 01:00              |                  | *            | *            | *              |
| 02:00              |                  | *            | *            | *              |
| 03:00              |                  | *            | *            | *              |
| 04:00              |                  | *            | *            | *              |
| 05:00              |                  | *            | *            | *              |
| 06:00              |                  | *            | *            | *              |
| 07:00              |                  | *            | *            | *              |
| 08:00              |                  | *            | *            | *              |
| 09:00              |                  | *            | *            | *              |
| 10:00              |                  | *            | *            | *              |
| 11:00              |                  | *            | *            | *              |
| <b>Total</b>       |                  | <b>627</b>   | <b>485</b>   | <b>1112</b>    |
| <b>Percent</b>     |                  | <b>56.4%</b> | <b>43.6%</b> |                |
| <b>Grand Total</b> |                  | <b>5020</b>  | <b>5708</b>  |                |
| <b>Percentage</b>  |                  | <b>46.8%</b> | <b>53.2%</b> |                |

AADT 5,994

ADT 5,994

ADT



**Connecticut Counts LLC**  
 63 Sugar Maple Lane  
 Kensington, Connecticut 06037  
 (860) 828-1693

Black Rock Tpk East of Commerce Drive  
 Fairfield, Connecticut

Site Code: 2938  
 Station ID:

| Westbound  |       | Latitude: 0' 0.000 Undefined |       |       |       |       |       |       |       |       |       |       |       |              |              |       |         |         |       |
|------------|-------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|--------------|-------|---------|---------|-------|
| Start Time | 16:20 | 16:21                        | 26:30 | 31:35 | 36:40 | 41:45 | 46:50 | 51:55 | 56:60 | 61:65 | 66:70 | 71:75 | 76:79 | 85th Percent | 95th Percent |       |         |         |       |
| 03/27/13   | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | Total | Percent | Percent |       |
| 01:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 02:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 03:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 04:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 05:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 06:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 07:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 08:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 09:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 10:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 11:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 12 PM      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 13:00      | *     | *                            | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     | *            | *            | *     | *       | *       |       |
| 14:00      | 12    | 31                           | 112   | 195   | 64    | 6     | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 422   | 30      | 34      |       |
| 15:00      | 5     | 32                           | 121   | 177   | 60    | 3     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 399   | 30      | 33      |       |
| 16:00      | 4     | 44                           | 169   | 189   | 51    | 13    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 471   | 30      | 33      |       |
| 17:00      | 9     | 39                           | 169   | 195   | 59    | 7     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 478   | 30      | 33      |       |
| 18:00      | 34    | 75                           | 196   | 156   | 40    | 3     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 505   | 28      | 31      |       |
| 19:00      | 3     | 31                           | 129   | 177   | 53    | 13    | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 408   | 30      | 34      |       |
| 20:00      | 1     | 13                           | 118   | 153   | 50    | 10    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 345   | 31      | 34      |       |
| 21:00      | 0     | 14                           | 64    | 121   | 33    | 12    | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 246   | 31      | 35      |       |
| 22:00      | 0     | 1                            | 17    | 53    | 51    | 12    | 4     | 1     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 139   | 35      | 39      |       |
| 23:00      | 0     | 0                            | 14    | 30    | 27    | 16    | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 89    | 36      | 38      |       |
| Total      | 68    | 280                          | 1109  | 1446  | 488   | 95    | 12    | 4     | 0     | 0     | 0     | 0     | 0     | 0            | 0            | 3502  |         |         |       |
| Percent    | 1.9%  | 8.0%                         | 31.7% | 41.3% | 13.9% | 2.7%  | 0.3%  | 0.1%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%         | 0.0%         |       |         |         |       |
| AM Peak    |       |                              |       |       |       |       |       |       |       |       |       |       |       |              |              |       |         |         |       |
| Vol.       |       |                              |       |       |       |       |       |       |       |       |       |       |       |              |              |       |         |         |       |
| PM Peak    | 18:00 | 18:00                        | 18:00 | 14:00 | 14:00 | 23:00 | 22:00 | 16:00 |       |       |       |       |       |              |              |       |         |         | 18:00 |
| Vol.       | 34    | 75                           | 196   | 195   | 64    | 16    | 4     | 1     |       |       |       |       |       |              |              |       |         |         | 505   |



**Connecticut Counts LLC**  
 63 Sugar Maple Lane  
 Kensington, Connecticut 06037  
 (860) 828-1693

Black Rock Tpk East of Commerce Drive  
 Fairfield, Connecticut

Site Code: 2938  
 Station ID:

Latitude: 0' 0.000 Undefined

| Westbound  | 1     | 16    | 21    | 26    | 31    | 36    | 41    | 46    | 51   | 56   | 61   | 66   | 71   | 76   | 76   | 85th    | 95th    |    |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|---------|---------|----|
| Start Time | 15    | 20    | 25    | 30    | 35    | 40    | 45    | 50    | 55   | 60   | 65   | 70   | 75   | 79   | 999  | Percent | Percent |    |
| 03/29/13   | 0     | 0     | 7     | 30    | 29    | 10    | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 77      | 35      | 38 |
| 01:00      | 0     | 0     | 2     | 13    | 16    | 8     | 1     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 41      | 36      | 39 |
| 02:00      | 0     | 0     | 0     | 7     | 7     | 7     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 21      | 38      | 40 |
| 03:00      | 0     | 1     | 3     | 4     | 3     | 3     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 14      | 35      | 37 |
| 04:00      | 0     | 0     | 2     | 5     | 5     | 3     | 2     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 17      | 37      | 39 |
| 05:00      | 0     | 0     | 5     | 15    | 20    | 6     | 2     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 48      | 35      | 39 |
| 06:00      | 1     | 2     | 15    | 34    | 38    | 22    | 4     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 116     | 36      | 39 |
| 07:00      | 0     | 3     | 27    | 92    | 59    | 20    | 4     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 205     | 34      | 38 |
| 08:00      | 0     | 2     | 49    | 97    | 95    | 19    | 4     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 266     | 34      | 37 |
| 09:00      | 1     | 14    | 105   | 187   | 72    | 17    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 396     | 31      | 35 |
| 10:00      | 1     | 12    | 88    | 110   | 56    | 7     | 3     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 277     | 32      | 35 |
| 11:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 12 PM      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 13:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 14:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 15:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 16:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 17:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 18:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 19:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 20:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 21:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 22:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| 23:00      | *     | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *       | *       | *  |
| Total      | 3     | 34    | 303   | 594   | 400   | 122   | 21    | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1478    |         |    |
| Percent    | 0.2%  | 2.3%  | 20.5% | 40.2% | 27.1% | 8.3%  | 1.4%  | 0.1%  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |         |         |    |
| AM Peak    | 06:00 | 09:00 | 09:00 | 09:00 | 08:00 | 06:00 | 06:00 | 01:00 |      |      |      |      |      |      |      |         |         |    |
| Vol.       | 1     | 14    | 105   | 187   | 95    | 22    | 4     | 1     |      |      |      |      |      |      |      |         |         |    |
| PM Peak    |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |         |         |    |
| Vol.       |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |         |         |    |
| Total      | 139   | 759   | 3262  | 4812  | 2050  | 501   | 67    | 12    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 11603   |         |    |
| Percent    | 1.2%  | 6.5%  | 28.1% | 41.5% | 17.7% | 4.3%  | 0.6%  | 0.1%  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |         |         |    |

Stats

10 MPH Pace Speed : 22-31 MPH  
 Number in Pace : 7312  
 Percent in Pace : 63.0%  
 Number of Vehicles > 40 MPH : 127  
 Percent of Vehicles > 40 MPH : 1.1%  
 Mean Speed(Average) : 27 MPH



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Site Code: 2938  
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Latitude: 0' 0.000 Undefined

| Eastbound | 1     | 16    | 21    | 26    | 31    | 36    | 41    | 46    | 51    | 56    | 61    | 66    | 71    | 76    | 77    | 78    | 79    | 80    | 81    | 82    | 83    | 84    | 85    | 86    | 87    | 88    | 89    | 90    | 91    | 92    | 93    | 94    | 95    | 96    | 97    | 98    | 99    | 100   |       |   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| Start     | 15    | 20    | 25    | 30    | 35    | 40    | 45    | 50    | 55    | 60    | 65    | 70    | 75    | 80    | 85    | 90    | 95    | 100   | 105   | 110   | 115   | 120   | 125   | 130   | 135   | 140   | 145   | 150   | 155   | 160   | 165   | 170   | 175   | 180   | 185   | 190   | 195   | 200   |       |   |
| 03/28/13  | 0     | 1     | 14    | 22    | 19    | 5     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 01:00     | 0     | 1     | 7     | 16    | 7     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 02:00     | 0     | 0     | 7     | 4     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 03:00     | 0     | 0     | 2     | 5     | 2     | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 04:00     | 0     | 0     | 3     | 10    | 8     | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 05:00     | 2     | 1     | 17    | 33    | 26    | 5     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 06:00     | 0     | 3     | 30    | 91    | 43    | 11    | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 07:00     | 0     | 4     | 53    | 174   | 83    | 17    | 5     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 08:00     | 0     | 4     | 44    | 165   | 81    | 8     | 3     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 09:00     | 0     | 4     | 95    | 161   | 81    | 10    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 10:00     | 0     | 8     | 69    | 187   | 61    | 11    | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 11:00     | 1     | 19    | 108   | 178   | 62    | 11    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| 12 PM     | 1     | 16    | 132   | 214   | 87    | 9     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| 13:00     | 5     | 27    | 103   | 178   | 86    | 8     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| 14:00     | 1     | 16    | 108   | 202   | 70    | 8     | 3     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 15:00     | 1     | 28    | 154   | 238   | 71    | 9     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 16:00     | 2     | 26    | 164   | 239   | 54    | 7     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 17:00     | 1     | 31    | 176   | 223   | 73    | 8     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 18:00     | 1     | 14    | 171   | 234   | 73    | 14    | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| 19:00     | 0     | 12    | 119   | 226   | 67    | 11    | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 20:00     | 0     | 12    | 94    | 159   | 68    | 8     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 21:00     | 0     | 7     | 64    | 122   | 50    | 9     | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |
| 22:00     | 0     | 3     | 37    | 71    | 36    | 9     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| 23:00     | 0     | 2     | 28    | 45    | 30    | 13    | 0     | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| Total     | 15    | 239   | 1799  | 3197  | 1239  | 195   | 22    | 2     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| Percent   | 0.2%  | 3.6%  | 26.8% | 47.7% | 18.5% | 2.9%  | 0.3%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  |   |
| AM Peak   | 05:00 | 11:00 | 11:00 | 10:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 | 07:00 |   |
| Vol.      | 2     | 19    | 108   | 187   | 83    | 17    | 5     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |   |
| PM Peak   | 13:00 | 17:00 | 17:00 | 16:00 | 12:00 | 18:00 | 14:00 | 21:00 | 23:00 | 21:00 | 18:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 | 14:00 |       |   |
| Vol.      | 5     | 31    | 176   | 239   | 87    | 14    | 3     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |   |

|       |       |
|-------|-------|
| 11:00 | 11:00 |
| 17:00 | 17:00 |
| 11:00 | 11:00 |
| 17:00 | 17:00 |
| 11:00 | 11:00 |
| 17:00 | 17:00 |

**Connecticut Counts LLC**  
**63 Sugar Maple Lane**  
**Kensington, Connecticut 06037**  
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Black Rock Tpk East of Commerce Drive  
 Fairfield, Connecticut

Site Code: 2938  
 Station ID:

Latitude: 0' 0.000 Undefined

| Start Time | 16    | 21    | 26    | 31    | 36    | 41    | 46    | 51   | 56   | 61   | 66   | 71   | 76   | 81   | 85th Percent | 95th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|--------------|--------------|
| 03/29/13   | 15    | 20    | 25    | 30    | 35    | 40    | 45    | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85th Percent | 95th Percent |
| 00:00      | 2     | 13    | 31    | 19    | 3     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 69           | 35           |
| 01:00      | 0     | 0     | 5     | 14    | 8     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 27           | 34           |
| 02:00      | 0     | 0     | 3     | 11    | 4     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 20           | 33           |
| 03:00      | 0     | 1     | 4     | 4     | 2     | 0     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 12           | 30           |
| 04:00      | 0     | 2     | 3     | 5     | 2     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 13           | 30           |
| 05:00      | 1     | 5     | 11    | 22    | 21    | 1     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 62           | 35           |
| 06:00      | 0     | 0     | 32    | 67    | 31    | 9     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 140          | 36           |
| 07:00      | 2     | 7     | 49    | 98    | 66    | 18    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 240          | 36           |
| 08:00      | 0     | 10    | 38    | 139   | 74    | 13    | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 275          | 36           |
| 09:00      | 0     | 7     | 66    | 176   | 94    | 14    | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 358          | 35           |
| 10:00      | 0     | 21    | 67    | 124   | 52    | 8     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 273          | 34           |
| 11:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 12 PM      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 13:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 14:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 15:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 16:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 17:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 18:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 19:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 20:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 21:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 22:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| 23:00      | *     | *     | *     | *     | *     | *     | *     | *    | *    | *    | *    | *    | *    | *    | *            | *            |
| Total      | 3     | 55    | 291   | 691   | 373   | 69    | 7     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1489         |              |
| Percent    | 0.2%  | 3.7%  | 19.5% | 46.4% | 25.1% | 4.6%  | 0.5%  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |              |              |
| AM Peak    | 07:00 | 10:00 | 10:00 | 09:00 | 09:00 | 07:00 | 00:00 |      |      |      |      |      |      |      |              | 09:00        |
| Vol.       | 2     | 21    | 67    | 176   | 94    | 18    | 1     |      |      |      |      |      |      |      |              | 358          |
| PM Peak    |       |       |       |       |       |       |       |      |      |      |      |      |      |      |              |              |
| Vol.       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |              |              |

| Total   | Percent                       | 15th Percentile | 50th Percentile                | 85th Percentile | 95th Percentile       |        |
|---------|-------------------------------|-----------------|--------------------------------|-----------------|-----------------------|--------|
| 33      | 0.3%                          | 488             | 3199                           | 5544            | 2202                  |        |
| Percent | 0.3%                          | 4.1%            | 27.0%                          | 46.8%           | 18.6%                 |        |
| Stats   | 10 MPH Pace Speed :           | 23-32 MPH       | Number in Pace :               | 8158            | Percent in Pace :     | 68.9%  |
|         | Number of Vehicles > 40 MPH : | 71              | Percent of Vehicles > 40 MPH : | 0.6%            | Mean Speed(Average) : | 27 MPH |