Connecticut Department of Transportation

Local Transportation Capital Improvement Program Application

Municipality:	City of New London	COG:	SCCOG
Route/Road:	Vauxhall Street at Vauxhall Street Extension		
Project Title:	Vauxhall Street Roundabout Improvements		
Roadway Functional Classification (if applicable):	Major Urban Collector and Urban Local Road		
COG Contact Information:	Kate Rattan		Transportation Program Mana
	Name		Title
	860-889-2324 ext.111		krattan@seccog.org
	Phone Number		Email
Municipal Contact Information:	Brian Sear		Director of Public Works
	Name		Title
	860-447-5200		bsear@newlondonct.org
	Phone Number		Email

The applicant must answer the questions below which are intended to address basic issues about existing conditions, project management, project costs, impacts on private property, utilities, wetlands, etc. You may provide your answer in the space provided below or submit separate answer sheets. **It is important that the application be as thorough as possible, as missing information will delay the review process. All project- related sections must be completely filled out or the application will be returned and will require resubmittal.**

The intent of the application is to establish eligibility, service life, and to ensure the Municipality is considering all pertinent aspects associated with major infrastructure improvements consistent with the purpose and need of the project.

(A) Project Information

1. Select the type of proposed improvement (select all that apply):

Please note: The entire application must be completed for all projects in addition to any necessary supplemental sections (K through P) as determined by the type of project.

- ☑ Roadway Geometric Improvement
- ☐ Stand-Alone Sidewalk Construction
- ☐ Bicycle/Pedestrian Improvement, including Multi-Use Trail Facilities
- ☑ Intersection Improvement

  Provide additional information as required in section L
- ☐ Bridge Rehabilitation/Replacement

  Provide additional information as required in section M
- ☐ Major Drainage Improvement

  Provide additional information as required in section N
- ☑ Pavement Structure Improvement

  Provide additional information as required in section O
- ☐ Traffic Signal Replacement/Upgrade/New Installation/Coordination

  Provide additional information as required in section P
- ☑ Other (please specify): Roundabout Implementation

  Provide additional information as required in section Q

2. Describe the purpose and need of the project (i.e., what are the problems to be corrected?). Please provide adequate detail to clearly convey the nature of the problem(s) to be corrected. Provide photographs to document the existing conditions and support the purpose and need. (Attachments acceptable)

See page 4 below

3. Provide a project description, including project limits and length, that specifically describe how the proposed improvements will correct the problem(s) identified in the purpose and need. Describe what alternative(s) were considered. (Attachments acceptable)

See page 5 and 6 below.

2. Describe the purpose and need of the project (i.e. what are the problems to be corrected?). Please provide adequate detail to clearly convey the nature of the problem(s) to be corrected. Provide photographs to document the existing conditions and support the purpose and need. (Attachments acceptable)

The purpose of the project is to reduce the number of vehicle and pedestrian crashes, enhance traffic operations, eliminate operational and intersection geometric confusions, improve safety, and rehabilitate current pavement conditions at the existing stop-controlled intersection of Vauxhall Street/Vauxhall Street Extension and Phillips Street. The proposed roundabout design for the intersection will better align the intersection to suit recent growth in vehicular and pedestrian travel as well as provide clear and distinct direction of travel while navigating the intersection. The proposed alterations will improve the level of service and queue lengths at all approaches within the intersection, while simultaneously providing a safe vehicular and pedestrian route at this location within the city. This design will integrate continuous and connecting sidewalks between Vauxhall Street Extension and Phillips Street.

From 2021 to 2023, there have been a total of sixteen crashes at the intersection of Vauxhall Street/Vauxhall Street Extension and Phillips Street. The most common types of collisions within the intersection were angle collisions, front to rear collisions, same direction sideswipe collisions, and opposite direction sideswipe collisions. Several of these crashes have occurred during daylight hours with clear weather indicating that the current intersection geometry is difficult to maneuver, creates uncertainty, and promotes both poor decision making and hazardous conditions. Crash Data and Collision Diagram are shown in Section A.

As shown in the images in Section A, the overall condition of the intersection is poor with limited pedestrian crossings. The one crossing is long and yields several conflict points with drivers. Also shown by the images is the deterioration of pavement as well as several sections of sidewalk posing trip hazards in conjunction with many sidewalk gaps and limited connectivity.

As stated in the SCCOG Regional Transportation Safety Plan, "The City of New London identified speeding as their main concern throughout the City". The implementation of the proposed roundabout at Vauxhall Street/Vauxhall Street Extension and Phillips Street will yield slower speeds, provide less points of conflict than the existing intersection in addition to clear crosswalks with enhanced lighting accommodations for the area to promote safety within the project area.

3. Provide a project description, including project limits and length, that specifically describe how the proposed improvements will correct the problem(s) identified in the purpose and need. Describe what alternative(s) were considered. (Attachments acceptable)

The proposed improvements to the project area include implementing a roundabout to replace the existing stop-controlled intersection that will provide better traffic flow and improved safety by reducing the number of conflict points within the intersection. Benefits of incorporating a roundabout are promoting lower speeds, improved operational performance, decrease in vehicle emissions, reduction in maintenance cost, and improved safety. Roundabout approaches deflect requiring drivers to slow down. A decrease in vehicle emissions is a supplemental result of the roundabout's constant traffic flow because of vehicles yielding rather than completely stopping.

The roundabout design includes designated crosswalks and new sidewalks throughout all approaches to accommodate multimodal traffic. Additional street lighting is also proposed throughout the intersection to provide better visibility and pedestrian amenities. The project limits, images, existing condition plan, and concept plan are shown in Section A.

A summary of the roads included in the project follows:

PRIMARY CORRIDOR IMPROVEMENTS			
Roadway	Length	Proposed Width Lane / Shoulder	Classification
Vauxhall Street	750 feet	+/- 26 ft 11 ft / 2 ft	Major Urban Collector

CONNECTING SIDE STREETS			
Roadway	Length	Proposed Width Lane / Shoulder	Classification
Vauxhall Street Ext.	500 feet	+/- 32 ft 11 ft / 5 ft	Urban Local Road
Phillips Street	200 feet	+/- 38 ft 19 ft	Urban Local Road

Excessive crash patterns are typically caused by aggressive driving (speeding) and poor intersection geometry. These emphasis areas are often attributed to fatalities and serious injuries within crash areas. The roundabout is an FHWA proven safety countermeasure to address these crash types.

Beyond the intersection improvements, new drainage structures and pipes are proposed graphically throughout the roundabout capturing stormwater runoff along the new curblines which will be tied back into the existing system. The enhanced drainage system will collect gutter flow prior to pedestrian crosswalks where feasible as well as roadway low points determined during formal design as detailed grading is advanced. Additionally, pedestrian and roadway amenities will be integrated into the project by providing localized street trees with porous flex-pave and structural soil for positive growth, decorative pedestrian and roadway lighting for improved safety, and a brick buffer zone or snow shelf where feasible.

The proposed roundabout will also provide safety and unity within the community and surrounding neighborhoods by providing a central island feature. The implementation of the roundabout will support the increasing amount of pedestrian and vehicular traffic that exists within the area surrounding the intersection of Vauxhall Street/Vauxhall Street Extension and Phillips Street due to the growing population and work force within the City of New London.

4. Provide concept plans of the proposed improvement. The plans must be sufficiently developed and provide enough detail on a scaled drawing (including aerial photography base mapping if possible) to identify the following:

Inc.	N/A		
		SEE ATTACHMENTS IN SECTION A FOR THOSE INCLUDED BELOW	
☑		Project location	SEE ATTACHMENT A
☑		Limits of project	SEE ATTACHMENT A
☑	☐	Approximate limits and extent of any pavement widening or realignment	SEE ATTACHMENT A
☑	☐	Proposed number of lanes, widths, and arrangements	SEE ATTACHMENT A
☑	☐	Approximate limits and extent of any anticipated ROW acquisitions (based on available ROW information from Assessors maps, GIS data, etc.)	SEE ATTACHMENT A
☐	☑	Structures (e.g., Retaining walls, bridges)	
☐	☑	Watercourses	
☑	☐	Typical Cross Section including lane and shoulder widths, pavement structure, etc.	SEE ATTACHMENT A

5. Have the improvements at this location been previously submitted to the Department for funding? ☑ No ☐ Yes

   If yes, when and under what program?

   _____

6. Have any other Federal or State funding sources been applied for or awarded for the improvements at this location? FEDERAL/STATE FUNDING HAS NEVER BEEN APPLIED OR AWARDED TO THIS LOCATION

   If yes, please list source, amount, and when awarded in detail below:

7. Does the project impact any State-owned Facilities (e.g., roads, bridges, etc.)?
   ☑ No ☐ Yes

   If yes, describe the impacts:

8. In the area of the project, are there any known proposed developments?

   ☑ No ☐ Yes

   If yes, describe the proposed developments:

9. Design Standards to be used:

   ☑ Established municipal standards

   ☑ AASHTO Policy on Geometric Design of Highways and Streets

   ☑ Connecticut Department of Transportation Highway Design Manual

   ☐ AASHTO LRFD Bridge Design Specifications and Connecticut Department of Transportation Bridge Design Manual

   ☑ Other, please specify: NCHRP REPORT 1043 - ROUNDABOUTS

(B) Rights of Way

1. Are any Right of Way (ROW) impacts anticipated? ☐ No ☑ Yes

   If yes, describe the nature, extent, and type of impacts:

   Based on GIS/LIDAR data, there are four potential property impacts. A temporary construction easement will be needed at 360 S Frontage Rd (5789 square feet) and 356 S Frontage Rd (345 square feet). During the formal design stage, the right of way impacts at 500 Vauxhall St and 516 Vauxhall St (> 10 square feet) will be re-evaluated in order to reduce or eliminate any formal ROW impacts due to minor design adjustments and/or modifications. Field survey and a ROW boundary survey to A-2 standards as well as mapping records will determine the exact location of street lines and any necessary sidewalk or grading limits.

2. If ROW acquisitions will be required, who does the Municipality plan to have perform acquisition activities?

   ☑ Municipal staff ☐ Consultant hired by Municipality ☐ State

3. If ROW acquisitions are to be performed by the Municipality's staff or their consultant, will the Municipality be seeking reimbursement for ROW costs?

   ☑ No ☐ Yes

(C) Utilities

1. List all utilities within the project area, including their owners.

Overhead	Underground
Atlantic Broadband	Crown Castle Fiber
Eversource Energy - Electric Distribution	MCI Communications Services, Inc.
Comcast of Connecticut	Frontier Communications of Connecticut
	New London Dept. of Public Utilities-Water

2. Are any utility impacts anticipated? ☐ No ☑ Yes

   If yes, explain the nature and extent of the impacts:

   Throughout the project area new catch basins are proposed, some catch basins will be converted to manholes and due to full depth reconstruction, all the utility manholes, gates, and valves need to be reset. Some utility pole relocations will be necessary along the southeastern roadside due to reconstruction of the intersection.

   Note: Costs associated with utility betterments/upgrades that are not required to accommodate the proposed transportation improvement are not eligible project costs.

3. Have the utility companies been contacted to identify any plans to expand or improve existing utilities that would compromise the service life of the proposed improvements?

   ☑ No ☐ Yes Utility work and coordination would be completed in advance of proposed improvements to ensure service life is not compromised

   If yes, describe any proposed improvements and their schedule:

(D) Storm water drainage system and under drains

1. Do any existing storm water drainage problems exist? ☐ No ☑ Yes

   If yes, describe the problem(s):

   The City has indicated that there have been complaints from local residents of ponding within and around the intersection. This is due to the large uneven surface found throughout the intersection.

2. Is any storm water drainage system work anticipated, including any new or modified drainage outlets? ☐ No ☑ Yes

   If yes, explain the nature and extent of the improvements:

   New catch basins will be proposed at all new/existing low points. Additionally, where appropriate, new catch basins will be provided before pedestrian crossings to limit water interfering with pedestrian crossings. There are several catch basins that will be converted to manholes to support this new drainage design.

3. Are there any existing watercourse crossings that are proposed to be modified, rehabilitated, or replaced as part of the project? ☑ No ☐ Yes

   If yes, indicate the type of improvement needed and the reason for it. Please also indicate if any existing watercourse crossings have inadequate hydraulic capacity:

(E) Rail Crossings

1. Are there any railroad crossings that are likely to be impacted as part of the project?

   ☑ No ☐ Yes
   ☐ At-grade
   ☐ Grade separated

   If yes, describe impacts and any necessary modifications:

(F) Pedestrian/Bicycle Safety and Mobility SEE ATTACHMENTS IN SECTION F

1. Complete and attach the Department's Bicycle and Pedestrian Needs Assessment Form to this application (a copy of this form is included in Appendix D). In accordance with Connecticut General Statutes, Section 13a-153f, and the Department's focus on accommodating non-motorized travel modes, accommodation of all users shall be a routine part of the planning, design, construction, and operating activities of all highways. The need for inclusion of accommodations for bicyclists and pedestrians, including those with disabilities, must be reviewed for every project, regardless of funding source.

(G) Traffic

The information below needs to be provided or reviewed (as specified) by the designer for all project types except for stand-alone sidewalk projects and bicycle/pedestrian improvements, and multi-use trail facilities that do not involve pedestrian crossings

1. Volumes SEE ATTACHMENTS IN SECTION G

   Provide existing and 20-year Projected ADTs and Turning Volumes. Refer to the Preliminary Engineering/Preliminary Design section for guidance on traffic volumes.

2. Crash Experience SEE ATTACHMENTS IN SECTION G

   Provide a summary of crash experience using the most current three-year data, including a crash summary diagram, and analysis noting any discernable crash patterns.

3. Traffic Signals EXISTING INTERSECTION IS UNSIGNALIZED

   Review the existing traffic signal plans for projects involving signalized intersections

4. Speed Data SEE ATTACHMENTS IN SECTION G

   Provide 85th percentile speeds in the project area

   PHILLIPS ST: 28 MPH
   VAUXHALL ST: 27 MPH
   VAUXHALL ST EXT.: 38 MPH

   Provide all posted speed limits in the project area

   PHILLIPS ST & VAUXHALL ST: 25 MPH
   VAUXHALL ST EXT.: 30 MPH

(H) Environmental Resource Involvement

Refer to Application Process/Preliminary Project Submittals - Information provided by the Department for more information.

1. Parks, Cemeteries, Historic Structures

   a. Are there any parks, cemeteries, or historic structures that are likely to be affected by the project? ☑ No ☐ Yes

If yes, describe the type and extent of the anticipated impact.

2. Wetlands
    a. Are there any wetlands that are likely to be affected by the project?

    ☑ No ☐ Yes

    If yes, describe the type and extent of the anticipated impact.

3. Hazardous or Contaminated Sites
    a. Has the potential for hazardous or contaminated sites and materials in the project area been investigated? ☑ No ☐ Yes

    If yes, describe the type and extent of the anticipated impact.

(I) Public Involvement

Refer to Preliminary Engineering/Project Design - Public Involvement section for more information.

1. Has public involvement been conducted? ☑ No ☐ Yes

    If yes, describe the public involvement effort, when it was conducted, and any public support or opposition to the project:

If no, describe the planned public involvement effort should the project move forward:

Public outreach will be conducted for immediately after a formal PD submission. The City will also begin contacting and initiating conversations with surrounding residents as well as commercial business owners to bring early awareness of the project prior to formal design advancement.

(J) Cost Estimate SEE ATTACHMENT IN SECTION J

1. Attach a preliminary cost estimate identifying:
    a. Approximate quantities and assumed unit prices of the major contract items
    b. An allowance for minor items (percentage of a)
    c. Standard lump sum items (e.g., clearing and grubbing, mobilization, construction staking, maintenance and protection of traffic), as applicable (percentages of a + b)
    d. Total contract items (a + b + c)
    e. Contingencies (10% of d)
    f. Incidentals to construction, (e.g., construction inspection, materials testing) (10% of d)
    g. Rights of Way costs
    h. Eligible utility relocation costs (in accordance with CGS 13a-98f)
    Note: Costs associated with utility betterments/upgrades that are not required to accommodate the proposed transportation improvement are not eligible project costs
    i. Total project costs (d + e + f + g + h)

Sample cost estimate form provided in Appendix C and the Excel spreadsheet is available for download from the Department's LOTCIP webpage:

https://portal.ct.gov/DOT/Office-of-Engineering/Highway-Design---Local-Roads---LOTCIP

Refer to the Department's most current Cost Estimating Guidelines for cost estimate guidance or use town-generated unit prices. The anticipated costs for each phase of the project shall be well documented and based on reasonable anticipated costs.

The guidelines are located at:

https://portal.ct.gov/DOT/Engineering-Applications/Submissions---Cost-Estimating

ADDITIONAL INFORMATION TO BE PROVIDED BASED ON IMPROVEMENT TYPE SELECTED IN SECTION (A)1:

(K) Roadway Geometric Improvements

Proposed Design Speed N/A

(L) Intersection Improvements SEE ATTACHED IN SECTION L

Capacity Analyses (For build and no-build conditions using existing and projected traffic volumes).*

(M) Bridge Rehabilitation/Replacement N/A

Latest Condition Report

(N) Major Drainage Improvement N/A

Material, Age, Hydraulic adequacy assessment of existing drainage system (Condition Report, post-cleaning is preferred)

(O) Pavement Structure Improvement

VEHICLE CLASSIFICATION DATA, ESAL CALCULATIONS, AND PAVEMENT BORING SCHEDULE ARE ATTACHED IN SECTION O.

The level of investigation will be dependent upon the proposed improvements. **Cores or test pits must be performed** such that a representative sample of the existing roadway condition is obtained. If varying pavement conditions exist along the roadway indicating the possibility of different pavement conditions, a test pit should be performed in each roadway section. **Pavement thickness and type, sub-base thickness and type**, and the presence of fines and/or groundwater must be noted. Attach the data obtained. If full depth reconstruction is proposed, cores or test pits may be required to justify the scope of the proposed improvements.

Approximate percentage of heavy vehicles: 7.41%

What is the existing pavement type, condition, and thickness?

Please see next page for response and Section O attachments for data.

What is the anticipated pavement design? Describe the type and depth of each course including the base that is suitable for the ADT and percentage of heavy vehicles. Does it meet current design standards? Describe the cross-section (e.g., lanes and shoulder widths, etc.).

Please see next page for response and Section O attachments for data.

1. What is the existing pavement type, condition, and thickness?

Vauxhall St, Vauxhall St Ext., and Phillips St pavements are Hot Mix Asphalt (HMA). All streets exhibit transverse and longitudinal cracking as well as lack of pavement markings in some of its approaches. See section O attachments for pavement thickness information.

2. What is the anticipated pavement design? Describe the type and depth of each course including the base that is suitable for the ADT and percentage of heavy vehicles. Does it meet current design standards? Describe the cross-section (e.g., lanes and shoulder widths, etc.).

B*ecause of the proposed roundabout, the principal pavement treatment is full depth reconstruction.*

The ESALs number for the roundabout was calculated using the eastbound ADT values from Phillips St and southbound ADT values from Vauxhall St and Vauxhall St Extension that converge in the intersection. ADT values from the northbound of Vauxhall St getting into the intersection were not collected. To account for the cars entering the intersection from the northbound approach, a percentage of cars coming from the northbound of Vauxhall St into the westbound of Phillips St, the northbound of Vauxhall St (after the intersection), and the northbound of Vauxhall St Extension was utilized. The percentages of cars coming from the south of Vauxhall St into the westbound of Phillips St, the northbound of Vauxhall St (after the intersection), and the northbound of Vauxhall St Extension were obtained using the turning counts from the weekday AM and PM peak hours under the assumption that they are a reasonable representation of the traffic movement at the intersection; their counts are available in section L. The ADT values from the westbound of Phillips St, the northbound of Vauxhall St (after the intersection) and the northbound of Vauxhall St Extension were multiplied by the appropriate percentages. This was done to obtain an ADT for each approach leg in order to calculate the ESAL properly based total traffic utilizing the roundabout.

Phillips St, Vauxhall St Ext., and the southeast portion of Vauxhall St have the same pavement structure to keep consistency during construction. Vauxhall Street Ext. pavement design to be applied between the I-95 overpass and the roundabout as well as on Vauxhall Street southeast of the roundabout to the project limits, Phillips St pavement design to be applied between Third Avenue and the roundabout. Traffic Analysis and ESALs numbers were also generated for each road individually, see section O attachments.

Based on the observed 20-year design Equivalent Single-Axle Loads (ESALs) of 2,816,047, the anticipated full depth pavement section design is as follows:

-2.0" Superpave S0.5 Polymer Modified Asphalt (PMA)

-4.0" Superpave S1.0 Hot Mix Asphalt (HMA)

-12.0" Processed Aggregate Base

For Vauxhall St between I-95 off-ramp / S Frontage Road and the proposed T intersection with Vauxhall St Ext. Since it will be realigned to intersect with Vauxhall St Ext. only, this segment will contain a separate pavement structure different than that of the roundabout and other above-mentioned streets.

Based on the observed 20-year design Equivalent Single-Axle Loads (ESALs) of 438,449, the anticipated full depth pavement section design is as follows:

-2.0" Superpave S0.5 Polymer Modified Asphalt (PMA)

-3.0" Superpave S1.0 Hot Mix Asphalt (HMA)

-10.0" Processed Aggregate Base

Both proposed pavement sections were developed in compliance with the 2022 CTDOT Guidelines for Superpave Mixes. See section A attachments for lane layouts.

3. Describe how the service life requirement for the proposed pavement design was determined:

The 20-year service life is determined by the typical life expectancy of an urban collector and urban local prior to requiring reconstruction or rehabilitation and as instructed by the LOTCIP guidelines. This is the expected minimum service life at the design lifetime ESALs. With proper maintenance, it is possible for the proposed pavement to exceed the design service life.

Describe how the service life requirement for the proposed pavement design was determined:

Please see previous page for response and Section O attachments for data.

(P) Traffic Signal Replacement/Upgrade/New Installation/Coordination

Who is/will be responsible for ownership, maintenance, and electrical costs N/A

Age of existing signals N/A

Capacity Analyses (For build and no-build conditions using existing and projected traffic volumes)* SEE ATTACHED IN SECTION L

Warrant Analysis for new signals NO NEW SIGNALS PROPOSED

Systems Engineering Analysis Form (SEAFORM) for Intelligent Transportation Systems (ITS) projects N/A

(Q) Other

To be determined based on type of improvement proposed.

***Capacity Analysis:** For the purposes of this application, a simplified analysis may be performed for signalized intersections that do not require detailed assumptions, proprietary software or specialized traffic engineering skills. The "Quick Estimation Method" is described in detail in the 2010 Highway Capacity Manual, with accompanying worksheets that can be completed by hand. A brief description of the method is also described in Section 3.3.6 of the FHWA Signal Timing Manual, where it is referred to as a "Critical Movement Analysis." The relevant section of the FHWA publication can be accessed at: http://ops.fhwa.dot.gov/publications/fhwahop08024/chapter3.htm

This simplified analysis will yield an approximate critical volume/capacity ratio that can be used to assess overall operation of the intersection. The build and no-build conditions should be analyzed for the existing and projected traffic volumes.

APPLICATION SUBMISSION

This application and supporting documents must be submitted by the Municipality to their COG. At such time when the application is to be forwarded to the Department of Transportation by the COG, it must be forwarded electronically to:

DOTLOTCIPapp@ct.gov

Prepared by: John A. Guzze - Associate Date: 11/22/24

Name, Title, and stamp of Responsible P.E. (Municipal or Consultant)



John A. Guzze

Signature

Reviewed/Recommended by: Michael E. Passero Date: 11-25-2024

Name and Title of Municipal Chief Administrative Officer

Michael Passero

Signature

Endorsed/Recommended by: _____ Date: _____

Name and Title of COG Executive Director

_____

Signature

FUSS & O'NEILL

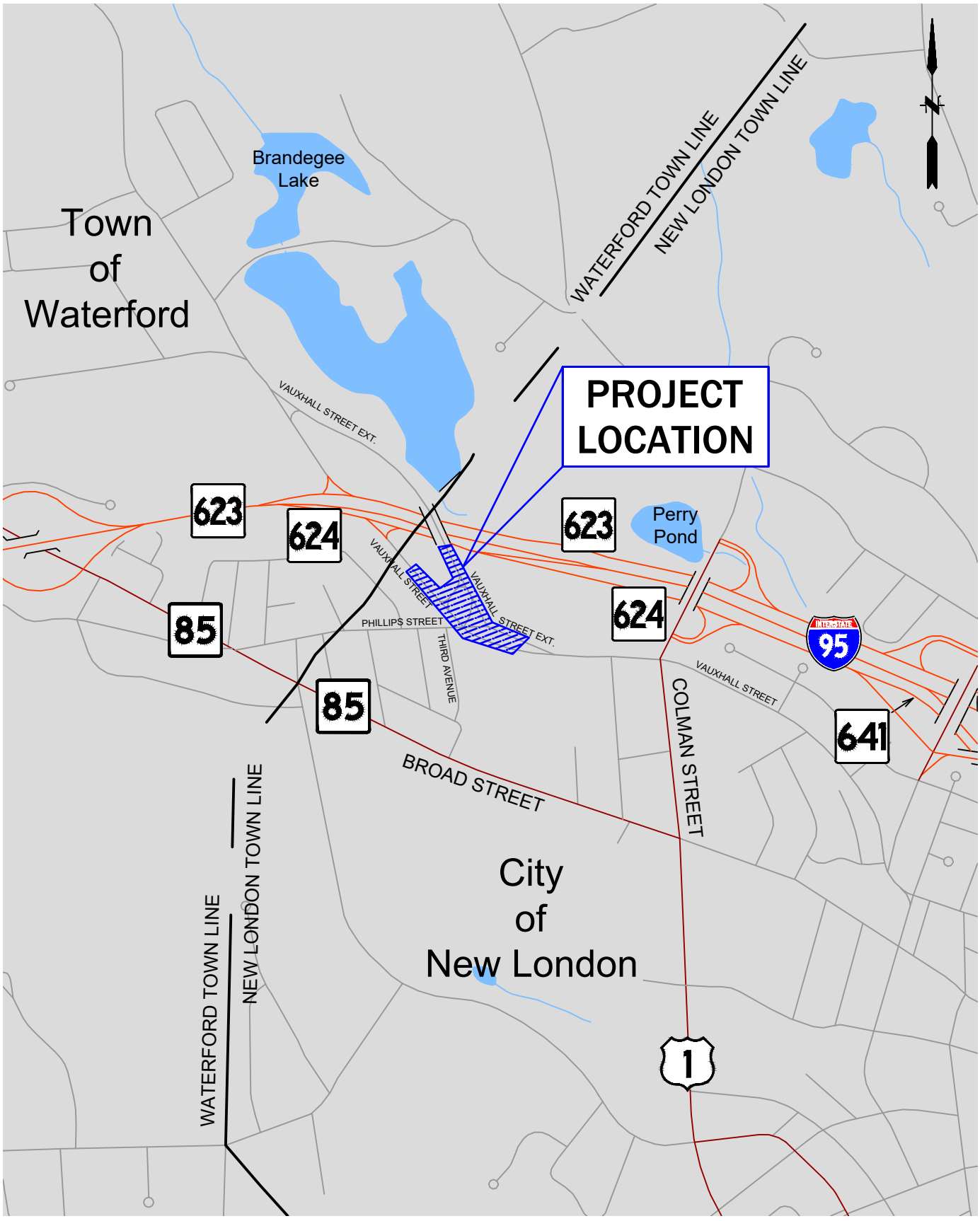
Section A

Project Location Map

Proposed Conceptual Design Plans

Proposed Conceptual Design Plans Include: Limits of project, approximate limits and extent of a pavement widening or realignment, proposed number of lanes, widths, and arrangements, and typical cross section including lane and shoulder widths, pavement structure, etc.

Typical Sections



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ONE FINANCIAL PLAZA, 15th FLOOR
HARTFORD, CT 06103
860.646.2469
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CITY OF NEW LONDON

2024 LOTCIP APPLICATION

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

SXN A



No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

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CITY OF NEW LONDON

EXISTING CONDITIONS

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

EXC-01

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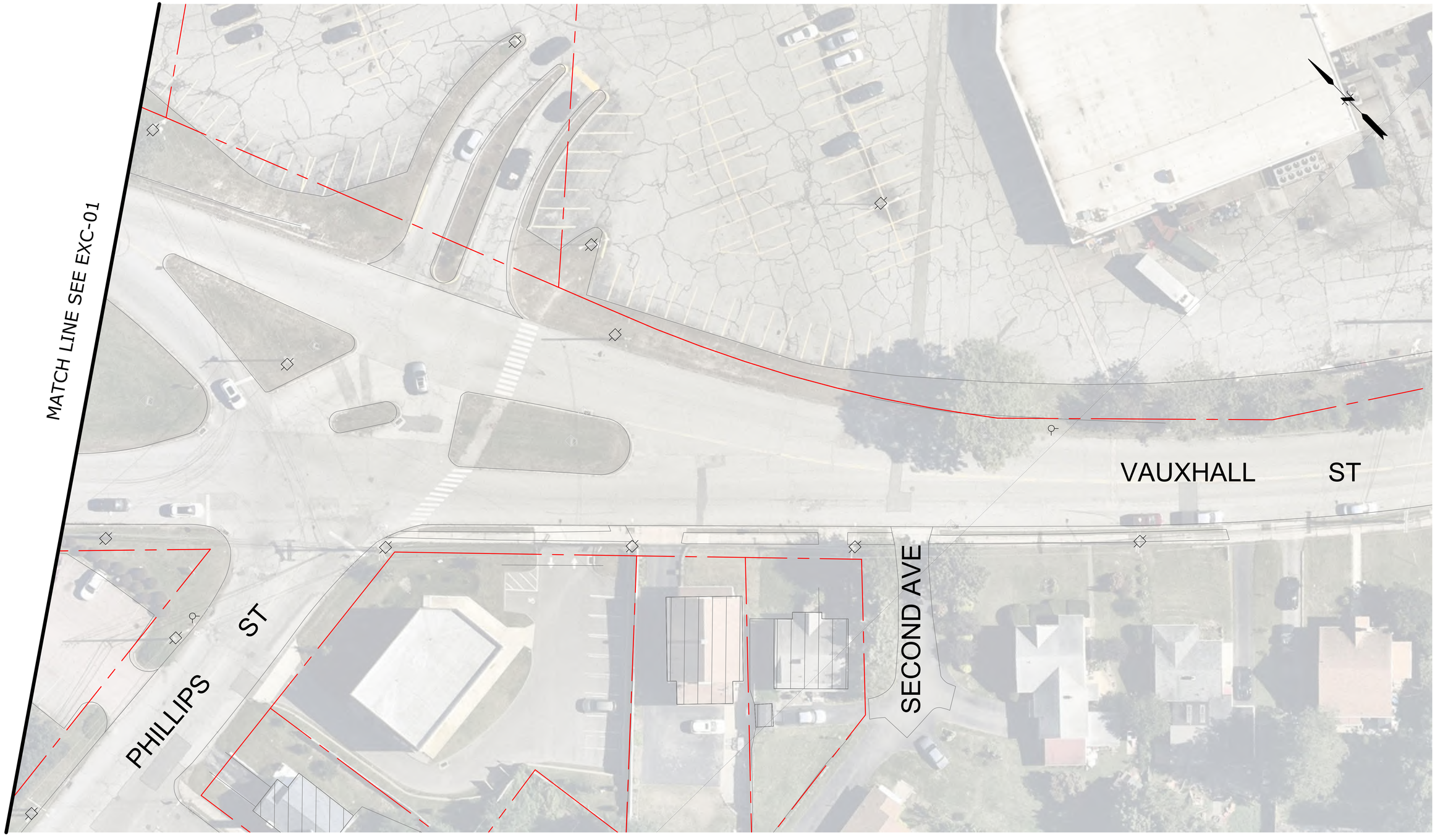

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CITY OF NEW LONDON

EXISTING CONDITIONS

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

EXC-02

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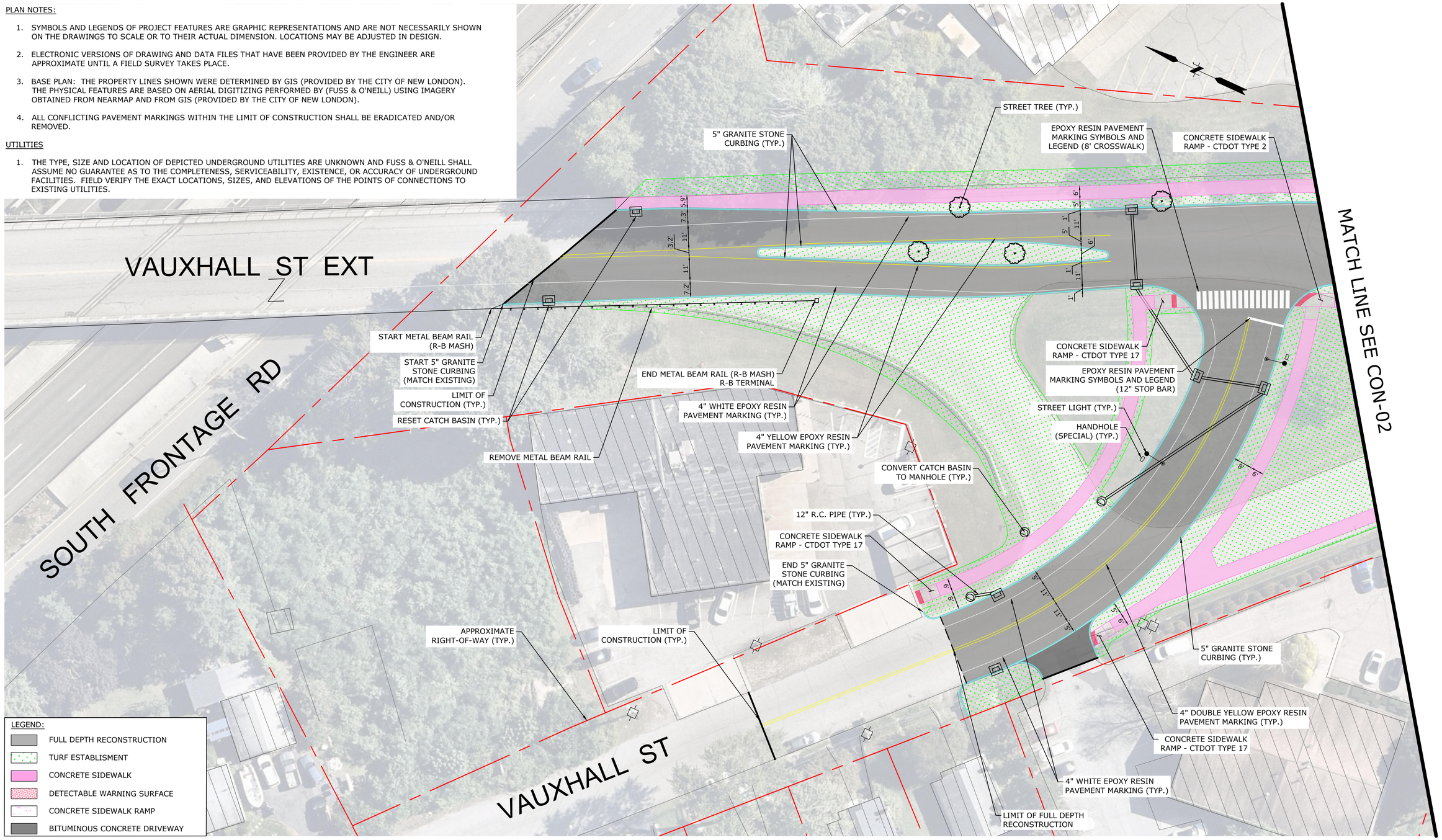
PLAN NOTES:

1. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR ACTUAL DIMENSION. LOCATIONS MAY BE ADJUSTED IN DESIGN.
2. ELECTRONIC VERSIONS OF DRAWING AND DATA FILES THAT HAVE BEEN PROVIDED BY THE ENGINEER ARE APPROXIMATE UNTIL A FIELD SURVEY TAKES PLACE.
3. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY GIS (PROVIDED BY THE CITY OF NEW LONDON). THE PHYSICAL FEATURES ARE BASED ON AERIAL DIGITIZING PERFORMED BY (FUSS & O'NEILL) USING IMAGERY OBTAINED FROM NEARMAP AND FROM GIS (PROVIDED BY THE CITY OF NEW LONDON).
4. ALL CONFLICTING PAVEMENT MARKINGS WITHIN THE LIMIT OF CONSTRUCTION SHALL BE ERADICATED AND/OR REMOVED.

UTILITIES

1. THE TYPE, SIZE AND LOCATION OF DEPICTED UNDERGROUND UTILITIES ARE UNKNOWN AND FUSS & O'NEILL SHALL ASSUME NO GUARANTEE AS TO THE COMPLETENESS, SERVICEABILITY, EXISTENCE, OR ACCURACY OF UNDERGROUND FACILITIES. FIELD VERIFY THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES.



FOR INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION

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CITY OF NEW LONDON

CONCEPT PLAN

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

CON-01

File: J:\DWG\P2017\0353.A50\Civil\Concept\20170353.A50CON_01.dwg Layout: CON-01 Plotted: 2025-02-07 8:42 AM Saved: 2025-02-07 8:40 AM User: Juan.JavierMejia
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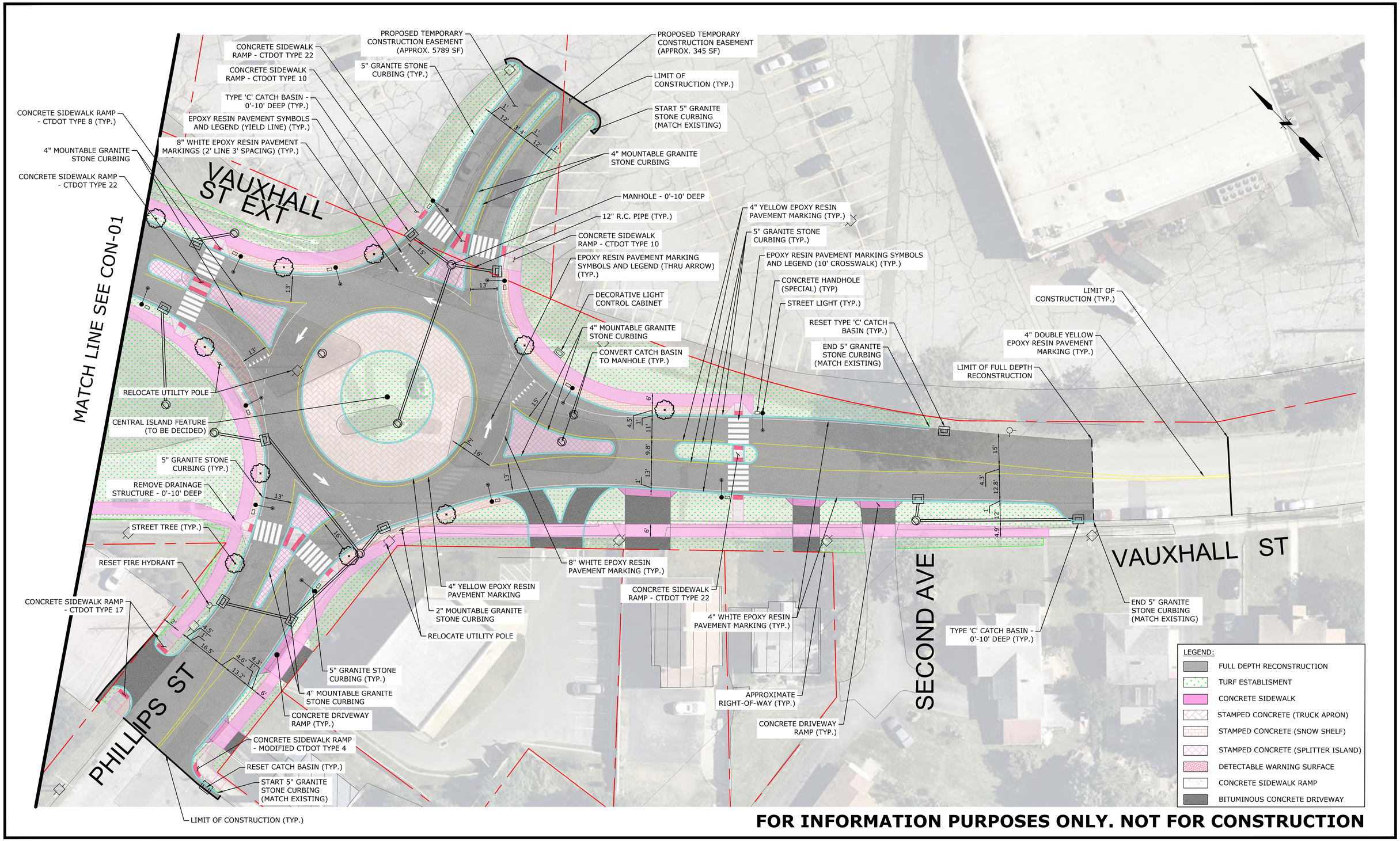

FOR INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

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0 10' 20' 40'
GRAPHIC SCALE

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CITY OF NEW LONDON

CONCEPT PLAN

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

CON-02

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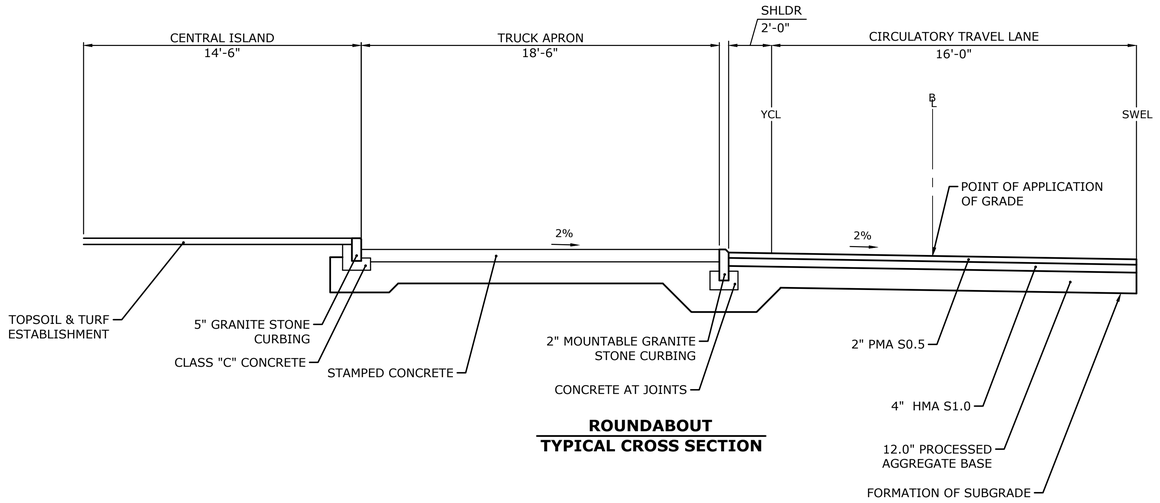
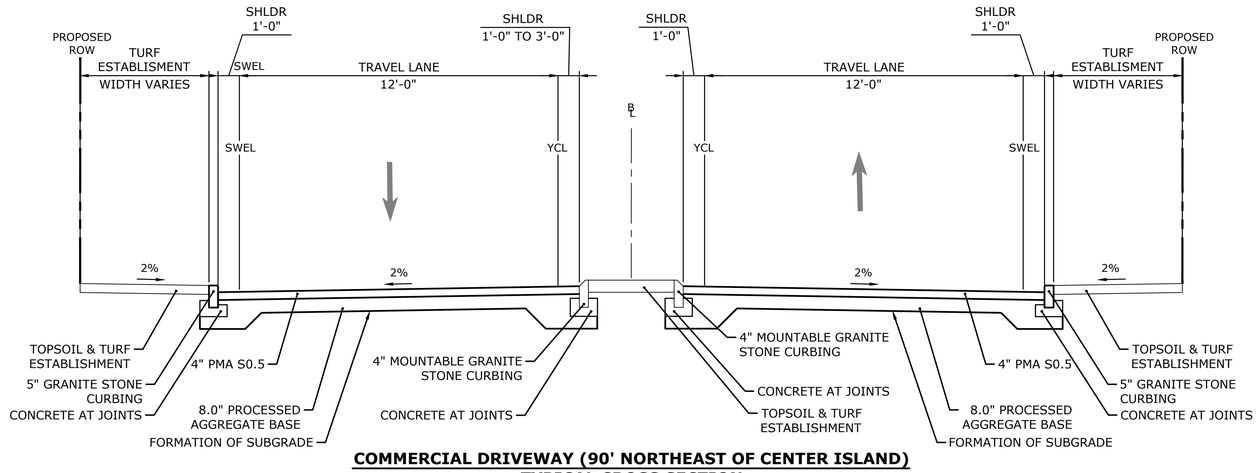


ROUNDABOUT
TYPICAL CROSS SECTION

LEGEND:

SWEL = SOLID WHITE EDGE LINE

YCL = YELLOW CENTER LINE



COMMERCIAL DRIVEWAY (90' NORTHEAST OF CENTER ISLAND)
TYPICAL CROSS SECTION

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No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

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CITY OF NEW LONDON

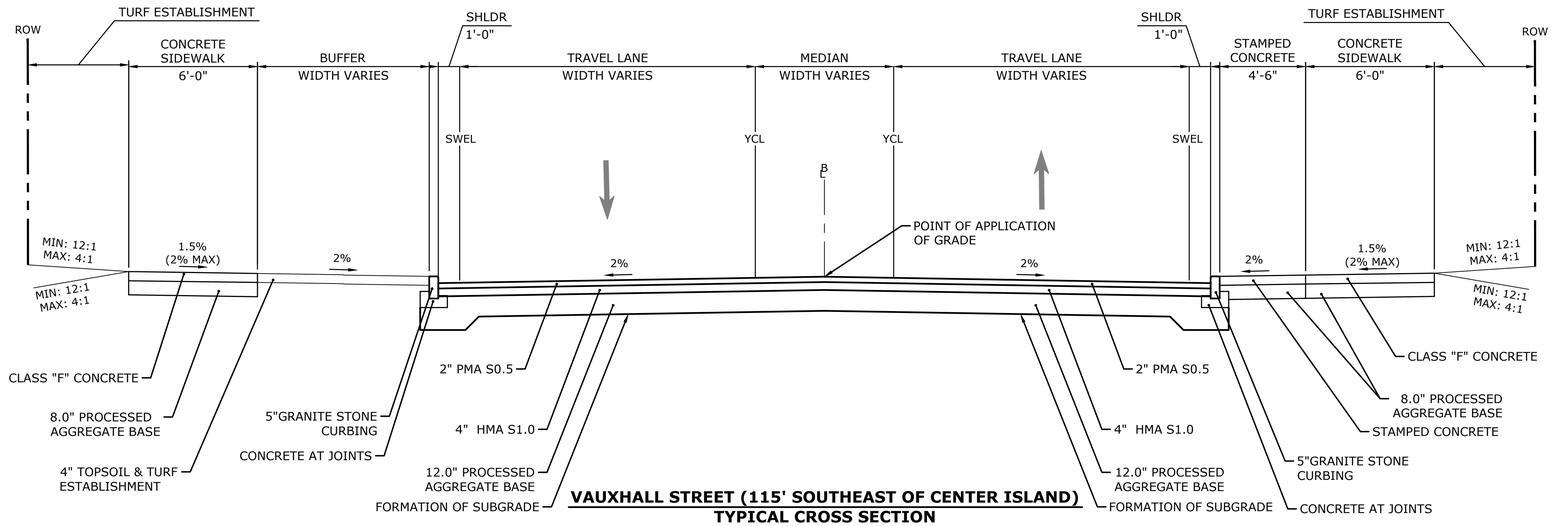
TYPICAL CROSS SECTION PLANS

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

TYP-01



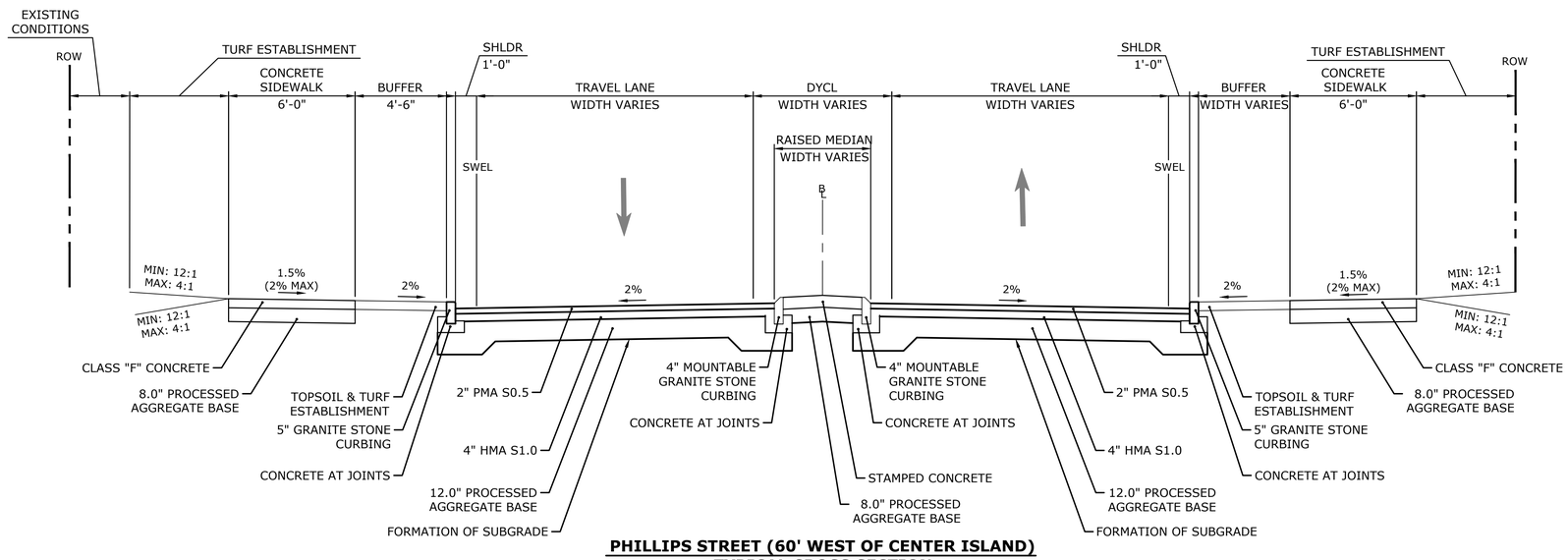
VAUXHALL STREET (115' SOUTHEAST OF CENTER ISLAND)
TYPICAL CROSS SECTION

LEGEND:

SWEL = SOLID WHITE EDGE LINE

DYCL= DOUBLE YELLOW CENTER LINE

YCL= YELLOW CENTER LINE



PHILLIPS STREET (60' WEST OF CENTER ISLAND)
TYPICAL CROSS SECTION

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

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VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

TYP-02

File: J:\DWG\P2017\0353\A50\Civil\Plan\20170353A50_TXS01_UPDATED.dwg Layout: TXS-02 Plotted: 2025-02-07 8:46 AM Saved: 2025-02-07 8:45 AM User: Juan.JavierMejia
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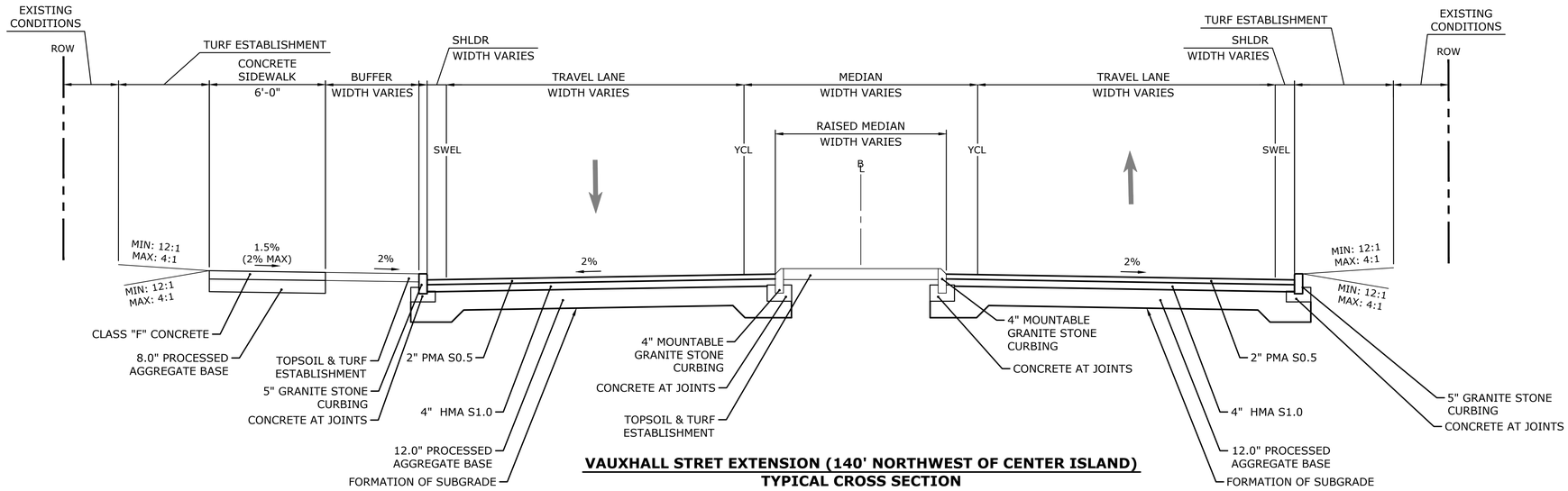


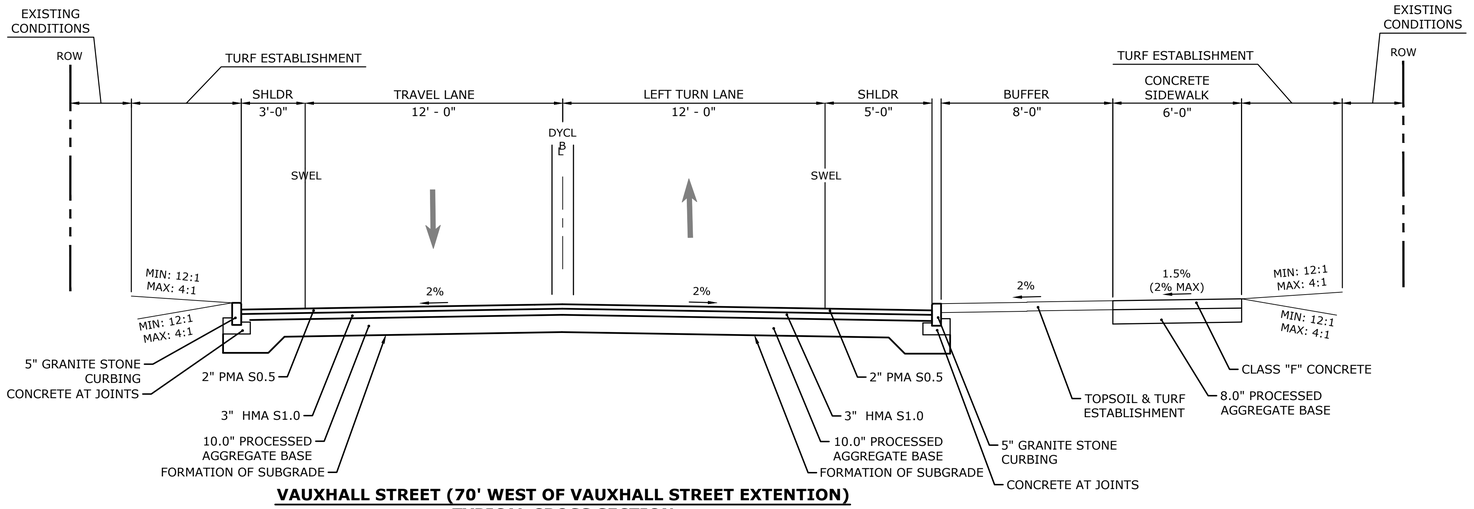
VAUXHALL STRET EXTENSION (140' NORTHWEST OF CENTER ISLAND)
TYPICAL CROSS SECTION

LEGEND:

SWEL = SOLID WHITE EDGE LINE

DYCL= DOUBLE YELLOW CENTER LINE

YCL= YELLOW CENTER LINE



VAUXHALL STREET (70' WEST OF VAUXHALL STREET EXTENTION)
TYPICAL CROSS SECTION

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LAYER STATE:
MS VIEW:

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

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SCALE:
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CITY OF NEW LONDON

TYPICAL CROSS SECTION PLANS

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: NOVEMBER 2024

TYP-03

Section B

There are no attachments for Section B.

Section C

There are no attachments for Section C.

Section D

There are no attachments for Section D.

Section E

There are no attachments for Section E.

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Section F

Bicycle and Pedestrian Travel Needs Assessment Form (BPTNA)
Study Area Map

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM (BPTNA)



In accordance with Connecticut General Statutes, Section 13a-153f, Accommodations and Provisions of Facilities for All Users and the Department's Policy Statement No. EX.0-31, It is the policy of the Department to consider the needs of all users of all abilities and ages (specifically including pedestrians, bicyclists, transit users, and vehicle operators) in the planning, programming, design, construction, retrofit and maintenance activities related to all roads and streets as a means of providing a "safe, efficient transportation network which enhances quality of life and economic vitality." Therefore, the need for inclusion of accommodations specifically for bicyclists and pedestrians, including those with disabilities, must be reviewed for **every** project.

This form shall apply to all Department projects, mainline utility projects within the state right-of-way, the Office of the State Traffic Administration (OSTA) certificate applications receiving state or federal funding, and municipal transportation projects that receive state or federal funding. This form provides designers the documentation and information needed to make decisions on the need and extent of bicycle and pedestrian features that should be included in a project. This form is not intended to dictate what features should be included in a project design, as guidance on those questions can be found in numerous other reference documents. This form should be completed to the extent practical (at least Sections 1 & 2) during the project scoping phase and finalized by the completion of the Preliminary Design. Once signed, this form should be retained with the project documents.

Project Number(s):		Route(s):	Vauxhall St, Vauxhall St Ext. and Phillips St
Project Name:	Vauxhall Street Roundabout Improvements		
Municipality(s):	City of New London	Planning Region(s):	SECCOG

SECTION 1: APPLICABILITY

Although bicycle and pedestrian accommodations should be considered for all projects, certain types of projects (e.g. bridge deck patching, culvert re-lining, projects on expressway mainlines) do not typically provide reasonable opportunity to provide improvements for these travel modes. Considering the project type answer the question below. If the question below is answered **no**, please explain why, then skip to the last page, sign the form, and file this form with the project documents. If the answer is **yes**, go to Section 2 and complete the rest of the form.

Does this project type provide reasonable opportunity to provide improvements for non-motorized access?	Yes ☑ No ☐
If no, why?	

SECTION 2: ASSESSMENT OF STUDY AREA SEE MAP ATTACHED BELOW

2.1 Study Area Map

Identify any non-motorized and/or transit generators located within the Study Area (Study Area is generally defined as approximately ½ mile radius from the project limits). Using the letters in the code column below, create a map from a location plan or aerial photograph indicating the location of existing or planned non-motorized or transit user generators identified below (for planned facilities, precede the letter with a P-).

Non-Motorized/Transit User Generators	Code
Residential Areas: Indicate any general areas of dense residential housing	**R**
Parks: Include areas that would attract people, whether officially designated as a park or not	**P**
Recreational Areas: Examples include athletic fields, dog parks	**RA**
Religious Facilities	**C**
Schools (including public and private schools, colleges, universities, daycare or other educational institution)	**S**
Health / Medical Facilities	**H**
Town Centers: typically would include areas where Town Halls, Libraries and other public facilities exist	**TC**
Shopping Centers: especially centers with businesses where non-motorized customers might be expected (restaurants, bookstores, drug stores, etc.)	**M**
Large Employment Businesses: Factories, large office buildings, hospitals, government offices	**E**
Bus Stops	**B**
Public Transit Facilities: train/bus stations, airports	**T**
Shared-use trail access / parking	**TA**
Other: other known facilities expected to generate or attract non-motorized users _____	**O**

2.2 Analysis of Study Area SEE MAP ATTACHED BELOW		
Using the map prepared in Section 2.1, and the resources suggested below, answer the following questions about the study area. **[For State/District-wide or Division of Traffic Engineering projects with many locations use the "Multi-location BPTNA Table" at: https://portal.ct.gov/DOT/PP_Policy/Documents/BikePed_Dashboard to answer questions marked with an (*)]**		Explain as needed (attach additional sheet(s) if needed)
a. * Referencing the CTDOT Interactive Bike Map located at: http://www.ctbikepedplan.org/interactivemap.html is this project located on the Connecticut Statewide On-Road or Off-Road Bicycle Planning Network?	Yes ☐ No ☑	
b. * Have all existing bicycle, pedestrian and transit features within and just beyond the project limits (such as: features and ADA accessibility of existing bus stops, sidewalks, shoulder widths, bicycle markings/signs, shared-use paths, etc.) been identified and assessed for condition and need? (If assistance is needed identifying Transit requirements a request can be sent to: DOT.PTransBikePed@ct.gov)	Yes ☑ No ☐	Areas within the project limits have proposed pedestrian and public transit improvements.
c. * Are there any areas of concern where physical impediments to non-motorized travel through the study area exist? Physical impediments can be excessive grade, limited width of roads/bridges, gaps or need for sidewalks (indicated by worn foot paths), utility poles or other appurtenances restricting access, etc.	Yes ☑ No ☐	There are foot paths on the side of the different approaches but they are worn.
d. * Is there any reason to anticipate an increase in travel by non-motorized and /or transit users through the project limits in the future?	Yes ☐ No ☑	
e. * Based on the U.S. Access Board's Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG), are there barriers to mobility inhibiting continuous access between schools, hospitals, senior care, or community centers, etc. for persons with disabilities that **cannot** be addressed in this project?	Yes ☐ No ☑	
f. * Is there a pattern of bicycle or pedestrian crashes within the project area? Crash information can be found by accessing the UCONN Crash Repository at (https://www.ctcrash.uconn.edu/).	Yes ☐ No ☑	

g. Does the project provide <u>unique or primary access</u> (defined as access which is not otherwise available within approximately one-half mile of the project) : • across a river, highway corridor or other natural and/or man-made barrier? • into or out of any of the bicycle and pedestrian generators listed above? • between communities?	Yes ☑ No ☐ Yes ☐ No ☑ Yes ☐ No ☑	Vauxhall St connects to I-95, this connection is at around 0.15 miles from the intersection with Phillips St.
h. Is the project located near or provide new access or connectivity to state parks, forests or CT Designated Greenways? Information on State Parks, Forests and Greenways can be found at: http://www.ct.gov/deep/cwp/view.asp?a=2707&q=323852 and http://www.ct.gov/deep/parkmaps If yes, please notify the Trails and Greenways Program Coordinator at the Department of Energy & Environmental Protection, State Parks Division, by sending a location and description of the project to: deep.stateparks@ct.gov. This is for notification and not intended to be a formal review and /or concurrence.	Yes ☐ No ☑	
i. In accordance to the Complete Streets Policy, the Department will include non-motorized users in traffic counts to the extent possible. Has the existing pedestrian and/or bicyclist usage patterns within the project limits, particularly at intersection and midblock crossings, been observed / collected?	Yes ☑ No ☐	A total of 12 pedestrian and bicyclist were seen in the morning and a total of 23 were seen in the afternoon of a regular weekday.
j. Has there been any documented public concern or comments about non-motorized and/or transit needs in the area?	Yes ☐ No ☑	
k. Are there any comprehensive regional or local planning documents (such as Complete Streets Plan, Sidewalk Plan, Plan of Conservation & Development, etc.) that address bicyclists, pedestrian or transit user conditions within or proximate to the project limits? (Can usually be found on applicable website) Contact the RPO Coordination or Intermodal Planning units in the Bureau of Policy and Planning if assistance is needed.	Yes ☑ No ☐	See attached plans in Section Q.

SECTION 3: NON-MOTORIZED AND TRANSIT ACCOMMODATIONS

Identify any non-motorized and/or transit user accommodations/improvements that may be considered as part of this project. This section is provided as a list of countermeasures that may be appropriate and is not intended to dictate what features should be included in the project design. **[For State/District-wide or Division of Traffic Engineering projects with many locations answer this section by considering all sites as if they were one location]**

3.1 Pedestrian Facilities and Crossing Treatments		*3.2 Bike Facilities (Cont.)*	
a. New sidewalks	Yes ☑ N/A ☐	e. Signage and/or pavement markings	Yes ☐ N/A ☑
b. Pedestrian median crossing island	Yes ☑ N/A ☐	f. Bicycle parking, bike racks/lockers	Yes ☐ N/A ☑
c. Curb extension/bulb-outs	Yes ☑ N/A ☐	g. Trail Improvements, including parking	Yes ☐ N/A ☑
d. Reduced Corner Radius	Yes ☑ N/A ☐	h. Special height railings	Yes ☐ N/A ☑
e. Pedestrian bridge/tunnel	Yes ☐ N/A ☑	*3.3 Bike & Pedestrian Treatments*	
f. New or relocated unsignalized or mid-block crossing	Yes ☐ N/A ☑	a. Road diet	Yes ☐ N/A ☑
g. Enhanced illumination at pedestrian crossings	Yes ☑ N/A ☐	b. Narrowing travel lane width	Yes ☑ N/A ☐
h. Pedestrian signing and yield lines	Yes ☑ N/A ☐	c. Corridor-wide speed calming	Yes ☑ N/A ☐
i. Parking restrictions near crossings	Yes ☑ N/A ☐	*3.4 Transit Facilities*	
j. Pedestrian hybrid beacon [PHB; also known as the High intensity Activated crossWalK (HAWK)]	Yes ☐ N/A ☑	a. New or revised bus stops	Yes ☐ N/A ☑
		b. Bus shelters	Yes ☐ N/A ☑
k. Rectangular rapid flashing beacon (RRFB)	Yes ☐ N/A ☑	c. Standing pads	Yes ☐ N/A ☑
l. Pedestrian fencing on bridges	Yes ☐ N/A ☑	d. New or revised crossing for bus stop	Yes ☐ N/A ☑
		3.5 Streetscape Elements	
3.2 Bike Facilities		a. Landscaping, street trees, planters, buffer strips, etc.	Yes ☑ N/A ☐
a. Dedicated bike lane or cycle track	Yes ☐ N/A ☑	b. Decorative lighting	Yes ☑ N/A ☐
b. Shared-used lanes	Yes ☐ N/A ☑	c. Public seating or benches	Yes ☐ N/A ☑
c. Shared-used path	Yes ☐ N/A ☑	*3.6 Other (please specify):*	
d. Wider shoulders	Yes ☐ N/A ☑		

Once completed this form should be signed, attached to the Preliminary Design Statement, and filed with the project documents in ProjectWise. If the answer to the question under Section 1 "Applicability" is "Yes", please email the link to the completed form in ProjectWise (or a PDF copy) to: CTDOT.BikePedReviews@ct.gov. Comments will be provided if necessary however, designers are not required to obtain concurrence to move forward with design. This form will be maintained and periodically updated by the Office of Strategic Planning & Projects in the Bureau of Policy & Planning.

Prepared By: Juan M. Javier Mesia
Project Engineer - Print Name

Juan Javier Mesia
Signature

Date: 11/22/24

Approved By: Brian Sear
Project Manager - Print Name

Brian R. Sear
Signature

Date December 2, 2024


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FUSS & O'NEILL

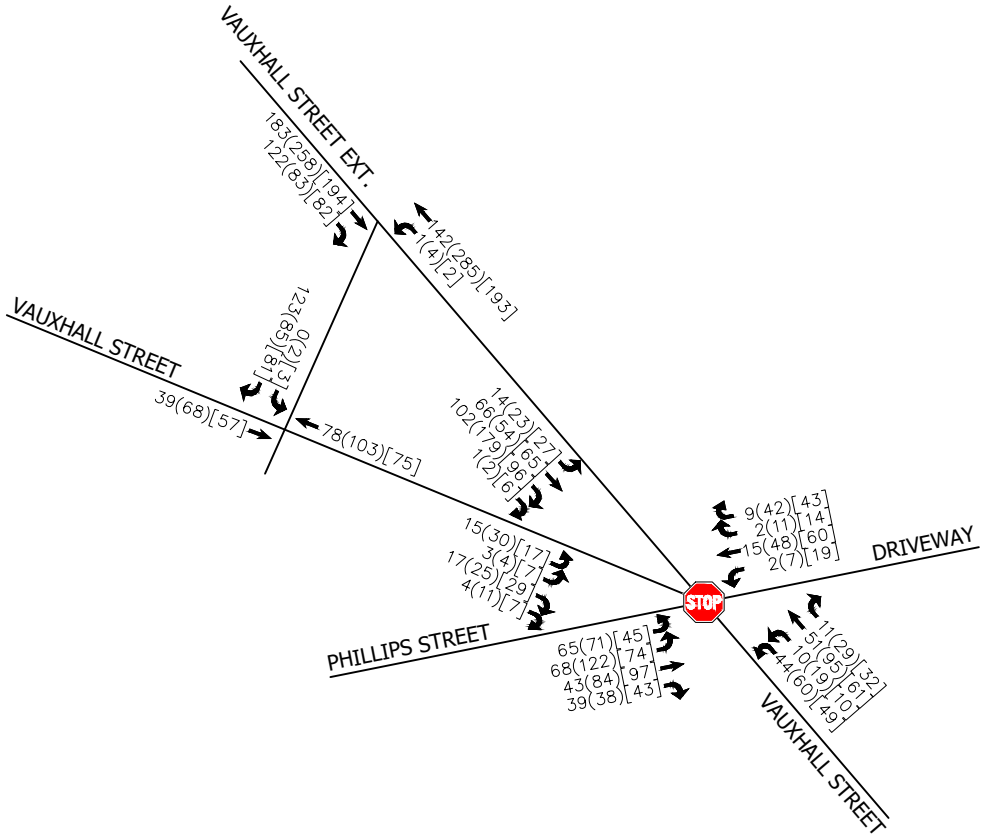
Section G

Traffic Volumes Figures

Crash Experience

Collision Diagrams

Speed Data



XX(XX)[XX] = WEEKDAY MORNING PEAK HOUR (WEEKDAY AFTERNOON PEAK HOUR) [SATURDAY MIDDAY PEAK HOUR]

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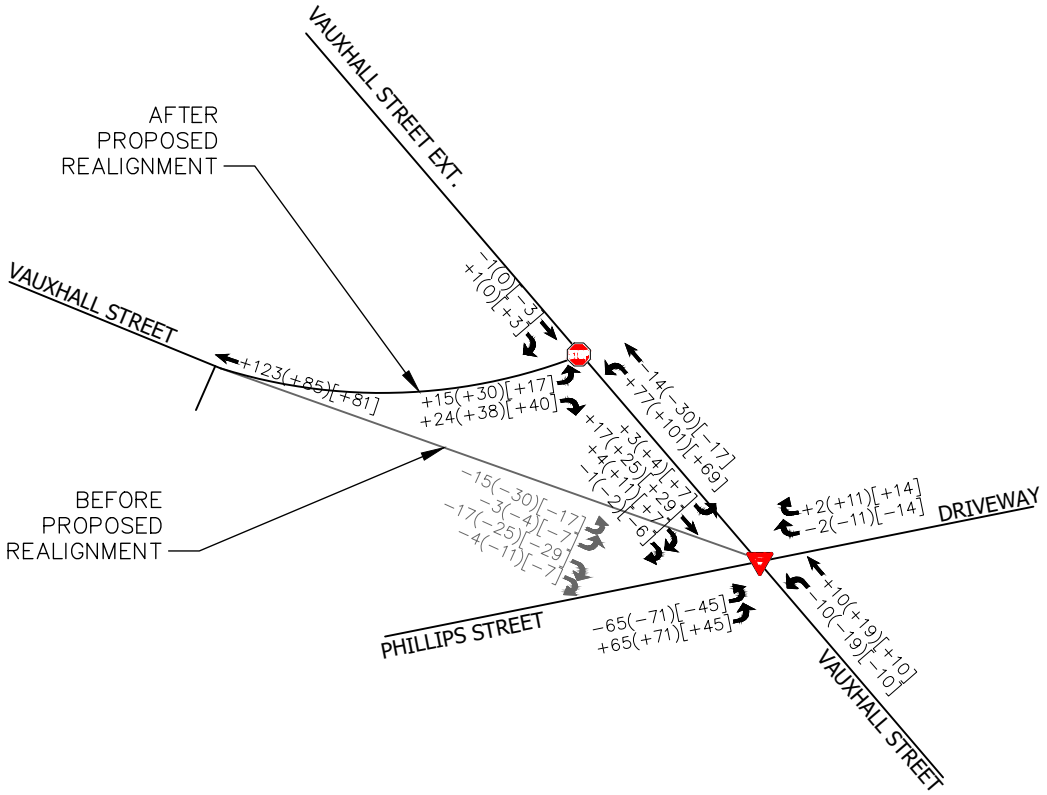
FIGURE 1: 2024 EXISTING TRAFFIC VOLUMES (NO-BUILD)

PROJ. NO: 20170353.A50 VAUXHALL STREET ROUNDABOUT IMPROVEMENTS NOVEMBER 2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353.A50_TVF-01.dwg Layout: FIG. 1 - 2024 BACKGROUND Plotted: Tue, November 26, 2024 - 10:17 PM User: JUAN JAVIER MEJIA



XX(XX)[XX] = WEEKDAY MORNING PEAK HOUR (WEEKDAY AFTERNOON PEAK HOUR) [SATURDAY MIDDAY PEAK HOUR]

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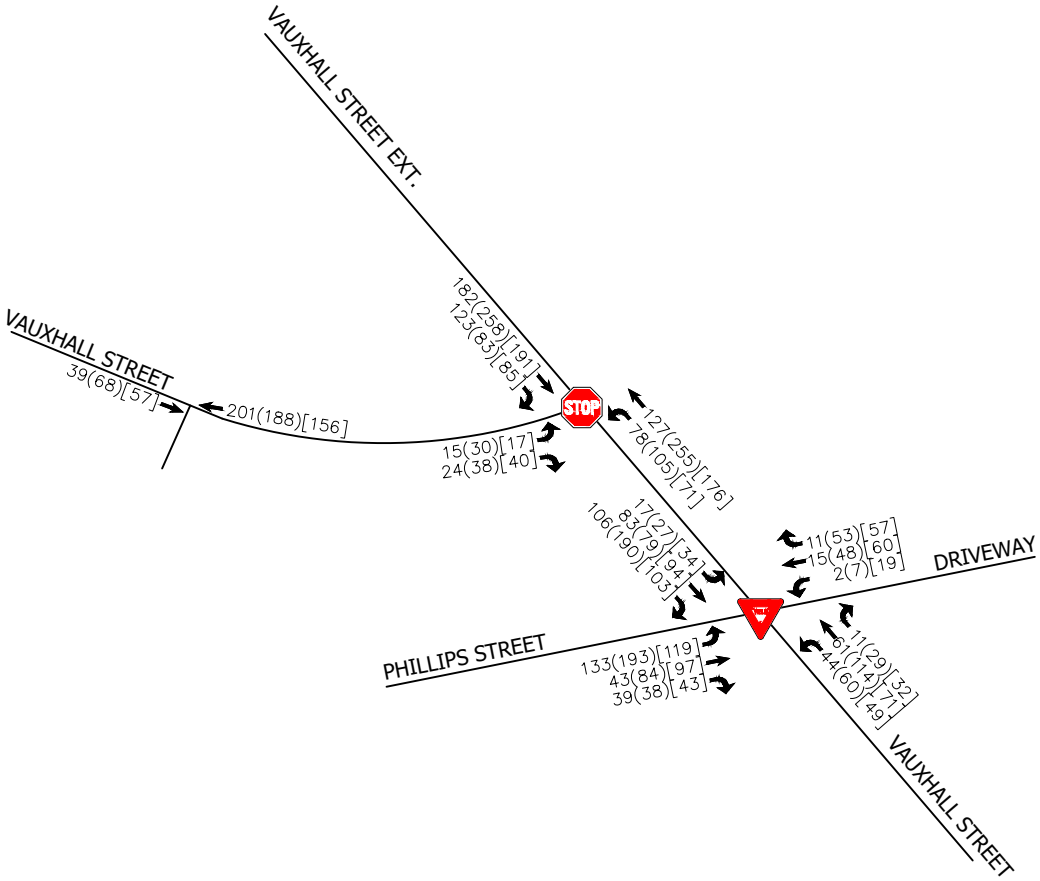
FIGURE 2: 2024 EXISTING TRAFFIC VOLUMES (DISTRIBUTION)

PROJ. NO: 20170353.A50 VAUXHALL STREET ROUNDABOUT IMPROVEMENTS NOVEMBER 2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353.A50_TVF-01.dwg Layout: FIG. 1 - 2024 DISTRIBUTION Plotted: Tue, November 26, 2024 - 10:17 PM User: JUAN JAVIER MEJIA



XX(XX)[XX] = WEEKDAY MORNING PEAK HOUR (WEEKDAY AFTERNOON PEAK HOUR) [SATURDAY MIDDAY PEAK HOUR]

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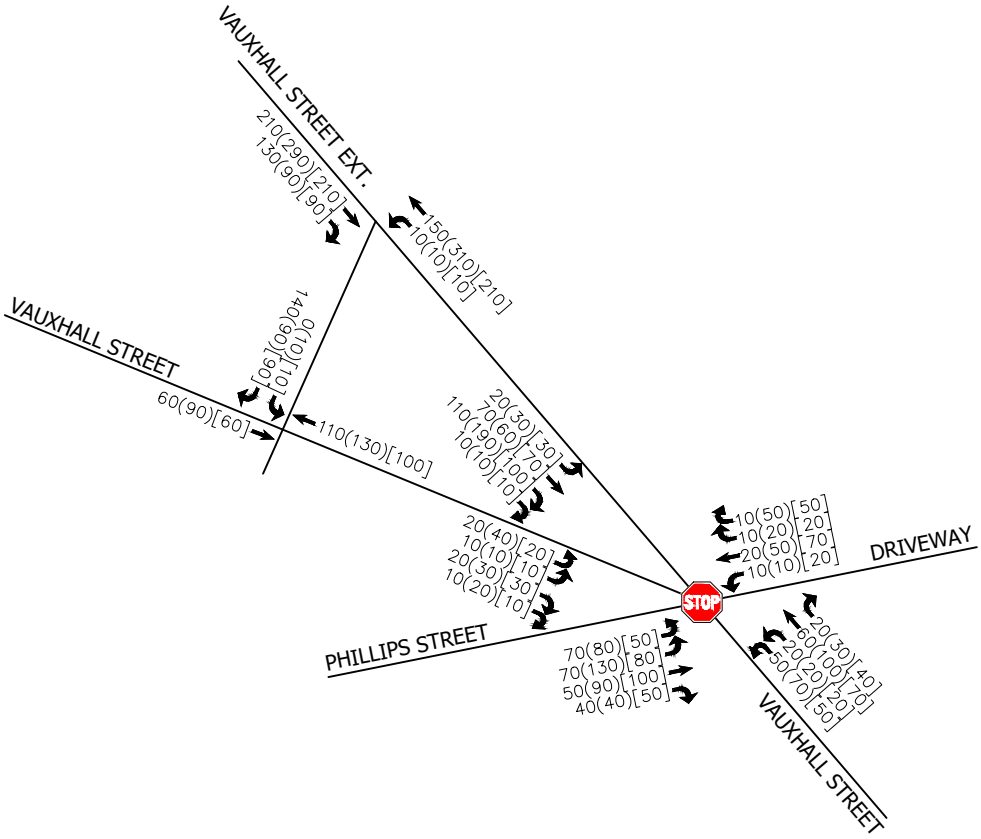
FIGURE 3: 2024 EXISTING TRAFFIC VOLUMES (BUILD)

PROJ. NO: 20170353.A50 VAUXHALL STREET ROUNDABOUT IMPROVEMENTS NOVEMBER 2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353.A50_TVF-01.dwg Layout: FIG. 3 - 2024 BACKGROUND Plotted: Tue, November 26, 2024 - 10:17 PM User: JUAN JAVIER MEJIA



XX(XX)[XX] = WEEKDAY MORNING PEAK HOUR (WEEKDAY AFTERNOON PEAK HOUR) [SATURDAY MIDDAY PEAK HOUR]

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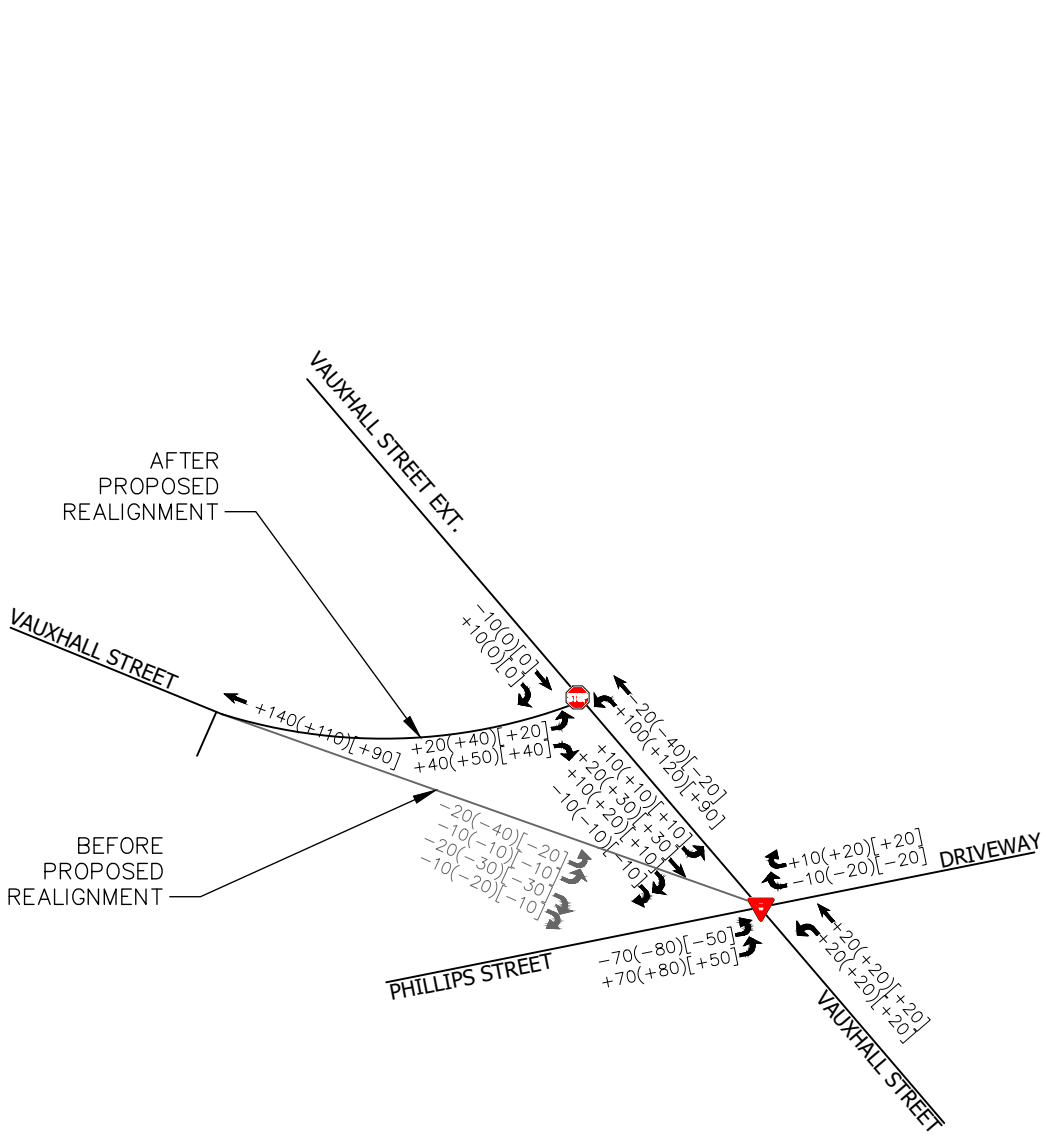
FIGURE 4: 2044 FUTURE TRAFFIC VOLUMES (NO-BUILD)

PROJ. NO: 20170353.A50 VAUXHALL STREET ROUNDABOUT IMPROVEMENTS NOVEMBER 2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353.A50_TVF-01.dwg Layout: FIG. 2 - 2044 GROWN Plotted: Tue, November 26, 2024 - 10:17 PM User: JUAN JAVIER MEJIA



XX(XX)[XX] = WEEKDAY MORNING PEAK HOUR (WEEKDAY AFTERNOON PEAK HOUR) [SATURDAY MIDDAY PEAK HOUR]

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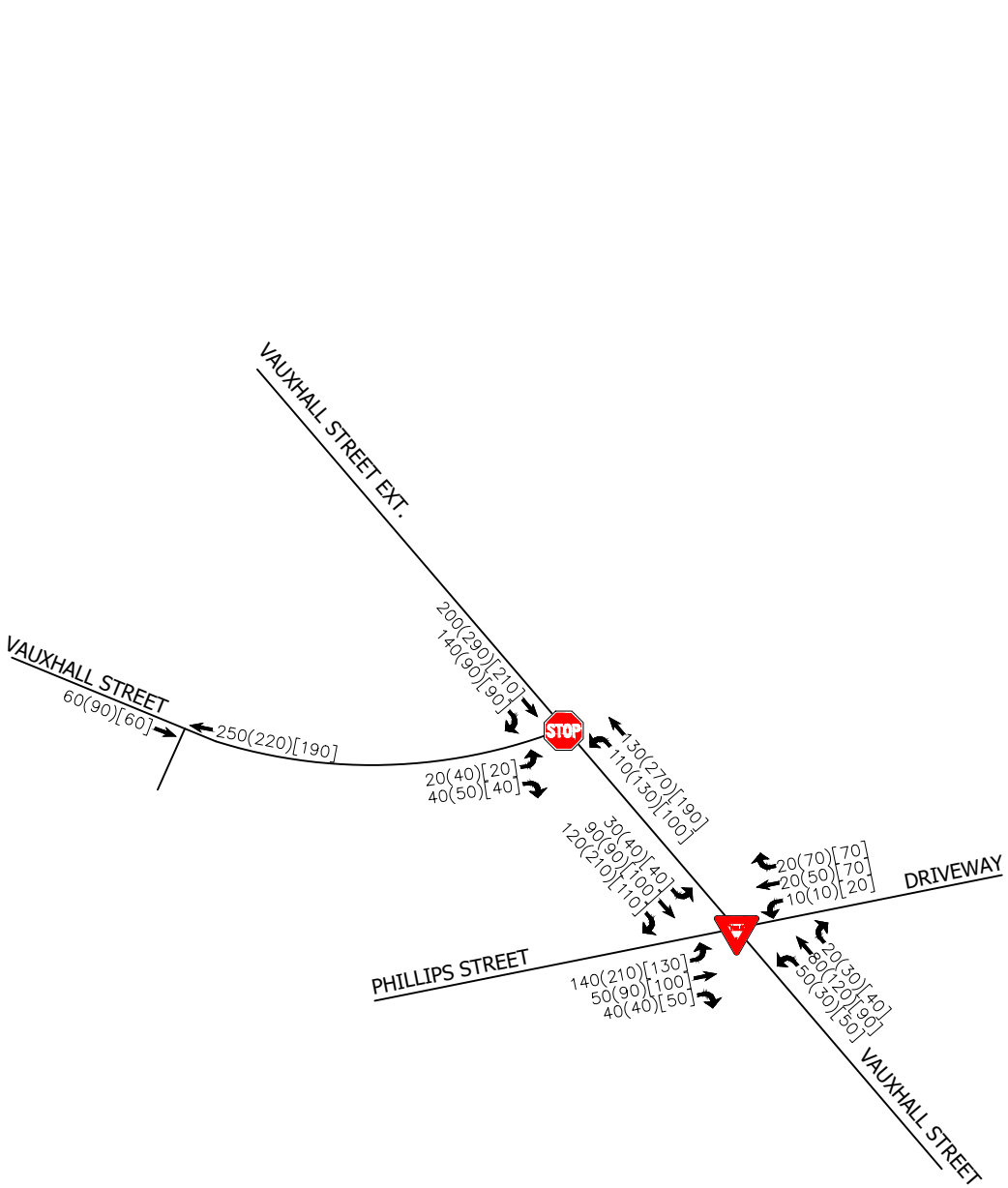
FIGURE 5: 2044 FUTURE TRAFFIC VOLUMES (DISTRIBUTION)

PROJ. NO: 20170353.A50 VAUXHALL STREET ROUNDABOUT IMPROVEMENTS NOVEMBER 2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353.A50_TVF-01.dwg Layout: FIG. 1 -2044 DISTRIBUTION Plotted: Tue, November 26, 2024 - 10:17 PM User: JUAN JAVIER MEJIA



XX(XX)[XX] = WEEKDAY MORNING PEAK HOUR (WEEKDAY AFTERNOON PEAK HOUR) [SATURDAY MIDDAY PEAK HOUR]

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FIGURE 6: 2044 FUTURE TRAFFIC VOLUMES (BUILD)

PROJ. NO: 20170353.A50 VAUXHALL STREET ROUNDABOUT IMPROVEMENTS NOVEMBER 2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353.A50_TVF-01.dwg Layout: FIG. 4 - 2044 GROWN Plotted: Tue, November 26, 2024 - 10:17 PM User: JUAN JAVIER MEJIA

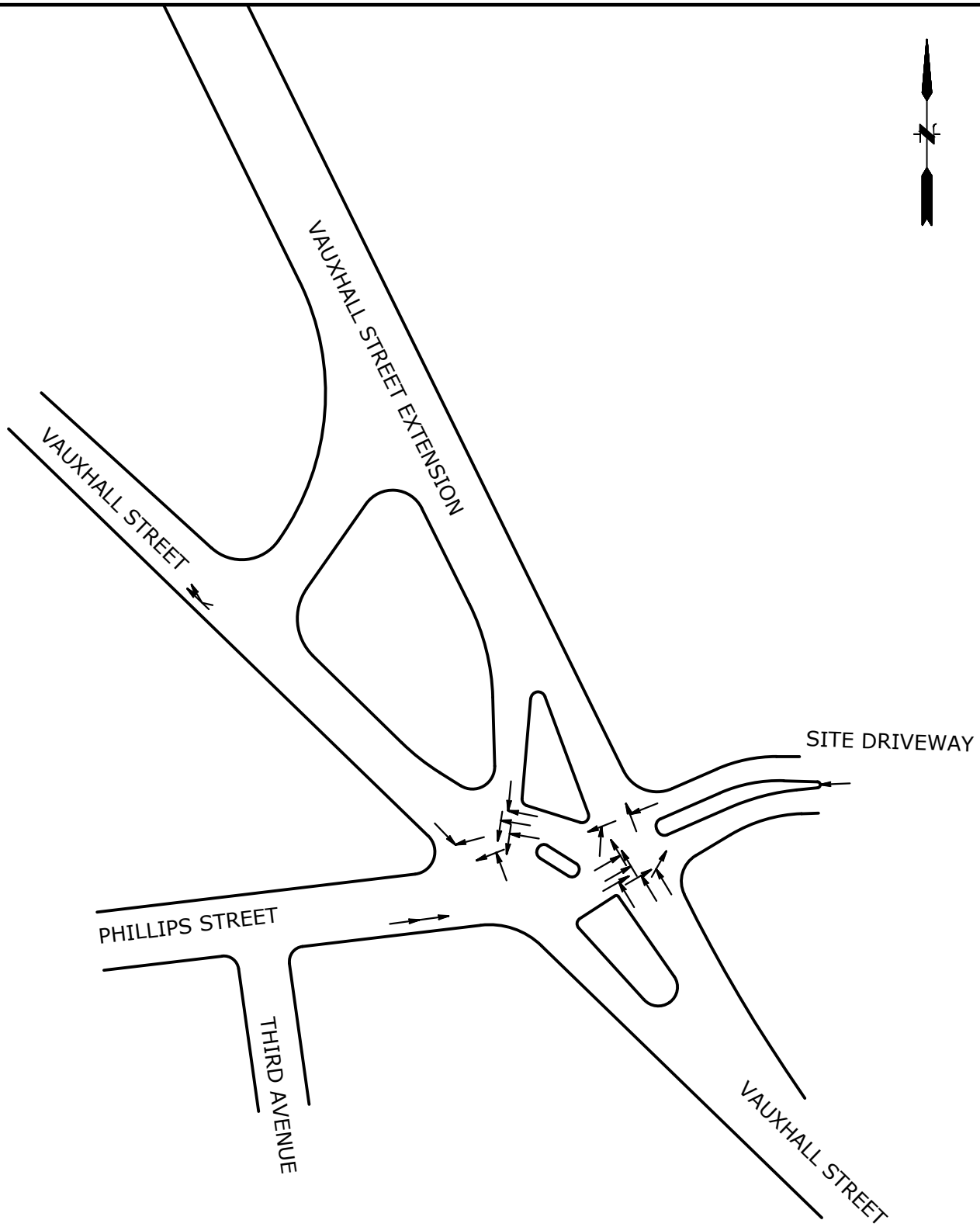
UCONN CRASH DATA

Vauxhall Street at Vauxhall Street Extension
New London, Connecticut
1/1/2021 - 12/31/2023

PDO = Property Damage Only

Date Of Crash	Time of Crash	Severity	No. of Vehicles	Roadway	Intersecting Roadway	Collision Type	Weather	Light Condition	Road Surface Condition	Contributing Circumstances Roadway
4/30/2021	13:49:00	Injury - Possible	2	VAUXHALL ST	PHILLIPS ST	Angle	Clear	Daylight	Dry	None
8/21/2021	15:10:00	Injury - Possible	2	VAUXHALL ST	PHILLIPS ST	Angle	Clear	Daylight	Dry	None
9/7/2021	17:33:00	PDO	2	VAUXHALL ST	PHILLIPS ST	Angle	Clear	Daylight	Dry	None
7/27/2021	15:44:00	PDO	2	VAUXHALL ST EXT		Angle	Clear	Daylight	Dry	None
10/23/2021	18:37:00	PDO	1	PHILLIPS ST		Not Applicable	Clear	Dark-Lighted	Dry	None
10/20/2021	1:42:00	PDO	1	PHILLIPS ST		Not Applicable	Clear	Dark-Lighted	Dry	None
11/24/2021	13:13:00	Injury - Minor	3	VAUXHALL ST	PHILLIPS ST	Angle	Clear	Daylight	Dry	None
12/13/2021	13:45:00	Injury - Minor	2	VAUXHALL ST	PHILLIPS ST	Angle	Clear	Daylight	Dry	None
1/27/2022	7:58:00	PDO	2	VAUXHALL ST	PHILLIPS ST	Sideswipe, opposite direction	Clear	Daylight	Dry	None
2/3/2022	5:30:00	PDO	1	VAUXHALL ST EXT		Not Applicable	Fog, Smog, Smoke	Dark-Not Lighted	Wet	None
3/11/2022	21:18:00	PDO	2	VAUXHALL ST EXT	Phillips St	Angle	Clear	Dark-Lighted	Dry	None
5/7/2022	12:01:00	Injury - Minor	2	VAUXHALL ST		Angle	Cloudy	Daylight	Dry	None
5/27/2022	13:28:00	PDO	2	PHILLIPS ST	THIRD AV	Front to rear	Clear	Daylight	Dry	None
6/14/2022	9:08:00	PDO	2	VAUXHALL ST	PHILLIPS ST	Angle	Clear	Daylight	Dry	None
7/15/2022	15:01:00	PDO	2	VAUXHALL ST EXT		Angle	Clear	Daylight	Dry	None
6/27/2023	16:54:00	PDO	2	VAUXHALL ST		Sideswipe, same direction	Clear	Daylight	Dry	None

CRASH DATA SUMMARY - 1/1/2021 - 12/31/2023 VAUXHALL STREET AT VAUXHALL STREET EXTENSION NEW LONDON, CONNECTICUT	
Criteria	
YEAR	
2021	8
2022	7
2023	1
Total	16
Avg. No. of Crashes/ Year	5.33
CRASH TYPE	
Angle	10
Front to Rear	1
Sideswipe, Opposite Direction	1
Sideswipe, Same Direction	1
Not Applicable	3
Total	16
SEVERITY	
Property Damage Only	11
Injury - Minor	3
Injury - Possible	2
Total	16



FUSS & O'NEILL
ONE FINANCIAL PLAZA, 15th FLOOR
HARTFORD, CT 06103
860.646.2469
www.fando.com

COLLISION DIAGRAM 01

PERIOD COVERED
01/01/2021 TO 12/31/2023

SCALE - NONE

- FATAL ACCIDENT
- PERSONAL INJURY
- PROPERTY DAMAGE ONLY
- REAR END COLLISION
- SIDESWIPE COLLISION
- ANGLED COLLISION
- PARKED VEHICLE
- OUT OF CONTROL
- FIXED OBJECT
- OVERTURN
- PEDESTRIAN
- MOTOR VEHICLE

TOWN OF - NEW LONDON

LOCATION - VAUXHALL STREET AT PHILLIPS STREET

PROJECT - VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

COMPILED BY: BKM 03/27/2024 DRAWN BY: BKM 03/27/2024

File Path: J:\DWG\P2017\0353\A50\Civil\Traffic Figures\20170353A50_CollisionDiagram.dwgLayout: COLL DIAGR 01 Plotted: Wednesday, November 13, 2024 - 3:17 PM User: JUAN.JAVIERMEJIA
Plotter: NONE CTB File: FO 2008 MONO.CTB

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: WB

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	10	0	0	0	0	0	0	0	0	0	0	0	0	10
1:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00	15	0	0	0	0	0	0	0	0	0	0	0	0	15
6:00	58	1	0	0	0	0	0	0	0	0	0	0	0	59
7:00	159	0	0	0	0	0	0	0	0	0	0	0	0	159
8:00	155	2	0	0	0	0	0	0	0	0	0	0	0	157
9:00	138	2	0	0	0	0	0	0	0	0	0	0	0	140
10:00	122	1	0	0	0	0	0	0	0	0	0	0	0	123
11:00	173	0	0	0	0	0	0	0	0	0	0	0	0	173
12:00 PM	165	0	0	0	0	0	0	0	0	0	0	0	0	165
1:00	177	0	0	0	0	0	0	0	0	0	0	0	0	177
2:00	232	1	0	0	0	0	0	0	0	0	0	0	0	233
3:00	279	2	0	0	0	0	0	0	0	0	0	0	0	281
4:00	265	0	1	0	0	0	0	0	0	0	0	0	0	266
5:00	216	0	0	0	0	0	0	0	0	0	0	0	0	216
6:00	181	1	0	0	0	0	0	0	0	0	0	0	0	182
7:00	125	1	0	0	0	0	0	0	0	0	0	0	0	126
8:00	68	0	0	0	0	0	0	0	0	0	0	0	0	68
9:00	59	0	0	0	0	0	0	0	0	0	0	0	0	59
10:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
11:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
Total	2650	11	1	0	0	0	0	0	0	0	0	0	0	2662

New Line		Percentile	15th	50th	85th	95th
		Speed	20	24	27	30
	Mean Speed (Average)		19.0			
	10 MPH Pace Speed		26-35			
	Number in Pace		838			
	Percent in Pace		31.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: WB

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	7	0	0	0	0	0	0	0	0	0	0	0	0	7
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
3:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
5:00	19	0	0	0	0	0	0	0	0	0	0	0	0	19
6:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
7:00	144	1	0	0	0	0	0	0	0	0	0	0	0	145
8:00	126	0	0	0	0	0	0	0	0	0	0	0	0	126
9:00	146	1	0	0	0	0	0	0	0	0	0	0	0	147
10:00	115	3	0	0	0	0	0	0	0	0	0	0	0	118
11:00	167	2	0	0	0	0	0	0	0	0	0	0	0	169
12:00 PM	174	0	0	0	0	0	0	0	0	0	0	0	0	174
1:00	184	0	0	0	0	0	0	0	0	0	0	0	0	184
2:00	188	0	0	0	0	0	0	0	0	0	0	0	0	188
3:00	245	0	0	1	0	0	0	0	0	0	0	0	0	246
4:00	259	2	0	0	0	0	0	0	0	0	0	0	0	261
5:00	218	3	0	0	0	0	0	0	0	0	0	0	0	221
6:00	196	1	0	0	0	0	0	0	0	0	0	0	0	197
7:00	119	1	1	0	0	0	0	0	0	0	0	0	0	121
8:00	113	0	0	0	0	0	0	0	0	0	0	0	0	113
9:00	49	0	0	0	0	0	0	0	0	0	0	0	0	49
10:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
11:00	18	0	1	0	0	0	0	0	0	0	0	0	0	19
Total	2580	14	2	1	0	0	0	0	0	0	0	0	0	2597

New Line	Percentile	15th	50th	85th	95th
	Speed	20	24	28	30
	Mean Speed (Average)	19.1			
	10 MPH Pace Speed	26-35			
	Number in Pace	819			
	Percent in Pace	32.0%			
	Number > 45 MPH	1			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	20	24	28	30
	Mean Speed (Average)	19.0			
	10 MPH Pace Speed	26-35			
	Number in Pace	1667			
	Percent in Pace	32.0%			
	Number > 45 MPH	1			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: EB

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	7	0	0	0	0	0	0	0	0	0	0	0	0	7
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00	9	0	1	0	0	0	0	0	0	0	0	0	0	10
5:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
6:00	69	0	0	0	0	0	0	0	0	0	0	0	0	69
7:00	145	0	0	0	1	0	0	0	0	0	0	0	0	146
8:00	185	0	0	0	0	0	0	0	0	0	0	0	0	185
9:00	125	2	0	0	0	0	0	0	0	0	0	0	0	127
10:00	160	2	0	0	0	0	0	0	0	0	0	0	0	162
11:00	291	4	0	0	0	0	0	0	0	0	0	0	0	295
12:00 PM	326	1	0	0	0	0	0	0	0	0	0	0	0	327
1:00	298	2	0	0	0	0	0	0	0	0	0	0	0	300
2:00	255	0	0	1	0	0	0	0	0	0	0	0	0	256
3:00	217	0	0	0	0	0	0	0	0	0	0	0	0	217
4:00	270	1	0	0	0	0	0	0	0	0	0	0	0	271
5:00	223	0	0	0	0	0	0	0	0	0	0	0	0	223
6:00	162	0	0	0	0	0	0	0	0	0	0	0	0	162
7:00	127	2	0	0	0	0	0	0	0	0	0	0	0	129
8:00	62	0	0	0	0	0	0	0	0	0	0	0	0	62
9:00	46	0	0	0	0	0	0	0	0	0	0	0	0	46
10:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
11:00	10	1	0	0	0	0	0	0	0	0	0	0	0	11
Total	3034	15	1	1	1	0	0	0	0	0	0	0	0	3052

New Line		Percentile	15th	50th	85th	95th
		Speed	18	23	28	30
	Mean Speed (Average)		19.0			
	10 MPH Pace Speed		26-35			
	Number in Pace		973			
	Percent in Pace		32.0%			
	Number > 45 MPH		2			
	Percent > 45 MPH		0.1%			

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: EB

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
4:00	5	0	1	0	0	0	0	0	0	0	0	0	0	6
5:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
6:00	71	2	0	0	0	0	0	0	0	0	0	0	0	73
7:00	161	1	0	0	0	0	0	0	0	0	0	0	0	162
8:00	147	3	0	0	0	0	0	0	0	0	0	0	0	150
9:00	115	3	0	0	0	0	0	0	0	0	0	0	0	118
10:00	159	1	0	0	0	0	0	0	0	0	0	0	0	160
11:00	183	1	0	0	0	0	0	0	0	0	0	0	0	184
12:00 PM	194	2	1	0	0	0	0	0	0	0	0	0	0	197
1:00	172	1	0	0	0	0	0	0	0	0	0	0	0	173
2:00	221	3	1	0	0	0	0	0	0	0	0	0	0	225
3:00	241	1	0	0	0	0	0	0	0	0	0	0	0	242
4:00	223	0	0	0	0	0	0	0	0	0	0	0	0	223
5:00	244	0	0	0	0	0	0	0	0	0	0	0	0	244
6:00	186	0	0	0	0	0	0	0	0	0	0	0	0	186
7:00	128	1	0	0	0	0	0	0	0	0	0	0	0	129
8:00	74	0	0	0	0	0	0	0	0	0	0	0	0	74
9:00	50	0	0	0	0	0	0	0	0	0	0	0	0	50
10:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
11:00	12	1	0	0	0	0	0	0	0	0	0	0	0	13
Total	2639	20	3	0	0	0	0	0	0	0	0	0	0	2662

New Line	Percentile	15th	50th	85th	95th
	Speed	19	24	28	30
	Mean Speed (Average)	19.1			
	10 MPH Pace Speed	26-35			
	Number in Pace	827			
	Percent in Pace	31.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	19	24	28	30
	Mean Speed (Average)	19.0			
	10 MPH Pace Speed	26-35			
	Number in Pace	1810			
	Percent in Pace	32.0%			
	Number > 45 MPH	2			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: Combined

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	17	0	0	0	0	0	0	0	0	0	0	0	0	17
1:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
2:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
3:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:00	18	0	1	0	0	0	0	0	0	0	0	0	0	19
5:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
6:00	127	1	0	0	0	0	0	0	0	0	0	0	0	128
7:00	304	0	0	0	1	0	0	0	0	0	0	0	0	305
8:00	340	2	0	0	0	0	0	0	0	0	0	0	0	342
9:00	263	4	0	0	0	0	0	0	0	0	0	0	0	267
10:00	282	3	0	0	0	0	0	0	0	0	0	0	0	285
11:00	464	4	0	0	0	0	0	0	0	0	0	0	0	468
12:00 PM	491	1	0	0	0	0	0	0	0	0	0	0	0	492
1:00	475	2	0	0	0	0	0	0	0	0	0	0	0	477
2:00	487	1	0	1	0	0	0	0	0	0	0	0	0	489
3:00	496	2	0	0	0	0	0	0	0	0	0	0	0	498
4:00	535	1	1	0	0	0	0	0	0	0	0	0	0	537
5:00	439	0	0	0	0	0	0	0	0	0	0	0	0	439
6:00	343	1	0	0	0	0	0	0	0	0	0	0	0	344
7:00	252	3	0	0	0	0	0	0	0	0	0	0	0	255
8:00	130	0	0	0	0	0	0	0	0	0	0	0	0	130
9:00	105	0	0	0	0	0	0	0	0	0	0	0	0	105
10:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
11:00	28	1	0	0	0	0	0	0	0	0	0	0	0	29
Total	5684	26	2	1	1	0	0	0	0	0	0	0	0	5714

New Line		Percentile	15th	50th	85th	95th
		Speed	19	24	28	30
	Mean Speed (Average)		19.0			
	10 MPH Pace Speed		26-35			
	Number in Pace		1811			
	Percent in Pace		32.0%			
	Number > 45 MPH		2			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: Combined

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	10	0	0	0	0	0	0	0	0	0	0	0	0	10
1:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
2:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
3:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
4:00	16	0	1	0	0	0	0	0	0	0	0	0	0	17
5:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
6:00	123	2	0	0	0	0	0	0	0	0	0	0	0	125
7:00	305	2	0	0	0	0	0	0	0	0	0	0	0	307
8:00	273	3	0	0	0	0	0	0	0	0	0	0	0	276
9:00	261	4	0	0	0	0	0	0	0	0	0	0	0	265
10:00	274	4	0	0	0	0	0	0	0	0	0	0	0	278
11:00	350	3	0	0	0	0	0	0	0	0	0	0	0	353
12:00 PM	368	2	1	0	0	0	0	0	0	0	0	0	0	371
1:00	356	1	0	0	0	0	0	0	0	0	0	0	0	357
2:00	409	3	1	0	0	0	0	0	0	0	0	0	0	413
3:00	486	1	0	1	0	0	0	0	0	0	0	0	0	488
4:00	482	2	0	0	0	0	0	0	0	0	0	0	0	484
5:00	462	3	0	0	0	0	0	0	0	0	0	0	0	465
6:00	382	1	0	0	0	0	0	0	0	0	0	0	0	383
7:00	247	2	1	0	0	0	0	0	0	0	0	0	0	250
8:00	187	0	0	0	0	0	0	0	0	0	0	0	0	187
9:00	99	0	0	0	0	0	0	0	0	0	0	0	0	99
10:00	44	0	0	0	0	0	0	0	0	0	0	0	0	44
11:00	30	1	1	0	0	0	0	0	0	0	0	0	0	32
Total	5219	34	5	1	0	0	0	0	0	0	0	0	0	5259

New Line	Percentile	15th	50th	85th	95th
	Speed	20	24	28	30
	Mean Speed (Average)	19.1			
	10 MPH Pace Speed	26-35			
	Number in Pace	1646			
	Percent in Pace	32.0%			
	Number > 45 MPH	1			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	19	24	28	30
	Mean Speed (Average)	19.0			
	10 MPH Pace Speed	26-35			
	Number in Pace	3477			
	Percent in Pace	32.0%			
	Number > 45 MPH	3			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: SB

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	8	0	0	0	0	0	0	0	0	0	0	0	0	8
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
6:00	19	0	0	0	0	0	0	0	0	0	0	0	0	19
7:00	35	2	0	0	0	0	0	0	0	0	0	0	0	37
8:00	39	2	0	0	0	0	0	0	0	0	0	0	0	41
9:00	50	0	0	0	0	0	0	0	0	0	0	0	0	50
10:00	39	1	0	0	0	0	0	0	0	0	0	0	0	40
11:00	40	1	0	0	0	0	0	0	0	0	0	0	0	41
12:00 PM	57	1	0	0	0	0	0	0	0	0	0	0	0	58
1:00	46	1	1	0	0	0	0	0	0	0	0	0	0	48
2:00	60	0	0	0	0	0	0	0	0	0	0	0	0	60
3:00	66	1	0	0	0	0	0	0	0	0	0	0	0	67
4:00	54	0	0	0	0	0	0	0	0	0	0	0	0	54
5:00	55	1	0	0	0	0	0	0	0	0	0	0	0	56
6:00	34	0	0	0	0	0	0	0	0	0	0	0	0	34
7:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
8:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
9:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
10:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
11:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	683	10	1	0	0	0	0	0	0	0	0	0	0	694

New Line		Percentile	15th	50th	85th	95th
		Speed	22	25	29	32
	Mean Speed (Average)		21.4			
	10 MPH Pace Speed		26-35			
	Number in Pace		274			
	Percent in Pace		39.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: SB

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
6:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
7:00	30	1	0	0	0	0	0	0	0	0	0	0	0	31
8:00	40	2	0	0	0	0	0	0	0	0	0	0	0	42
9:00	55	0	0	0	0	0	0	0	0	0	0	0	0	55
10:00	33	0	0	0	0	0	0	0	0	0	0	0	0	33
11:00	35	2	0	0	0	0	0	0	0	0	0	0	0	37
12:00 PM	41	0	0	0	0	0	0	0	0	0	0	0	0	41
1:00	54	0	0	0	0	0	0	0	0	0	0	0	0	54
2:00	54	0	0	0	0	0	0	0	0	0	0	0	0	54
3:00	64	1	0	0	0	0	0	0	0	0	0	0	0	65
4:00	75	0	0	0	0	0	0	0	0	0	0	0	0	75
5:00	49	1	0	0	0	0	0	0	0	0	0	0	0	50
6:00	46	0	0	0	0	0	0	0	0	0	0	0	0	46
7:00	32	0	0	0	0	0	0	0	0	0	0	0	0	32
8:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
9:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
10:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
11:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	685	7	0	0	0	0	0	0	0	0	0	0	0	692

New Line	Percentile	15th	50th	85th	95th
	Speed	18	24	29	32
	Mean Speed (Average)	21.1			
	10 MPH Pace Speed	26-35			
	Number in Pace	257			
	Percent in Pace	38.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	20	25	29	32
	Mean Speed (Average)	21.2			
	10 MPH Pace Speed	26-35			
	Number in Pace	540			
	Percent in Pace	39.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: NB

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	6	0	0	0	0	0	0	0	0	0	0	0	0	6
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
4:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
5:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
6:00	114	0	0	0	0	0	0	0	0	0	0	0	0	114
7:00	158	0	0	0	0	0	0	0	0	0	0	0	0	158
8:00	180	0	0	0	0	0	0	0	0	0	0	0	0	180
9:00	114	0	0	0	0	0	0	0	0	0	0	0	0	114
10:00	108	0	0	0	0	0	0	0	0	0	0	0	0	108
11:00	103	0	0	0	0	0	0	0	0	0	0	0	0	103
12:00 PM	129	0	0	0	0	0	0	0	0	0	0	0	0	129
1:00	117	0	0	0	0	0	0	0	0	0	0	0	0	117
2:00	138	0	0	0	0	0	0	0	0	0	0	0	0	138
3:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
4:00	169	0	0	0	0	0	0	0	0	0	0	0	0	169
5:00	143	0	0	0	0	0	0	0	0	0	0	0	0	143
6:00	117	0	0	0	0	0	0	0	0	0	0	0	0	117
7:00	69	0	0	0	0	0	0	0	0	0	0	0	0	69
8:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
9:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
10:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
11:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	2003	0	0	0	0	0	0	0	0	0	0	0	0	2003

New Line		Percentile	15th	50th	85th	95th
		Speed	19	22	26	28
	Mean Speed (Average)		19.1			
	10 MPH Pace Speed		26-35			
	Number in Pace		659			
	Percent in Pace		33.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: NB

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	6	0	0	0	0	0	0	0	0	0	0	0	0	6
1:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
4:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
5:00	54	0	0	0	0	0	0	0	0	0	0	0	0	54
6:00	103	0	0	0	0	0	0	0	0	0	0	0	0	103
7:00	163	0	0	0	0	0	0	0	0	0	0	0	0	163
8:00	159	0	0	0	0	0	0	0	0	0	0	0	0	159
9:00	109	0	0	0	0	0	0	0	0	0	0	0	0	109
10:00	102	0	0	0	0	0	0	0	0	0	0	0	0	102
11:00	106	0	0	0	0	0	0	0	0	0	0	0	0	106
12:00 PM	105	0	0	0	0	0	0	0	0	0	0	0	0	105
1:00	125	0	0	0	0	0	0	0	0	0	0	0	0	125
2:00	136	0	0	0	0	0	0	0	0	0	0	0	0	136
3:00	158	0	0	0	0	0	0	0	0	0	0	0	0	158
4:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
5:00	156	0	0	0	0	0	0	0	0	0	0	0	0	156
6:00	120	0	0	0	0	0	0	0	0	0	0	0	0	120
7:00	65	0	0	0	0	0	0	0	0	0	0	0	0	65
8:00	53	0	0	0	0	0	0	0	0	0	0	0	0	53
9:00	36	0	0	0	0	0	0	0	0	0	0	0	0	36
10:00	19	0	0	0	0	0	0	0	0	0	0	0	0	19
11:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	1982	0	0	0	0	0	0	0	0	0	0	0	0	1982

New Line	Percentile	15th	50th	85th	95th
	Speed	18	22	26	28
	Mean Speed (Average)	19.2			
	10 MPH Pace Speed	26-35			
	Number in Pace	625			
	Percent in Pace	32.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	18	22	26	28
	Mean Speed (Average)	19.2			
	10 MPH Pace Speed	26-35			
	Number in Pace	1294			
	Percent in Pace	33.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: Combined

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	14	0	0	0	0	0	0	0	0	0	0	0	0	14
1:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
3:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
4:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
5:00	57	0	0	0	0	0	0	0	0	0	0	0	0	57
6:00	133	0	0	0	0	0	0	0	0	0	0	0	0	133
7:00	193	2	0	0	0	0	0	0	0	0	0	0	0	195
8:00	219	2	0	0	0	0	0	0	0	0	0	0	0	221
9:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
10:00	147	1	0	0	0	0	0	0	0	0	0	0	0	148
11:00	143	1	0	0	0	0	0	0	0	0	0	0	0	144
12:00 PM	186	1	0	0	0	0	0	0	0	0	0	0	0	187
1:00	163	1	1	0	0	0	0	0	0	0	0	0	0	165
2:00	198	0	0	0	0	0	0	0	0	0	0	0	0	198
3:00	230	1	0	0	0	0	0	0	0	0	0	0	0	231
4:00	223	0	0	0	0	0	0	0	0	0	0	0	0	223
5:00	198	1	0	0	0	0	0	0	0	0	0	0	0	199
6:00	151	0	0	0	0	0	0	0	0	0	0	0	0	151
7:00	93	0	0	0	0	0	0	0	0	0	0	0	0	93
8:00	61	0	0	0	0	0	0	0	0	0	0	0	0	61
9:00	36	0	0	0	0	0	0	0	0	0	0	0	0	36
10:00	29	0	0	0	0	0	0	0	0	0	0	0	0	29
11:00	16	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	2686	10	1	0	0	0	0	0	0	0	0	0	0	2697

New Line		Percentile	15th	50th	85th	95th
		Speed	19	23	27	29
	Mean Speed (Average)		19.7			
	10 MPH Pace Speed		26-35			
	Number in Pace		933			
	Percent in Pace		35.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: Combined

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	8	0	0	0	0	0	0	0	0	0	0	0	0	8
1:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
2:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
4:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
5:00	59	0	0	0	0	0	0	0	0	0	0	0	0	59
6:00	120	0	0	0	0	0	0	0	0	0	0	0	0	120
7:00	193	1	0	0	0	0	0	0	0	0	0	0	0	194
8:00	199	2	0	0	0	0	0	0	0	0	0	0	0	201
9:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
10:00	135	0	0	0	0	0	0	0	0	0	0	0	0	135
11:00	141	2	0	0	0	0	0	0	0	0	0	0	0	143
12:00 PM	146	0	0	0	0	0	0	0	0	0	0	0	0	146
1:00	179	0	0	0	0	0	0	0	0	0	0	0	0	179
2:00	190	0	0	0	0	0	0	0	0	0	0	0	0	190
3:00	222	1	0	0	0	0	0	0	0	0	0	0	0	223
4:00	239	0	0	0	0	0	0	0	0	0	0	0	0	239
5:00	205	1	0	0	0	0	0	0	0	0	0	0	0	206
6:00	166	0	0	0	0	0	0	0	0	0	0	0	0	166
7:00	97	0	0	0	0	0	0	0	0	0	0	0	0	97
8:00	73	0	0	0	0	0	0	0	0	0	0	0	0	73
9:00	53	0	0	0	0	0	0	0	0	0	0	0	0	53
10:00	28	0	0	0	0	0	0	0	0	0	0	0	0	28
11:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Total	2667	7	0	0	0	0	0	0	0	0	0	0	0	2674

New Line	Percentile	15th	50th	85th	95th
	Speed	18	23	27	29
	Mean Speed (Average)	19.7			
	10 MPH Pace Speed	26-35			
	Number in Pace	882			
	Percent in Pace	33.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	19	23	27	29
	Mean Speed (Average)	19.7			
	10 MPH Pace Speed	26-35			
	Number in Pace	1834			
	Percent in Pace	34.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: SB

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	8	1	0	0	0	0	0	0	0	0	0	0	0	9
1:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
2:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
3:00	4	1	0	0	0	0	0	0	0	0	0	0	0	5
4:00	18	3	1	0	0	0	0	0	0	0	0	0	0	22
5:00	48	16	1	0	0	0	0	0	0	0	0	0	0	65
6:00	104	40	12	2	0	0	0	0	0	0	0	0	0	158
7:00	207	75	22	2	0	0	0	0	0	0	0	0	0	306
8:00	182	75	17	3	0	0	0	0	0	0	0	0	0	277
9:00	116	67	13	3	0	0	0	0	0	0	0	0	0	199
10:00	109	44	15	2	0	0	0	0	0	0	0	0	0	170
11:00	131	58	10	0	0	0	0	0	0	0	0	0	0	199
12:00 PM	156	67	11	0	1	0	0	0	0	0	0	0	0	235
1:00	149	70	16	1	1	0	0	0	0	0	0	0	0	237
2:00	153	75	19	1	0	0	0	0	0	0	0	0	0	248
3:00	230	98	22	4	0	0	0	0	0	0	0	0	0	354
4:00	191	93	33	3	0	0	0	0	0	0	0	0	0	320
5:00	167	95	24	1	0	0	0	0	0	0	0	0	0	287
6:00	165	57	19	0	0	0	0	0	0	0	0	0	0	241
7:00	89	40	9	0	0	0	0	0	0	0	0	0	0	138
8:00	86	22	2	2	0	0	0	0	0	0	0	0	0	112
9:00	27	21	4	0	0	0	0	0	0	0	0	0	0	52
10:00	27	10	2	2	1	0	0	0	0	0	0	0	0	42
11:00	23	5	5	0	0	0	0	0	0	0	0	0	0	33
Total	2393	1035	257	26	3	0	0	0	0	0	0	0	0	3714

New Line				
	Percentile	15th	50th	85th	95th
	Speed	27	32	37	40

Mean Speed (Average)	26.2
10 MPH Pace Speed	31-40
Number in Pace	1431
Percent in Pace	39.0%
Number > 45 MPH	29
Percent > 45 MPH	0.8%

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: SB

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	8	3	1	0	0	0	0	0	0	0	0	0	0	12
1:00	3	1	0	1	0	0	0	0	0	0	0	0	0	5
2:00	3	1	0	0	0	0	0	0	0	0	0	0	0	4
3:00	4	1	1	0	0	0	0	0	0	0	0	0	0	6
4:00	19	3	2	0	0	0	0	0	0	0	0	0	0	24
5:00	57	14	2	0	0	0	0	0	0	0	0	0	0	73
6:00	105	37	5	1	0	0	0	0	0	0	0	0	0	148
7:00	189	91	15	0	0	0	0	0	0	0	0	0	0	295
8:00	171	71	12	1	1	0	0	0	0	0	0	0	0	256
9:00	133	76	28	0	0	0	0	0	0	0	0	0	0	237
10:00	118	59	18	1	1	0	0	0	0	0	0	0	0	197
11:00	138	55	11	3	0	0	0	0	0	0	0	0	0	207
12:00 PM	147	66	5	2	0	0	0	0	0	0	0	0	0	220
1:00	136	81	13	2	0	0	0	0	0	0	0	0	0	232
2:00	137	78	25	1	0	0	0	0	0	0	0	0	0	241
3:00	176	105	22	1	0	0	0	0	0	0	0	0	0	304
4:00	175	102	20	1	0	0	0	0	0	0	0	0	0	298
5:00	171	83	21	3	0	0	0	0	0	0	0	0	0	278
6:00	154	85	8	3	1	0	0	0	0	0	0	0	0	251
7:00	92	33	8	3	0	0	0	0	0	0	0	0	0	136
8:00	106	23	13	0	0	0	0	0	0	0	0	0	0	142
9:00	41	14	4	1	0	0	0	0	0	0	0	0	0	60
10:00	26	6	4	0	0	0	0	0	0	0	0	0	0	36
11:00	16	13	3	0	0	0	0	0	0	0	0	0	0	32
Total	2325	1101	241	24	3	0	0	0	0	0	0	0	0	3694

New Line	Percentile	15th	50th	85th	95th
	Speed	27	32	37	40
	Mean Speed (Average)	26.3			
	10 MPH Pace Speed	31-40			
	Number in Pace	1449			
	Percent in Pace	40.0%			
	Number > 45 MPH	27			
	Percent > 45 MPH	0.7%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	27	32	37	40
	Mean Speed (Average)	26.3			
	10 MPH Pace Speed	31-40			
	Number in Pace	2891			
	Percent in Pace	39.0%			
	Number > 45 MPH	56			
	Percent > 45 MPH	0.8%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: NB

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	7	2	4	0	0	0	0	0	0	0	0	0	0	13
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
3:00	2	0	0	0	1	0	0	0	0	0	0	0	0	3
4:00	6	2	0	0	0	0	0	0	0	0	0	0	0	8
5:00	8	6	3	0	0	0	0	0	0	0	0	0	0	17
6:00	25	19	9	1	0	0	0	0	0	0	0	0	0	54
7:00	59	32	18	6	0	0	0	0	0	0	0	0	0	115
8:00	43	57	18	6	0	0	0	0	0	0	0	0	0	124
9:00	60	38	12	3	0	0	0	0	0	0	0	0	0	113
10:00	62	43	17	4	2	0	0	0	0	0	0	0	0	128
11:00	71	70	28	6	1	0	0	0	0	0	0	0	0	176
12:00 PM	68	69	26	7	2	0	0	0	0	0	0	0	0	172
1:00	59	67	24	7	3	0	0	0	0	0	0	0	0	160
2:00	83	98	40	5	1	0	0	0	0	0	0	0	0	227
3:00	66	107	43	8	3	0	0	0	0	0	0	0	0	227
4:00	111	94	52	8	2	0	0	0	0	0	0	0	0	267
5:00	89	100	28	11	6	0	0	0	0	0	0	0	0	234
6:00	90	54	21	5	0	0	0	0	0	0	0	0	0	170
7:00	69	55	14	3	1	0	0	0	0	0	0	0	0	142
8:00	42	19	5	1	0	0	0	0	0	0	0	0	0	67
9:00	26	11	8	3	0	0	0	0	0	0	0	0	0	48
10:00	14	7	3	0	0	0	0	0	0	0	0	0	0	24
11:00	13	6	3	1	0	0	0	0	1	0	0	0	0	24
Total	1075	956	377	85	22	0	0	0	1	0	0	0	0	2516

New Line		Percentile	15th	50th	85th	95th
		Speed	30	35	40	44
	Mean Speed (Average)		31.5			
	10 MPH Pace Speed		36-45			
	Number in Pace		1333			
	Percent in Pace		53.0%			
	Number > 45 MPH		108			
	Percent > 45 MPH		4.3%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: NB

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	2	3	0	0	0	0	0	0	0	0	0	0	0	5
1:00	5	0	2	0	1	0	0	0	0	0	0	0	0	8
2:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
3:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
4:00	4	1	0	0	0	0	0	0	0	0	0	0	0	5
5:00	10	4	3	1	0	0	0	0	0	0	0	0	0	18
6:00	31	6	14	3	0	0	0	0	0	0	0	0	0	54
7:00	42	45	26	9	1	0	0	0	0	0	0	0	0	123
8:00	52	39	17	9	0	0	0	0	0	0	0	0	0	117
9:00	62	47	18	3	1	0	0	0	0	0	0	0	0	131
10:00	60	48	20	3	0	0	0	0	0	0	0	0	0	131
11:00	61	62	25	6	4	0	0	0	0	0	0	0	0	158
12:00 PM	58	64	25	7	2	0	0	0	0	0	0	0	0	156
1:00	74	71	18	4	1	1	0	0	0	0	0	0	0	169
2:00	79	91	25	6	2	1	0	0	0	0	0	0	0	204
3:00	80	93	41	8	0	1	0	0	0	0	0	0	0	223
4:00	88	112	46	6	2	0	1	0	0	0	0	0	0	255
5:00	122	80	48	5	3	0	0	0	0	0	0	0	0	258
6:00	80	75	22	2	1	0	0	0	0	0	0	0	0	180
7:00	86	37	17	3	1	0	0	0	0	0	0	0	0	144
8:00	53	39	11	2	0	0	0	0	0	0	0	0	0	105
9:00	32	20	6	1	0	0	0	0	0	0	0	0	0	59
10:00	9	8	4	2	2	0	0	0	0	0	0	0	0	25
11:00	6	5	2	0	0	0	0	0	0	1	0	0	0	14
Total	1100	952	390	80	21	3	1	0	0	1	0	0	0	2548

New Line	Percentile	15th	50th	85th	95th
	Speed	30	35	40	43
	Mean Speed (Average)	31.5			
	10 MPH Pace Speed	36-45			
	Number in Pace	1323			
	Percent in Pace	53.0%			
	Number > 45 MPH	106			
	Percent > 45 MPH	4.2%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	30	35	40	43
	Mean Speed (Average)	31.5			
	10 MPH Pace Speed	36-45			
	Number in Pace	2668			
	Percent in Pace	53.0%			
	Number > 45 MPH	214			
	Percent > 45 MPH	4.2%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: Combined

10/9/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	15	3	4	0	0	0	0	0	0	0	0	0	0	22
1:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
2:00	3	1	1	0	0	0	0	0	0	0	0	0	0	5
3:00	6	1	0	0	1	0	0	0	0	0	0	0	0	8
4:00	24	5	1	0	0	0	0	0	0	0	0	0	0	30
5:00	56	22	4	0	0	0	0	0	0	0	0	0	0	82
6:00	129	59	21	3	0	0	0	0	0	0	0	0	0	212
7:00	266	107	40	8	0	0	0	0	0	0	0	0	0	421
8:00	225	132	35	9	0	0	0	0	0	0	0	0	0	401
9:00	176	105	25	6	0	0	0	0	0	0	0	0	0	312
10:00	171	87	32	6	2	0	0	0	0	0	0	0	0	298
11:00	202	128	38	6	1	0	0	0	0	0	0	0	0	375
12:00 PM	224	136	37	7	3	0	0	0	0	0	0	0	0	407
1:00	208	137	40	8	4	0	0	0	0	0	0	0	0	397
2:00	236	173	59	6	1	0	0	0	0	0	0	0	0	475
3:00	296	205	65	12	3	0	0	0	0	0	0	0	0	581
4:00	302	187	85	11	2	0	0	0	0	0	0	0	0	587
5:00	256	195	52	12	6	0	0	0	0	0	0	0	0	521
6:00	255	111	40	5	0	0	0	0	0	0	0	0	0	411
7:00	158	95	23	3	1	0	0	0	0	0	0	0	0	280
8:00	128	41	7	3	0	0	0	0	0	0	0	0	0	179
9:00	53	32	12	3	0	0	0	0	0	0	0	0	0	100
10:00	41	17	5	2	1	0	0	0	0	0	0	0	0	66
11:00	36	11	8	1	0	0	0	0	1	0	0	0	0	57
Total	3468	1991	634	111	25	0	0	0	1	0	0	0	0	6230

New Line		Percentile	15th	50th	85th	95th
		Speed	28	33	38	42
	Mean Speed (Average)		28.4			
	10 MPH Pace Speed		34-43			
	Number in Pace		2646			
	Percent in Pace		42.0%			
	Number > 45 MPH		137			
	Percent > 45 MPH		2.2%			

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: Combined

10/10/2024 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	10	6	1	0	0	0	0	0	0	0	0	0	0	17
1:00	8	1	2	1	1	0	0	0	0	0	0	0	0	13
2:00	5	2	0	0	0	0	0	0	0	0	0	0	0	7
3:00	6	2	1	0	0	0	0	0	0	0	0	0	0	9
4:00	23	4	2	0	0	0	0	0	0	0	0	0	0	29
5:00	67	18	5	1	0	0	0	0	0	0	0	0	0	91
6:00	136	43	19	4	0	0	0	0	0	0	0	0	0	202
7:00	231	136	41	9	1	0	0	0	0	0	0	0	0	418
8:00	223	110	29	10	1	0	0	0	0	0	0	0	0	373
9:00	195	123	46	3	1	0	0	0	0	0	0	0	0	368
10:00	178	107	38	4	1	0	0	0	0	0	0	0	0	328
11:00	199	117	36	9	4	0	0	0	0	0	0	0	0	365
12:00 PM	205	130	30	9	2	0	0	0	0	0	0	0	0	376
1:00	210	152	31	6	1	1	0	0	0	0	0	0	0	401
2:00	216	169	50	7	2	1	0	0	0	0	0	0	0	445
3:00	256	198	63	9	0	1	0	0	0	0	0	0	0	527
4:00	263	214	66	7	2	0	1	0	0	0	0	0	0	553
5:00	293	163	69	8	3	0	0	0	0	0	0	0	0	536
6:00	234	160	30	5	2	0	0	0	0	0	0	0	0	431
7:00	178	70	25	6	1	0	0	0	0	0	0	0	0	280
8:00	159	62	24	2	0	0	0	0	0	0	0	0	0	247
9:00	73	34	10	2	0	0	0	0	0	0	0	0	0	119
10:00	35	14	8	2	2	0	0	0	0	0	0	0	0	61
11:00	22	18	5	0	0	0	0	0	0	1	0	0	0	46
Total	3425	2053	631	104	24	3	1	0	0	1	0	0	0	6242

New Line	Percentile	15th	50th	85th	95th
	Speed	28	33	38	42
	Mean Speed (Average)	28.4			
	10 MPH Pace Speed	34-43			
	Number in Pace	2653			
	Percent in Pace	43.0%			
	Number > 45 MPH	133			
	Percent > 45 MPH	2.1%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	28	33	38	42
	Mean Speed (Average)	28.4			
	10 MPH Pace Speed	34-43			
	Number in Pace	5323			
	Percent in Pace	43.0%			
	Number > 45 MPH	270			
	Percent > 45 MPH	2.2%			

Section H

There are no attachments for Section H.

Section I

There are no attachments for Section I.

FUSS & O'NEILL

Section J

Vauxhall Street Roundabout Proposal Estimate

PROPOSAL ESTIMATE

FOR THE CONSTRUCTION OF:

Vauxhall Street Roundabout Improvements

City of New London

FUSS & O'NEILL

TOWN OF	New London
PROJECT NO.	20170353.A50
ESTIMATE BY	JJM
DATE	Nov-24
REVISED	XX/XX/XXXX
CHECKED BY	JAG

NO.	ITEM	UNIT	QUANTITY	PRICE	AMOUNT
0000564	CENTRAL ISLAND FEATURE	l.s.	1	$40,000.00	$40,000.00
0202000	EARTH EXCAVATION	c.y.	3000	$22.50	$67,500.00
0202100	ROCK EXCAVATION	c.y.	150	$175.00	$26,250.00
0202503	REMOVAL OF CONCRETE CURB	l.f.	2200	$20.00	$44,000.00
0202529	CUT BITUMINOUS CONCRETE PAVEMENT	l.f.	2000	$4.25	$8,500.00
0209001	FORMATION OF SUBGRADE	s.y.	5800	$5.50	$31,900.00
0219001	SEDIMENTATION CONTROL SYSTEM	l.f.	2750	$6.00	$16,500.00
0219011	SEDIMENT CONTROL SYSTEM AT CATCH BASIN	ea.	33	$175.00	$5,775.00
0304002	PROCESSED AGGREGATE BASE	c.y.	1815	$57.00	$103,455.00
0406170	HMA S1	ton	1175	$130.00	$152,750.00
0406159	PMA S0.5	ton	700	$130.00	$91,000.00
0406236	MATERIAL FOR TACK COAT	gal	600	$13.00	$7,800.00
0406999	ASPHALT ADJUSTMENT COST	est.	2000	$1.00	$2,000.00
0586002.10	TYPE 'C' CATCH BASIN (4' SUMP) - 0' - 10' DEEP	ea.	13	$5,250.00	$68,250.00
0586500.10	MANHOLE - 0' - 10' DEEP	ea.	1	$5,500.00	$5,500.00
0586600	RESET CATCH BASIN	ea.	7	$1,250.00	$8,750.00
0586650	RESET MANHOLE	ea.	4	$1,500.00	$6,000.00
0586703	CONVERT CATCH BASIN TO MANHOLE	ea.	12	$2,500.00	$30,000.00
0586750	TYPE 'C' CATCH BASIN TOP	ea.	7	$1,750.00	$12,250.00
0586780	MANHOLE FRAME AND COVER	ea.	1	$2,000.00	$2,000.00
0586790.1	REMOVE DRAINAGE STRUCTURE - 0' - 10' DEEP	ea.	1	$1,000.00	$1,000.00
0601020	STAMPED CONCRETE	s.f.	6275	$28.50	$178,837.50
0686000.12	12" R.C. PIPE - 0' - 10' DEEP	l.f.	550	$95.00	$52,250.00
0813001	5" GRANITE STONE CURBING	l.f.	3350	$70.00	$234,500.00
0813010	REMOVAL OF GRANITE STONE CURBING	l.f.	40	$20.00	$800.00
0813022	2" MOUNTABLE GRANITE STONE CURBING	l.f.	290	$75.00	$21,750.00
0813023	4" MOUNTABLE GRANITE STONE CURBING	l.f.	610	$80.00	$48,800.00
0813451	GRANITE STONE TRANSITION CURBING	l.f.	95	$85.00	$8,075.00
0815091	REMOVAL OF BITUMINOUS CONCRETE LIP CURBING	l.f.	725	$3.00	$2,175.00
0910173	R-B 350 BRIDGE ATTACHMENT - VERTICAL SHAPED PARAPET	ea.	1	$4,500.00	$4,500.00
0910300	METAL BEAM RAIL (R-B MASH)	l.f.	175	$30.00	$5,250.00
0911923	R-B END ANCHORAGE-TYPE I	ea.	1	$2,000.00	$2,000.00
0912503	REMOVE METAL BEAM RAIL	l.f.	300	$7.50	$2,250.00
0921001	CONCRETE SIDEWALK	s.f.	11000	$15.00	$165,000.00
0921005	CONCRETE SIDEWALK RAMP	s.f.	1550	$25.00	$38,750.00
0921048	DETECTABLE WARNING SURFACE	s.f.	325	$45.00	$14,625.00
0921099	FLEXI-PAVE PAVEMENT AT NEW TREE	s.f.	250	$20.00	$5,000.00
0922005	STAMPED BITUMINOUS CONCRETE	s.f.	525	$25.00	$13,125.00
0922500	BITUMINOUS CONCRETE DRIVEWAY (COMMERCIAL)	s.y.	200	$70.00	$14,000.00
0922501	BITUMINOUS CONCRETE DRIVEWAY	s.y.	100	$65.00	$6,500.00
0924004	CONCRETE DRIVEWAY RAMP	s.y.	50	$650.00	$32,500.00
0939001	SWEEPING FOR DUST CONTROL	hr	40	$135.00	$5,400.00
0942001	CALCIUM CHLORIDE FOR DUST CONTROL	ton	10	$250.00	$2,500.00
0943001	WATER FOR DUST CONTROL	m.gal	400	$7.50	$3,000.00
0944000	FURNISHING AND PLACING TOPSOIL	s.y.	4600	$11.00	$50,600.00
0944105	STRUCTURAL SOIL	c.y.	250	$80.00	$20,000.00
0949953	STREET TREES	ea.	14	$1,000.00	$14,000.00
0950005	TURF ESTABLISHMENT	s.y.	5800	$5.00	$29,000.00
0969060	CONSTRUCTION FIELD OFFICE, SMALL	mo.	12	$2,500.00	$30,000.00
0970007	TRAFFICPERSON (UNIFORMED FLAGGER)	hr	3840	$50.00	$192,000.00
1001001	TRENCHING AND BACKFILLING	l.f.	1105	$32.50	$35,912.50
1002008	LIGHT POLE AND FIXTURES (DECORATIVE)	ea.	14	$12,000.00	$168,000.00
1002110	DECORATIVE LIGHT POLE FOUNDATION	ea.	14	$1,400.00	$19,600.00
1008124	1" POLYVINYL CHLORIDE CONDUIT IN TRENCH	l.f.	80	$10.00	$800.00
1008127	2" POLYVINYL CHLORIDE CONDUIT IN TRENCH	l.f.	700	$12.50	$8,750.00
1008181	2" POLYVINYL CHLORIDE CONDUIT UNDER ROADWAY	l.f.	225	$15.00	$3,375.00
1010001	CONCRETE HANDHOLE - (SPECIAL)	ea.	14	$1,250.00	$17,500.00
1012010	NO. 10 SINGLE CONDUCTOR	l.f.	3600	$3.50	$12,600.00
1012036	NO. 6 SINGLE CONDUCTOR	l.f.	4000	$4.00	$16,000.00
1017014	DECORATIVE LIGHT CONTROL CABINET	ea.	1	$20,000.00	$20,000.00
1206023	REMOVAL AND RELOCATION OF EXISTING SIGNS	l.s.	1	$2,000.00	$2,000.00
1207039	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	s.f.	200	$65.00	$13,000.00
1210101	4" WHITE EPOXY RESIN PAVEMENT MARKINGS	l.f.	2500	$1.25	$3,125.00
1210102	4" YELLOW EPOXY RESIN PAVEMENT MARKINGS	l.f.	2900	$1.50	$4,350.00
1210104	8" WHITE EPOXY RESIN PAVEMENT MARKINGS	l.f.	175	$2.00	$350.00
1210105	EPOXY RESIN PAVEMENT MARKINGS, SYMBOLS AND LEGENDS	s.f.	1150	$6.00	$6,900.00

1302061	ADJUST GATE BOX (WATER)	ea.	6	$350.00	$2,100.00
1303189	RESET EXISTING FIRE HYDRANT	ea.	1	$3,000.00	$3,000.00
A	**Major Items Subtotal** (EXCLUDES CLEARING AND GRUBBING, M&PT MOBILIZATION, CONSTRUCTION SURVEYING)				**$2,265,730.00**
B	**Minor Items Subtotal (0% at Final Design)**	15	% of Line "A"		**$339,859.50**
C	**Major and Minor Contract Items Subtotal (A + B)**				**$2,605,589.50**
	Other Item Allowances				
0201001	Clearing and Grubbing (suggested 0.5% - 2%)	0.5	% of Line "C"		$13,027.95
0971001	M & P of Traffic (suggested 2% - 5%)	4	% of Line "C"		$104,223.58
0975004	Mobilization and Project Closeout (suggested 4% - 10%)	5	% of Line "C"		$130,279.48
0980020	Construction Surveying (suggested 1% - 2%)	2	% of Line "C"		$52,111.79
D	**Other Items Subtotal**				**$299,642.79**
E	**CONTRACT SUBTOTAL (C + D)**				**$2,905,232.29**
	Inflation Costs (Simple Method)				
	Date of Estimate	Nov-24			
	Anticipated Bid Date	Nov-27			
	Base Years	3			
	Annual Inflation (5% annually, 0% at Final Design)	5.0%			
F	**Inflation Subtotal**	15.0%	of Line "E"		**$435,784.84**
G	**TOTAL CONTRACT COST ESTIMATE (E + F)**				**$3,341,017.14**

Project Costs Summary		
Contract Cost Estimate (Line "G")		$3,341,017.14
Contingencies (10% for all LOTCIP projects)	10%	$334,101.71
Incidentals (10% for all LOTCIP projects)	10%	$334,101.71
ROW	LS	$0.00
Utilities	LS	**$0.00**
TOTAL PROJECT COST		**$4,009,220.56**

Section K

There are no attachments for Section K.

FUSS & O'NEILL

Section L

Intersection Level of Service Summary

2024 Weekday AM Peak Hour No Build

2024 Weekday PM Peak Hour No Build

2024 Weekend Midday Peak Hour No Build

2044 Weekday AM Peak Hour No Build

2044 Weekday PM Peak Hour No Build

2044 Weekend Midday Peak Hour No Build

2024 Weekday AM Peak Hour Build

2024 Weekday PM Peak Hour Build

2024 Weekend Midday Peak Hour Build

2044 Weekday AM Peak Hour Build

2044 Weekday PM Peak Hour Build

2044 Weekend Midday Peak Hour Build

FUSS & O'NEILL

Intersection Level of Service Summary
Vauxhall St LOTCIP Application
New London, Connecticut

1 Introduction

Capacity analyses for the unsignalized intersection network were conducted using Synchro Professional Software, version 11.0.

In discussing intersection capacity analyses results, two terms are used to describe the operating condition of the road or intersection. These two terms are volume to capacity ratio (v/c) and level of service (LOS).

The v/c ratio is a ratio of the volume of traffic using an intersection to the total capacity of the intersection (the maximum number of vehicles that can utilize the intersection during an hour). The v/c ratio can be used to describe the percentage of capacity utilized by a single intersection movement, a combination of movements, an entire intersection approach, or the intersection as a whole.

LOS is a measure of the delay experienced by stopped vehicles at an intersection. LOS is rated on a scale from A to F, with A describing a condition of very low delay (less than 10 seconds per vehicle), and F describing a condition where delays will exceed 50 seconds per vehicle for unsignalized intersections and 80 seconds per vehicle for signalized intersections. Delay is described as a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Therefore, intersections with longer delay times are less acceptable to most drivers.

In discussing roundabout capacity analyses, LOS is used to provide a description of the delay and operational characteristics of each approach. All approaches entering the roundabout yield to traffic within the roundabout; therefore, delay is possible on each approach. However, the design of modern roundabouts provides for continuous movement within the roundabout, thus generating minimal delay for each approach and providing an overall improvement in LOS when compared to a signalized intersection.

LOS is generally used to describe the operation (based on delay time) of both signalized and unsignalized intersections, while v/c ratio is applied to signalized intersections only. These definitions for v/c ratio and LOS, as well as the methodology for conducting signalized and unsignalized intersection capacity analyses, are taken from the "Highway Capacity Manual 6th Edition" published by the Transportation Research Board.

2 Results

Capacity analyses were conducted for the unsignalized intersections of Vauxhall St Ext., Vauxhall St Ext. at Vauxhall St & 516 Driveway, and Vauxhall St & Vauxhall St Ext. at Phillips St & Private Driveway under No Build and Build conditions for existing 2024 volumes and design year 2044 volumes. No-build conditions refer to both intersections remaining under current unsignalized operations and Build conditions include construction of a roundabout at the intersection Vauxhall St & Vauxhall St Ext. at Phillips St & Private Driveway, elimination of the westbound approach at the intersection Vauxhall St Ext. at Vauxhall St & 516 Driveway and the construction of a T-intersection between Vauxhall St and Vauxhall St Ext.

Due to the limitations of the HCM analysis feature in Synchro Professional Software, version 11.0, the intersection of Vauxhall St & Vauxhall St Ext. at Phillips St & Private Driveway in its No-Build condition was analyzed as 2 different intersections (Vauxhall St southbound at Phillips St and Vauxhall St Ext. at Vauxhall St northbound & Private Driveway) since it is an atypical 5-leg intersection and the Synchro software is not able to analyze this type of intersection.

Keeping in mind what was said above, the results of the analyses indicate that the proposed roundabout will maintain acceptable levels of service under all conditions.

The capacity analysis for the proposed roundabout results in an overall reduction in delays and an acceptable level of service when compared to the No-Build analysis. It is important to note that the primary benefit of roundabout implementation at this intersection will be an increase in pedestrian and vehicular safety through a reduction in vehicular travel speeds and a safer intersection layout.

Table 1

Unsignalized Intersection Level of Service Summary
Vauxhall Street Roundabout Improvements
New London, Connecticut

Intersection	2024 Weekday AM Peak Hour		2024 Weekday PM Peak Hour		2024 Saturday Midday Peak Hour		2044 Weekday AM Peak Hour		2044 Weekday PM Peak Hour		2044 Saturday Midday Peak Hour	
	No Build	Build	No Build	Build	No Build	Build	No Build	Build	No Build	Build	No Build	Build
Vauxhall St Ext. (No-Build) *	A/0/0	N/A	A/0/0	N/A	A/0/0	N/A	A/0.2/0.01	N/A	A/0.1/0.01	N/A	A/0.2/0.01	N/A
Vauxhall St Ext. at Vauxhall St & 516 Driveway *	A/4.8/0.15	A/0/0	A/3.1/0.11	A/0/0	A/3.5/0.1	A/0/0	A/4.4/0.18	A/0/0	A/3/0.13	A/0/0	A/3.7/0.13	A/0/0
Phillips St at Vauxhall St & Vauxhall St Ext. (No-Build) **	A/8.9/0.29	N/A	B/10.6/0.44	N/A	A/9.8/0.37	N/A	A/9.4/0.32	N/A	B/11.9/0.51	N/A	B/10.4/0.42	N/A
Vauxhall St & Vauxhall St Ext. at Driveway (No-Build) *	B/9.2/0.34	N/A	C/13/0.61	N/A	C/11.7/0.53	N/A	B/10/0.42	N/A	D/17.1/0.74	N/A	C/13.3/0.62	N/A
Vauxhall St Ext. at Vauxhall St (Build) *	N/A	B/2/0.07	N/A	B/2.4/0.17	N/A	B/2.1/0.1	N/A	B/2.6/0.12	N/A	C/3.1/0.26	N/A	B/2.4/0.12
Vauxhall St & Vauxhall St Ext. at Phillips St & Private Driveway (Build) **	N/A	A/5.1/0.2	N/A	A/5.9/0.29	N/A	A/5.3/0.25	N/A	A/5.4/0.23	N/A	A/6.3/0.33	N/A	A/5.5/0.27

*Indicates Lowest Approach LOS/ Intersection Delay (s)/ Max v/c ratio
**Indicates Intersection LOS/ Intersection Delay (s)/ Max v/c ratio



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.946			
Flt Protected						
Satd. Flow (prot)	0	1959	1963	0	1900	0
Flt Permitted						
Satd. Flow (perm)	0	1959	1963	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		150	186		192	
Travel Time (s)		3.4	4.2		4.4	

Intersection Summary	
Area Type:	Other



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Traffic Volume (vph)	1	142	183	122	0	0
Future Volume (vph)	1	142	183	122	0	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	10%	5%	2%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	1	154	199	133	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	155	332	0	0	0

Intersection Summary

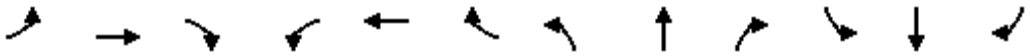
Intersection	
Int Delay, s/veh	0

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1	142	183	122	0	0
Future Vol, veh/h	1	142	183	122	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	10	5	2	0	0
Mvmt Flow	1	154	199	133	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	332	0	-	0	422	-
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	4.1	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	-
Pot Cap-1 Maneuver	1239	-	-	-	592	0
Stage 1	-	-	-	-	783	0
Stage 2	-	-	-	-	877	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1239	-	-	-	591	-
Mov Cap-2 Maneuver	-	-	-	-	591	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	877	-

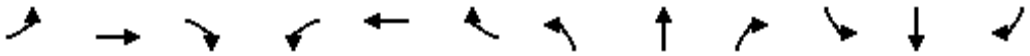
Approach	NB	SB	NE
HCM Control Delay, s	0.1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	-	1239	-	-	-
HCM Lane V/C Ratio	-	0.001	-	-	-
HCM Control Delay (s)	0	7.9	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	16	12	16	12	15	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	2153	0	0	1791	0	0	2091	0	0	2091	0
Flt Permitted												
Satd. Flow (perm)	0	2153	0	0	1791	0	0	2091	0	0	2091	0
Link Speed (mph)		25			30			25			25	
Link Distance (ft)		125			192			207			253	
Travel Time (s)		3.4			4.4			5.6			6.9	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	0	0	123	0	78	0	0	39	0
Future Volume (vph)	0	0	0	0	0	123	0	78	0	0	39	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	4%	0%	3%	0%	0%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	0	0	145	0	92	0	0	46	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	145	0	0	92	0	0	46	0

Intersection Summary

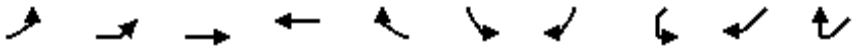
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	123	0	78	0	0	39	0
Future Vol, veh/h	0	0	0	0	0	123	0	78	0	0	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	4	0	3	0	0	3	0
Mvmt Flow	0	0	0	0	0	145	0	92	0	0	46	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	211	138	46	138	138	92	46	0	-	-	-	0
Stage 1	46	46	-	92	92	-	-	-	-	-	-	-
Stage 2	165	92	-	46	46	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.24	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.336	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	750	757	1029	837	757	960	1575	-	0	0	-	-
Stage 1	973	861	-	920	823	-	-	-	0	0	-	-
Stage 2	842	823	-	973	861	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	637	757	1029	837	757	960	1575	-	-	-	-	-
Mov Cap-2 Maneuver	637	757	-	837	757	-	-	-	-	-	-	-
Stage 1	973	861	-	920	823	-	-	-	-	-	-	-
Stage 2	715	823	-	973	861	-	-	-	-	-	-	-

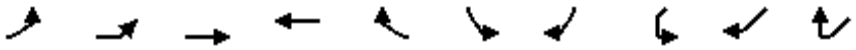
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.4	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1575	-	-	960	-	-
HCM Lane V/C Ratio	-	-	-	0.151	-	-
HCM Control Delay (s)	0	-	0	9.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	-	-



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	16	12	16	12	16	12	12
Grade (%)			0%	0%		0%		0%		
Storage Length (ft)		0			0	0	0	0	0	
Storage Lanes		0			0	1	0	1	0	
Taper Length (ft)		25				25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										
Frt				0.977		0.987		0.924		
Flt Protected			0.985			0.957		0.979		
Satd. Flow (prot)	0	0	1959	1994	0	1980	0	1859	0	0
Flt Permitted			0.985			0.957		0.979		
Satd. Flow (perm)	0	0	1959	1994	0	1980	0	1859	0	0
Link Speed (mph)			25	25		25		30		
Link Distance (ft)			204	116		207		196		
Travel Time (s)			5.6	3.2		5.6		4.5		

Intersection Summary	
Area Type:	Other



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Traffic Volume (vph)	65	0	150	59	12	35	4	80	102	1
Future Volume (vph)	65	0	150	59	12	35	4	80	102	1
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	11%	5%	8%	3%	0%	2%	7%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%		0%		
Adj. Flow (vph)	70	0	161	63	13	38	4	86	110	1
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	231	76	0	42	0	197	0	0

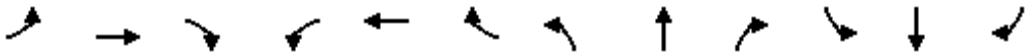
Intersection Summary

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	0	150	59	12	35	4	80	102
Future Vol, veh/h	0	150	59	12	35	4	80	102
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	11	5	8	3	0	2	7
Mvmt Flow	0	161	63	13	38	4	86	110
Number of Lanes	0	1	1	0	1	0	1	0

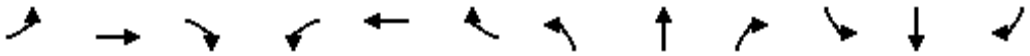
Approach	WB	SB	SW
Opposing Approach	EB		
Opposing Lanes	1	0	0
Conflicting Approach Left		SW	WB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	SB	EB	EB
Conflicting Lanes Right	1	1	1
HCM Control Delay	8.5	8.5	8.5
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SWLn1
Vol Left, %	30%	0%	90%	44%
Vol Thru, %	70%	83%	0%	0%
Vol Right, %	0%	17%	10%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	71	39	183
LT Vol	65	0	35	80
Through Vol	150	59	0	0
RT Vol	0	12	4	103
Lane Flow Rate	231	76	42	197
Geometry Grp	1	1	1	1
Degree of Util (X)	0.289	0.104	0.06	0.232
Departure Headway (Hd)	4.496	4.888	5.12	4.236
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	800	732	698	848
Service Time	2.523	2.926	3.162	2.263
HCM Lane V/C Ratio	0.289	0.104	0.06	0.232
HCM Control Delay	9.4	8.5	8.5	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.2	0.3	0.2	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	16	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.938			0.955			0.987				
Flt Protected		0.985			0.997			0.977				
Satd. Flow (prot)	0	1848	0	0	1687	0	0	2076	0	0	2153	0
Flt Permitted		0.985			0.997			0.977				
Satd. Flow (perm)	0	1848	0	0	1687	0	0	2076	0	0	2153	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		116			127			139			202	
Travel Time (s)		3.2			3.5			3.8			4.6	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	83	60	122	2	17	9	54	51	11	0	0	0
Future Volume (vph)	83	60	122	2	17	9	54	51	11	0	0	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	12%	5%	6%	50%	6%	33%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	89	65	131	2	18	10	58	55	12	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	285	0	0	30	0	0	125	0	0	0	0

Intersection Summary

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			↑	
Traffic Vol, veh/h	83	60	122	2	17	9	54	51	11	0	0	0
Future Vol, veh/h	83	60	122	2	17	9	54	51	11	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	12	5	6	50	6	33	0	0	0	0	0	0
Mvmt Flow	89	65	131	2	18	10	58	55	12	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	192	184	1	276	178	61	1	0	0	-	-	0
Stage 1	1	1	-	177	177	-	-	-	-	-	-	-
Stage 2	191	183	-	99	1	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.55	6.26	7.6	6.56	6.53	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.22	5.55	-	6.6	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.55	-	6.6	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.045	3.354	3.95	4.054	3.597	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	746	705	1072	590	709	924	1635	-	-	0	-	0
Stage 1	997	889	-	725	745	-	-	-	-	0	-	0
Stage 2	788	743	-	802	887	-	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	703	679	1072	467	683	924	1635	-	-	-	-	-
Mov Cap-2 Maneuver	703	679	-	467	683	-	-	-	-	-	-	-
Stage 1	960	889	-	698	717	-	-	-	-	-	-	-
Stage 2	732	716	-	653	887	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	10.2	3.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1635	-	-	828	720	-
HCM Lane V/C Ratio	0.036	-	-	0.344	0.042	-
HCM Control Delay (s)	7.3	0	-	11.6	10.2	-
HCM Lane LOS	A	A	-	B	B	-
HCM 95th %tile Q(veh)	0.1	-	-	1.5	0.1	-



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.967			
Flt Protected		0.999				
Satd. Flow (prot)	0	2130	2051	0	1900	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	2130	2051	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		150	186		192	
Travel Time (s)		3.4	4.2		4.4	

Intersection Summary	
Area Type:	Other



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Traffic Volume (vph)	4	285	258	83	0	0
Future Volume (vph)	4	285	258	83	0	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	4	291	263	85	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	295	348	0	0	0

Intersection Summary

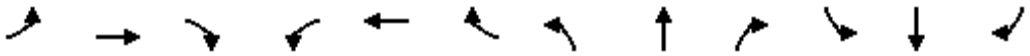
Intersection	
Int Delay, s/veh	0

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	4	285	258	83	0	0
Future Vol, veh/h	4	285	258	83	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	4	291	263	85	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	348	0	-	0	605	-
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	4.1	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	-
Pot Cap-1 Maneuver	1222	-	-	-	464	0
Stage 1	-	-	-	-	751	0
Stage 2	-	-	-	-	757	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1222	-	-	-	462	-
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	757	-

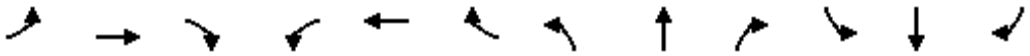
Approach	NB	SB	NE
HCM Control Delay, s	0.1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	-	1222	-	-	-
HCM Lane V/C Ratio	-	0.003	-	-	-
HCM Control Delay (s)	0	8	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	16	12	16	12	15	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.868							
Flt Protected					0.999							
Satd. Flow (prot)	0	2153	0	0	1831	0	0	2132	0	0	2031	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	2153	0	0	1831	0	0	2132	0	0	2031	0
Link Speed (mph)		25			30			25			25	
Link Distance (ft)		125			192			207			253	
Travel Time (s)		3.4			4.4			5.6			6.9	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	2	0	85	0	103	0	0	68	0
Future Volume (vph)	0	0	0	2	0	85	0	103	0	0	68	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	6%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	2	0	97	0	117	0	0	77	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	99	0	0	117	0	0	77	0

Intersection Summary

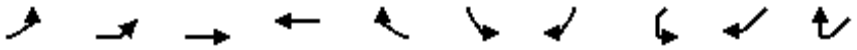
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	0	85	0	103	0	0	68	0
Future Vol, veh/h	0	0	0	2	0	85	0	103	0	0	68	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	2	0	1	0	0	6	0
Mvmt Flow	0	0	0	2	0	97	0	117	0	0	77	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	243	194	77	194	194	117	77	0	-	-	-	0
Stage 1	77	77	-	117	117	-	-	-	-	-	-	-
Stage 2	166	117	-	77	77	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.22	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.318	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	715	705	990	770	705	935	1535	-	0	0	-	-
Stage 1	937	835	-	892	803	-	-	-	0	0	-	-
Stage 2	841	803	-	937	835	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	641	705	990	770	705	935	1535	-	-	-	-	-
Mov Cap-2 Maneuver	641	705	-	770	705	-	-	-	-	-	-	-
Stage 1	937	835	-	892	803	-	-	-	-	-	-	-
Stage 2	754	803	-	937	835	-	-	-	-	-	-	-

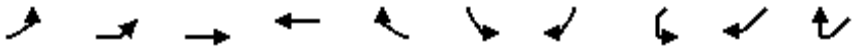
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.3	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1535	-	-	930	-	-
HCM Lane V/C Ratio	-	-	-	0.106	-	-
HCM Control Delay (s)	0	-	0	9.3	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	-



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	16	12	16	12	16	12	12
Grade (%)			0%	0%		0%		0%		
Storage Length (ft)		0			0	0	0	0	0	
Storage Lanes		0			0	1	0	1	0	
Taper Length (ft)		25				25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										
Frt				0.971		0.979		0.905		
Flt Protected			0.989			0.959		0.985		
Satd. Flow (prot)	0	0	2113	2061	0	1908	0	1880	0	0
Flt Permitted			0.989			0.959		0.985		
Satd. Flow (perm)	0	0	2113	2061	0	1908	0	1880	0	0
Link Speed (mph)			25	25		25		30		
Link Distance (ft)			204	116		207		196		
Travel Time (s)			5.6	3.2		5.6		4.5		

Intersection Summary	
Area Type:	Other



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Traffic Volume (vph)	71	0	244	108	30	59	11	77	179	2
Future Volume (vph)	71	0	244	108	30	59	11	77	179	2
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	1%	1%	3%	7%	0%	0%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%		0%		
Adj. Flow (vph)	74	0	254	113	31	61	11	80	186	2
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	328	144	0	72	0	268	0	0

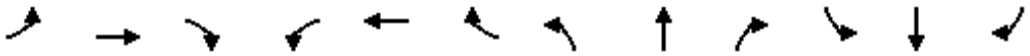
Intersection Summary

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	0	244	108	30	59	11	77	179
Future Vol, veh/h	0	244	108	30	59	11	77	179
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	1	1	3	7	0	0	3
Mvmt Flow	0	254	113	31	61	11	80	186
Number of Lanes	0	1	1	0	1	0	1	0

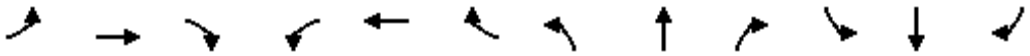
Approach	WB	SB	SW
Opposing Approach	EB		
Opposing Lanes	1	0	0
Conflicting Approach Left		SW	WB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	SB	EB	EB
Conflicting Lanes Right	1	1	1
HCM Control Delay	9.8	9.6	9.9
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SWLn1
Vol Left, %	23%	0%	84%	30%
Vol Thru, %	77%	78%	0%	0%
Vol Right, %	0%	22%	16%	70%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	315	138	70	258
LT Vol	71	0	59	77
Through Vol	244	108	0	0
RT Vol	0	30	11	181
Lane Flow Rate	328	144	73	269
Geometry Grp	1	1	1	1
Degree of Util (X)	0.44	0.214	0.117	0.337
Departure Headway (Hd)	4.826	5.357	5.793	4.516
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	738	674	622	785
Service Time	2.914	3.359	3.798	2.607
HCM Lane V/C Ratio	0.444	0.214	0.117	0.343
HCM Control Delay	11.7	9.8	9.6	9.9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.3	0.8	0.4	1.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	16	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.958			0.947			0.981				
Flt Protected		0.980			0.997			0.981				
Satd. Flow (prot)	0	1996	0	0	1958	0	0	2040	0	0	2153	0
Flt Permitted		0.980			0.997			0.981				
Satd. Flow (perm)	0	1996	0	0	1958	0	0	2040	0	0	2153	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		116			127			139			202	
Travel Time (s)		3.2			3.5			3.8			4.6	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	152	111	117	7	59	42	79	95	29	0	0	0
Future Volume (vph)	152	111	117	7	59	42	79	95	29	0	0	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	1%	0%	0%	2%	3%	0%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	158	116	122	7	61	44	82	99	30	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	396	0	0	112	0	0	211	0	0	0	0

Intersection Summary

Intersection	
Int Delay, s/veh	13

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			↑	
Traffic Vol, veh/h	152	111	117	7	59	42	79	95	29	0	0	0
Future Vol, veh/h	152	111	117	7	59	42	79	95	29	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	1	2	1	0	0	2	3	0	3	0	0	0
Mvmt Flow	158	116	122	7	61	44	82	99	30	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	332	294	1	398	279	114	1	0	0	-	-	0
Stage 1	1	1	-	278	278	-	-	-	-	-	-	-
Stage 2	331	293	-	120	1	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.52	6.21	7.1	6.5	6.22	4.13	-	-	-	-	-
Critical Hdwy Stg 1	6.11	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.018	3.309	3.5	4	3.318	2.227	-	-	-	-	-
Pot Cap-1 Maneuver	623	617	1087	566	632	939	1615	-	-	0	-	0
Stage 1	1025	895	-	733	684	-	-	-	-	0	-	0
Stage 2	684	670	-	889	899	-	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	525	583	1087	409	597	939	1615	-	-	-	-	-
Mov Cap-2 Maneuver	525	583	-	409	597	-	-	-	-	-	-	-
Stage 1	969	895	-	693	646	-	-	-	-	-	-	-
Stage 2	558	633	-	687	899	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.9	11.4	2.9	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1615	-	-	647	672	-
HCM Lane V/C Ratio	0.051	-	-	0.612	0.167	-
HCM Control Delay (s)	7.3	0	-	18.9	11.4	-
HCM Lane LOS	A	A	-	C	B	-
HCM 95th %tile Q(veh)	0.2	-	-	4.2	0.6	-



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.960			
Flt Protected						
Satd. Flow (prot)	0	2091	2067	0	1900	0
Flt Permitted						
Satd. Flow (perm)	0	2091	2067	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		150	186		192	
Travel Time (s)		3.4	4.2		4.4	

Intersection Summary	
Area Type:	Other



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Traffic Volume (vph)	2	193	194	82	0	0
Future Volume (vph)	2	193	194	82	0	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	2	208	209	88	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	210	297	0	0	0

Intersection Summary

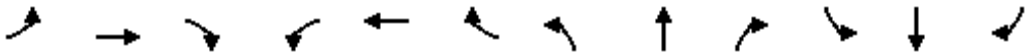
Intersection	
Int Delay, s/veh	0

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	2	193	194	82	0	0
Future Vol, veh/h	2	193	194	82	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	0	0
Mvmt Flow	2	208	209	88	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	297	0	-	0	465	-
Stage 1	-	-	-	-	253	-
Stage 2	-	-	-	-	212	-
Critical Hdwy	4.1	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	-
Pot Cap-1 Maneuver	1276	-	-	-	559	0
Stage 1	-	-	-	-	794	0
Stage 2	-	-	-	-	828	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1276	-	-	-	558	-
Mov Cap-2 Maneuver	-	-	-	-	558	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	828	-

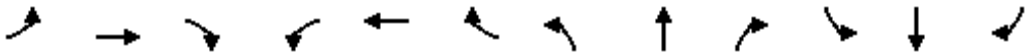
Approach	NB	SB	NE
HCM Control Delay, s	0.1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	-	1276	-	-	-
HCM Lane V/C Ratio	-	0.002	-	-	-
HCM Control Delay (s)	0	7.8	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	16	12	16	12	15	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.869							
Flt Protected					0.998							
Satd. Flow (prot)	0	2153	0	0	1868	0	0	2153	0	0	2111	0
Flt Permitted					0.998							
Satd. Flow (perm)	0	2153	0	0	1868	0	0	2153	0	0	2111	0
Link Speed (mph)		25			30			25			25	
Link Distance (ft)		125			192			207			253	
Travel Time (s)		3.4			4.4			5.6			6.9	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	3	0	81	0	75	0	0	57	0
Future Volume (vph)	0	0	0	3	0	81	0	75	0	0	57	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	3	0	94	0	87	0	0	66	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	97	0	0	87	0	0	66	0

Intersection Summary

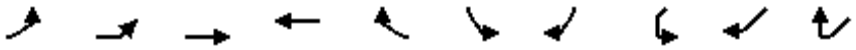
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	0	81	0	75	0	0	57	0
Future Vol, veh/h	0	0	0	3	0	81	0	75	0	0	57	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	2	0
Mvmt Flow	0	0	0	3	0	94	0	87	0	0	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	200	153	66	153	153	87	66	0	-	-	-	0
Stage 1	66	66	-	87	87	-	-	-	-	-	-	-
Stage 2	134	87	-	66	66	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	763	742	1003	819	742	977	1549	-	0	0	-	-
Stage 1	950	844	-	926	827	-	-	-	0	0	-	-
Stage 2	874	827	-	950	844	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	690	742	1003	819	742	977	1549	-	-	-	-	-
Mov Cap-2 Maneuver	690	742	-	819	742	-	-	-	-	-	-	-
Stage 1	950	844	-	926	827	-	-	-	-	-	-	-
Stage 2	790	827	-	950	844	-	-	-	-	-	-	-

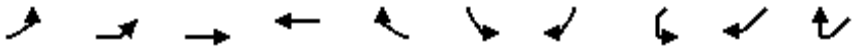
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1549	-	-	970	-	-
HCM Lane V/C Ratio	-	-	-	0.101	-	-
HCM Control Delay (s)	0	-	0	9.1	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	-



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	16	12	16	12	16	12	12
Grade (%)			0%	0%		0%		0%		
Storage Length (ft)		0			0	0	0	0	0	
Storage Lanes		0			0	1	0	1	0	
Taper Length (ft)		25				25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										
Frt				0.976		0.984		0.929		
Flt Protected			0.991			0.958		0.977		
Satd. Flow (prot)	0	0	2116	2102	0	2030	0	1945	0	0
Flt Permitted			0.991			0.958		0.977		
Satd. Flow (perm)	0	0	2116	2102	0	2030	0	1945	0	0
Link Speed (mph)			25	25		25		30		
Link Distance (ft)			204	116		207		196		
Travel Time (s)			5.6	3.2		5.6		4.5		

Intersection Summary	
Area Type:	Other



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Traffic Volume (vph)	45	0	214	109	24	53	7	92	96	6
Future Volume (vph)	45	0	214	109	24	53	7	92	96	6
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%		0%		
Adj. Flow (vph)	49	0	233	118	26	58	8	100	104	7
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	282	144	0	66	0	211	0	0

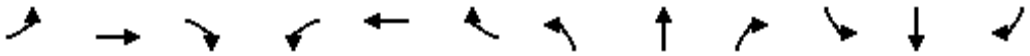
Intersection Summary

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	0	214	109	24	53	7	92	96
Future Vol, veh/h	0	214	109	24	53	7	92	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	1	0	0	0	0	0	1
Mvmt Flow	0	233	118	26	58	8	100	104
Number of Lanes	0	1	1	0	1	0	1	0

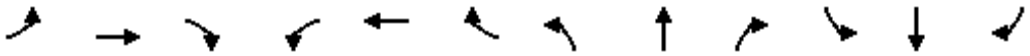
Approach	WB	SB	SW
Opposing Approach	EB		
Opposing Lanes	1	0	0
Conflicting Approach Left		SW	WB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	SB	EB	EB
Conflicting Lanes Right	1	1	1
HCM Control Delay	9.4	9	9.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SWLn1
Vol Left, %	17%	0%	88%	47%
Vol Thru, %	83%	82%	0%	0%
Vol Right, %	0%	18%	12%	53%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	259	133	60	194
LT Vol	45	0	53	92
Through Vol	214	109	0	0
RT Vol	0	24	7	102
Lane Flow Rate	282	145	65	211
Geometry Grp	1	1	1	1
Degree of Util (X)	0.368	0.201	0.097	0.266
Departure Headway (Hd)	4.711	5.01	5.343	4.549
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	760	711	665	784
Service Time	2.767	3.082	3.425	2.609
HCM Lane V/C Ratio	0.371	0.204	0.098	0.269
HCM Control Delay	10.5	9.4	9	9.3
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.7	0.7	0.3	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	16	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.948			0.957			0.971				
Flt Protected		0.987			0.993			0.981				
Satd. Flow (prot)	0	2000	0	0	1986	0	0	2051	0	0	2153	0
Flt Permitted		0.987			0.993			0.981				
Satd. Flow (perm)	0	2000	0	0	1986	0	0	2051	0	0	2153	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		116			127			139			202	
Travel Time (s)		3.2			3.5			3.8			4.6	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	91	131	137	19	74	43	59	61	32	0	0	0
Future Volume (vph)	91	131	137	19	74	43	59	61	32	0	0	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	99	142	149	21	80	47	64	66	35	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	390	0	0	148	0	0	165	0	0	0	0

Intersection Summary

Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			↑	
Traffic Vol, veh/h	91	131	137	19	74	43	59	61	32	0	0	0
Future Vol, veh/h	91	131	137	19	74	43	59	61	32	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	99	142	149	21	80	47	64	66	35	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	276	230	1	359	213	84	1	0	0	-	-	0
Stage 1	1	1	-	212	212	-	-	-	-	-	-	-
Stage 2	275	229	-	147	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.21	7.1	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.309	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	680	672	1087	600	688	981	1635	-	-	0	-	0
Stage 1	1027	897	-	795	731	-	-	-	-	0	-	0
Stage 2	736	717	-	860	899	-	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	568	644	1087	416	659	981	1635	-	-	-	-	-
Mov Cap-2 Maneuver	568	644	-	416	659	-	-	-	-	-	-	-
Stage 1	984	897	-	762	700	-	-	-	-	-	-	-
Stage 2	594	687	-	624	899	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.4	11.8	2.8	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1635	-	-	733	674	-
HCM Lane V/C Ratio	0.039	-	-	0.532	0.219	-
HCM Control Delay (s)	7.3	0	-	15.4	11.8	-
HCM Lane LOS	A	A	-	C	B	-
HCM 95th %tile Q(veh)	0.1	-	-	3.2	0.8	-



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.948			
Flt Protected		0.997				
Satd. Flow (prot)	0	1963	1966	0	1900	0
Flt Permitted		0.997				
Satd. Flow (perm)	0	1963	1966	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		150	186		192	
Travel Time (s)		3.4	4.2		4.4	

Intersection Summary	
Area Type:	Other



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Traffic Volume (vph)	10	150	210	130	0	0
Future Volume (vph)	10	150	210	130	0	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	10%	5%	2%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	11	163	228	141	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	174	369	0	0	0

Intersection Summary

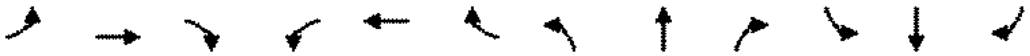
Intersection	
Int Delay, s/veh	0.2

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	10	150	210	130	0	0
Future Vol, veh/h	10	150	210	130	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	10	5	2	0	0
Mvmt Flow	11	163	228	141	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	369	0	-	0	484	-
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	185	-
Critical Hdwy	4.1	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	-
Pot Cap-1 Maneuver	1201	-	-	-	545	0
Stage 1	-	-	-	-	757	0
Stage 2	-	-	-	-	852	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1201	-	-	-	540	-
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	852	-

Approach	NB	SB	NE
HCM Control Delay, s	0.5	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	-	1201	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	0	8	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	16	12	16	12	15	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	2153	0	0	1791	0	0	2091	0	0	2091	0
Flt Permitted												
Satd. Flow (perm)	0	2153	0	0	1791	0	0	2091	0	0	2091	0
Link Speed (mph)		25			30			25			25	
Link Distance (ft)		125			192			207			253	
Travel Time (s)		3.4			4.4			5.6			6.9	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	0	0	140	0	110	0	0	60	0
Future Volume (vph)	0	0	0	0	0	140	0	110	0	0	60	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	4%	0%	3%	0%	0%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	0	0	165	0	129	0	0	71	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	165	0	0	129	0	0	71	0

Intersection Summary

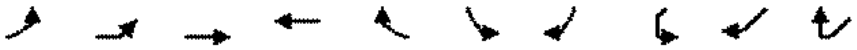
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	140	0	110	0	0	60	0
Future Vol, veh/h	0	0	0	0	0	140	0	110	0	0	60	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	4	0	3	0	0	3	0
Mvmt Flow	0	0	0	0	0	165	0	129	0	0	71	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	283	200	71	200	200	129	71	0	-	-	-	0
Stage 1	71	71	-	129	129	-	-	-	-	-	-	-
Stage 2	212	129	-	71	71	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.24	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.336	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	673	699	997	763	699	916	1542	-	0	0	-	-
Stage 1	944	840	-	880	793	-	-	-	0	0	-	-
Stage 2	795	793	-	944	840	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	552	699	997	763	699	916	1542	-	-	-	-	-
Mov Cap-2 Maneuver	552	699	-	763	699	-	-	-	-	-	-	-
Stage 1	944	840	-	880	793	-	-	-	-	-	-	-
Stage 2	652	793	-	944	840	-	-	-	-	-	-	-

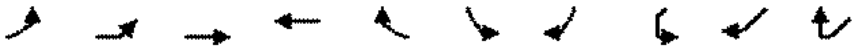
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.8	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1542	-	-	916	-	-
HCM Lane V/C Ratio	-	-	-	0.18	-	-
HCM Control Delay (s)	0	-	0	9.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	-	-



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	16	12	16	12	16	12	12
Grade (%)			0%	0%		0%		0%		
Storage Length (ft)		0			0	0	0	0	0	
Storage Lanes		0			0	1	0	1	0	
Taper Length (ft)		25				25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										
Frt				0.960		0.977		0.923		
Flt Protected			0.985			0.960		0.979		
Satd. Flow (prot)	0	0	1959	1952	0	1971	0	1862	0	0
Flt Permitted			0.985			0.960		0.979		
Satd. Flow (perm)	0	0	1959	1952	0	1971	0	1862	0	0
Link Speed (mph)			25	25		25		30		
Link Distance (ft)			204	116		207		196		
Travel Time (s)			5.6	3.2		5.6		4.5		

Intersection Summary	
Area Type:	Other



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Traffic Volume (vph)	70	0	160	70	30	50	10	90	110	10
Future Volume (vph)	70	0	160	70	30	50	10	90	110	10
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	11%	5%	8%	3%	0%	2%	7%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%		0%		
Adj. Flow (vph)	75	0	172	75	32	54	11	97	118	11
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	247	107	0	65	0	226	0	0

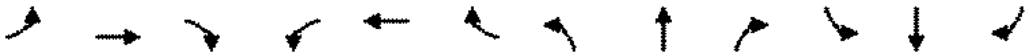
Intersection Summary

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	0	160	70	30	50	10	90	110
Future Vol, veh/h	0	160	70	30	50	10	90	110
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	11	5	8	3	0	2	7
Mvmt Flow	0	172	75	32	54	11	97	118
Number of Lanes	0	1	1	0	1	0	1	0

Approach	WB	SB	SW
Opposing Approach	EB		
Opposing Lanes	1	0	0
Conflicting Approach Left		SW	WB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	SB	EB	EB
Conflicting Lanes Right	1	1	1
HCM Control Delay	8.9	8.9	9.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SWLn1
Vol Left, %	30%	0%	83%	43%
Vol Thru, %	70%	70%	0%	0%
Vol Right, %	0%	30%	17%	57%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	100	60	210
LT Vol	70	0	50	90
Through Vol	160	70	0	0
RT Vol	0	30	10	120
Lane Flow Rate	247	108	65	226
Geometry Grp	1	1	1	1
Degree of Util (X)	0.321	0.148	0.094	0.276
Departure Headway (Hd)	4.679	4.966	5.24	4.401
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	767	718	680	813
Service Time	2.723	3.024	3.302	2.445
HCM Lane V/C Ratio	0.322	0.15	0.096	0.278
HCM Control Delay	9.9	8.9	8.9	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.4	0.5	0.3	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	16	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.941			0.972			0.982				
Flt Protected		0.985			0.990			0.977				
Satd. Flow (prot)	0	1856	0	0	1670	0	0	2066	0	0	2153	0
Flt Permitted		0.985			0.990			0.977				
Satd. Flow (perm)	0	1856	0	0	1670	0	0	2066	0	0	2153	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		116			127			139			202	
Travel Time (s)		3.2			3.5			3.8			4.6	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	90	80	130	10	30	10	70	60	20	0	0	0
Future Volume (vph)	90	80	130	10	30	10	70	60	20	0	0	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	12%	5%	6%	50%	6%	33%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	97	86	140	11	32	11	75	65	22	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	323	0	0	54	0	0	162	0	0	0	0

Intersection Summary

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	90	80	130	10	30	10	70	60	20	0	0	0
Future Vol, veh/h	90	80	130	10	30	10	70	60	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	12	5	6	50	6	33	0	0	0	0	0	0
Mvmt Flow	97	86	140	11	32	11	75	65	22	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	249	238	1	340	227	76	1	0	0	-	-	0
Stage 1	1	1	-	226	226	-	-	-	-	-	-	-
Stage 2	248	237	-	114	1	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.55	6.26	7.6	6.56	6.53	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.22	5.55	-	6.6	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.55	-	6.6	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.045	3.354	3.95	4.054	3.597	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	684	658	1072	533	665	905	1635	-	-	0	-	0
Stage 1	997	889	-	680	709	-	-	-	-	0	-	0
Stage 2	734	703	-	787	887	-	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	626	626	1072	400	633	905	1635	-	-	-	-	-
Mov Cap-2 Maneuver	626	626	-	400	633	-	-	-	-	-	-	-
Stage 1	949	889	-	647	675	-	-	-	-	-	-	-
Stage 2	657	669	-	618	887	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	11.6	3.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1635	-	-	764	599	-
HCM Lane V/C Ratio	0.046	-	-	0.422	0.09	-
HCM Control Delay (s)	7.3	0	-	13.1	11.6	-
HCM Lane LOS	A	A	-	B	B	-
HCM 95th %tile Q(veh)	0.1	-	-	2.1	0.3	-



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.968			
Flt Protected		0.998				
Satd. Flow (prot)	0	2128	2053	0	1900	0
Flt Permitted		0.998				
Satd. Flow (perm)	0	2128	2053	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		150	186		192	
Travel Time (s)		3.4	4.2		4.4	

Intersection Summary	
Area Type:	Other



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Traffic Volume (vph)	10	310	290	90	0	0
Future Volume (vph)	10	310	290	90	0	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	10	316	296	92	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	326	388	0	0	0

Intersection Summary

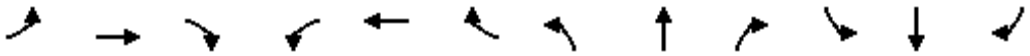
Intersection	
Int Delay, s/veh	0.1

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	10	310	290	90	0	0
Future Vol, veh/h	10	310	290	90	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	10	316	296	92	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	388	0	-	0	678	-
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	336	-
Critical Hdwy	4.1	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	-
Pot Cap-1 Maneuver	1182	-	-	-	421	0
Stage 1	-	-	-	-	724	0
Stage 2	-	-	-	-	728	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1182	-	-	-	417	-
Mov Cap-2 Maneuver	-	-	-	-	417	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	728	-

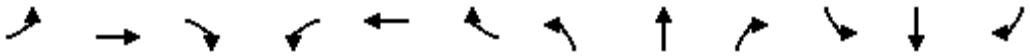
Approach	NB	SB	NE
HCM Control Delay, s	0.3	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	-	1182	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	0	8.1	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	16	12	16	12	15	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.878							
Flt Protected					0.995							
Satd. Flow (prot)	0	2153	0	0	1848	0	0	2132	0	0	2031	0
Flt Permitted					0.995							
Satd. Flow (perm)	0	2153	0	0	1848	0	0	2132	0	0	2031	0
Link Speed (mph)		25			30			25			25	
Link Distance (ft)		125			192			207			253	
Travel Time (s)		3.4			4.4			5.6			6.9	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	10	0	90	0	130	0	0	90	0
Future Volume (vph)	0	0	0	10	0	90	0	130	0	0	90	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	6%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	11	0	102	0	148	0	0	102	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	113	0	0	148	0	0	102	0

Intersection Summary

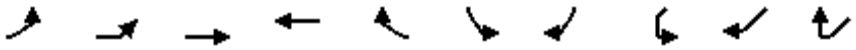
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	0	90	0	130	0	0	90	0
Future Vol, veh/h	0	0	0	10	0	90	0	130	0	0	90	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	2	0	1	0	0	6	0
Mvmt Flow	0	0	0	11	0	102	0	148	0	0	102	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	301	250	102	250	250	148	102	0	-	-	-	0
Stage 1	102	102	-	148	148	-	-	-	-	-	-	-
Stage 2	199	148	-	102	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.22	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.318	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	655	656	959	708	656	899	1503	-	0	0	-	-
Stage 1	909	815	-	859	779	-	-	-	0	0	-	-
Stage 2	807	779	-	909	815	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	580	656	959	708	656	899	1503	-	-	-	-	-
Mov Cap-2 Maneuver	580	656	-	708	656	-	-	-	-	-	-	-
Stage 1	909	815	-	859	779	-	-	-	-	-	-	-
Stage 2	715	779	-	909	815	-	-	-	-	-	-	-

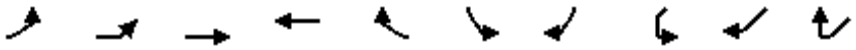
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.7	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1503	-	-	875	-	-
HCM Lane V/C Ratio	-	-	-	0.13	-	-
HCM Control Delay (s)	0	-	0	9.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	-



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	16	12	16	12	16	12	12
Grade (%)			0%	0%		0%		0%		
Storage Length (ft)		0			0	0	0	0	0	
Storage Lanes		0			0	1	0	1	0	
Taper Length (ft)		25				25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										
Frt				0.966		0.973		0.907		
Flt Protected			0.988			0.962		0.985		
Satd. Flow (prot)	0	0	2111	2049	0	1909	0	1887	0	0
Flt Permitted			0.988			0.962		0.985		
Satd. Flow (perm)	0	0	2111	2049	0	1909	0	1887	0	0
Link Speed (mph)			25	25		25		30		
Link Distance (ft)			204	116		207		196		
Travel Time (s)			5.6	3.2		5.6		4.5		

Intersection Summary	
Area Type:	Other



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Traffic Volume (vph)	80	0	260	120	40	80	20	90	190	10
Future Volume (vph)	80	0	260	120	40	80	20	90	190	10
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	1%	1%	3%	7%	0%	0%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%		0%		
Adj. Flow (vph)	83	0	271	125	42	83	21	94	198	10
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	354	167	0	104	0	302	0	0

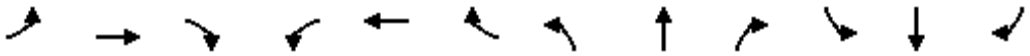
Intersection Summary

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	0	260	120	40	80	20	90	190
Future Vol, veh/h	0	260	120	40	80	20	90	190
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	1	1	3	7	0	0	3
Mvmt Flow	0	271	125	42	83	21	94	198
Number of Lanes	0	1	1	0	1	0	1	0

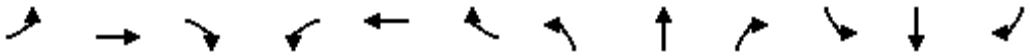
Approach	WB	SB	SW
Opposing Approach	EB		
Opposing Lanes	1	0	0
Conflicting Approach Left		SW	WB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	SB	EB	EB
Conflicting Lanes Right	1	1	1
HCM Control Delay	10.6	10.4	11.3
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1	SWLn1
Vol Left, %	24%	0%	80%	31%
Vol Thru, %	76%	75%	0%	0%
Vol Right, %	0%	25%	20%	69%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	160	100	290
LT Vol	80	0	80	90
Through Vol	260	120	0	0
RT Vol	0	40	20	200
Lane Flow Rate	354	167	104	302
Geometry Grp	1	1	1	1
Degree of Util (X)	0.508	0.26	0.175	0.409
Departure Headway (Hd)	5.168	5.623	6.037	4.869
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	698	638	593	737
Service Time	3.205	3.669	4.088	2.906
HCM Lane V/C Ratio	0.507	0.262	0.175	0.41
HCM Control Delay	13.5	10.6	10.4	11.3
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2.9	1	0.6	2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	16	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.959			0.948			0.982				
Flt Protected		0.981			0.996			0.980				
Satd. Flow (prot)	0	2000	0	0	1958	0	0	2039	0	0	2153	0
Flt Permitted		0.981			0.996			0.980				
Satd. Flow (perm)	0	2000	0	0	1958	0	0	2039	0	0	2153	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		116			127			139			202	
Travel Time (s)		3.2			3.5			3.8			4.6	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	170	130	130	10	70	50	90	100	30	0	0	0
Future Volume (vph)	170	130	130	10	70	50	90	100	30	0	0	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	1%	0%	0%	2%	3%	0%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	177	135	135	10	73	52	94	104	31	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	447	0	0	135	0	0	229	0	0	0	0

Intersection Summary

Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			↑	
Traffic Vol, veh/h	170	130	130	10	70	50	90	100	30	0	0	0
Future Vol, veh/h	170	130	130	10	70	50	90	100	30	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	1	2	1	0	0	2	3	0	3	0	0	0
Mvmt Flow	177	135	135	10	73	52	94	104	31	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	371	324	1	444	309	120	1	0	0	-	-	0
Stage 1	1	1	-	308	308	-	-	-	-	-	-	-
Stage 2	370	323	-	136	1	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.52	6.21	7.1	6.5	6.22	4.13	-	-	-	-	-
Critical Hdwy Stg 1	6.11	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.018	3.309	3.5	4	3.318	2.227	-	-	-	-	-
Pot Cap-1 Maneuver	588	594	1087	528	609	931	1615	-	-	0	-	0
Stage 1	1025	895	-	706	664	-	-	-	-	0	-	0
Stage 2	652	650	-	872	899	-	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	477	557	1087	359	571	931	1615	-	-	-	-	-
Mov Cap-2 Maneuver	477	557	-	359	571	-	-	-	-	-	-	-
Stage 1	960	895	-	662	622	-	-	-	-	-	-	-
Stage 2	509	609	-	648	899	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.9	12.2	3	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1615	-	-	606	637	-
HCM Lane V/C Ratio	0.058	-	-	0.739	0.213	-
HCM Control Delay (s)	7.4	0	-	25.9	12.2	-
HCM Lane LOS	A	A	-	D	B	-
HCM 95th %tile Q(veh)	0.2	-	-	6.4	0.8	-



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.959			
Flt Protected		0.998				
Satd. Flow (prot)	0	2089	2065	0	1900	0
Flt Permitted		0.998				
Satd. Flow (perm)	0	2089	2065	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		150	186		192	
Travel Time (s)		3.4	4.2		4.4	

Intersection Summary	
Area Type:	Other



Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Traffic Volume (vph)	10	210	210	90	0	0
Future Volume (vph)	10	210	210	90	0	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	11	226	226	97	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	237	323	0	0	0

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	10	210	210	90	0	0
Future Vol, veh/h	10	210	210	90	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	0	0
Mvmt Flow	11	226	226	97	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	323	0	-	0	523	-
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	248	-
Critical Hdwy	4.1	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	-
Pot Cap-1 Maneuver	1248	-	-	-	518	0
Stage 1	-	-	-	-	776	0
Stage 2	-	-	-	-	798	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1248	-	-	-	513	-
Mov Cap-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	798	-

Approach	NB	SB	NE
HCM Control Delay, s	0.4	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	-	1248	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	0	7.9	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	16	12	16	12	15	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.879							
Flt Protected					0.995							
Satd. Flow (prot)	0	2153	0	0	1883	0	0	2153	0	0	2111	0
Flt Permitted					0.995							
Satd. Flow (perm)	0	2153	0	0	1883	0	0	2153	0	0	2111	0
Link Speed (mph)		25			30			25			25	
Link Distance (ft)		125			192			207			253	
Travel Time (s)		3.4			4.4			5.6			6.9	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	0	0	0	10	0	90	0	100	0	0	60	0
Future Volume (vph)	0	0	0	10	0	90	0	100	0	0	60	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	12	0	105	0	116	0	0	70	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	117	0	0	116	0	0	70	0

Intersection Summary

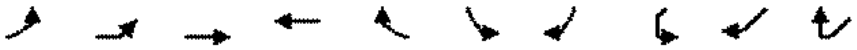
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	0	90	0	100	0	0	60	0
Future Vol, veh/h	0	0	0	10	0	90	0	100	0	0	60	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	2	0
Mvmt Flow	0	0	0	12	0	105	0	116	0	0	70	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	239	186	70	186	186	116	70	0	-	-	-	0
Stage 1	70	70	-	116	116	-	-	-	-	-	-	-
Stage 2	169	116	-	70	70	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	719	712	998	779	712	942	1544	-	0	0	-	-
Stage 1	945	841	-	894	803	-	-	-	0	0	-	-
Stage 2	838	803	-	945	841	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	639	712	998	779	712	942	1544	-	-	-	-	-
Mov Cap-2 Maneuver	639	712	-	779	712	-	-	-	-	-	-	-
Stage 1	945	841	-	894	803	-	-	-	-	-	-	-
Stage 2	745	803	-	945	841	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1544	-	-	923	-	-
HCM Lane V/C Ratio	-	-	-	0.126	-	-
HCM Control Delay (s)	0	-	0	9.5	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	-



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	16	12	16	12	16	12	12
Grade (%)			0%	0%		0%		0%		
Storage Length (ft)		0			0	0	0	0	0	
Storage Lanes		0			0	1	0	1	0	
Taper Length (ft)		25				25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										
Frt				0.966		0.980		0.929		
Flt Protected			0.991			0.959		0.977		
Satd. Flow (prot)	0	0	2117	2080	0	2024	0	1945	0	0
Flt Permitted			0.991			0.959		0.977		
Satd. Flow (perm)	0	0	2117	2080	0	2024	0	1945	0	0
Link Speed (mph)			25	25		25		30		
Link Distance (ft)			204	116		207		196		
Travel Time (s)			5.6	3.2		5.6		4.5		

Intersection Summary	
Area Type:	Other



Lane Group	EBL2	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR	SWR2
Traffic Volume (vph)	50	0	230	120	40	60	10	100	100	10
Future Volume (vph)	50	0	230	120	40	60	10	100	100	10
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%		0%		
Adj. Flow (vph)	54	0	250	130	43	65	11	109	109	11
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	304	173	0	76	0	229	0	0

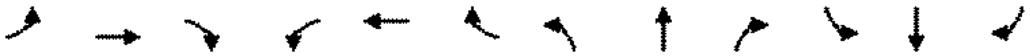
Intersection Summary

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	0	230	120	40	60	10	100	100
Future Vol, veh/h	0	230	120	40	60	10	100	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	1	0	0	0	0	0	1
Mvmt Flow	0	250	130	43	65	11	109	109
Number of Lanes	0	1	1	0	1	0	1	0

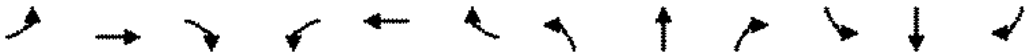
Approach	WB	SB	SW
Opposing Approach	EB		
Opposing Lanes	1	0	0
Conflicting Approach Left		SW	WB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	SB	EB	EB
Conflicting Lanes Right	1	1	1
HCM Control Delay	9.9	9.3	9.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SWLn1
Vol Left, %	18%	0%	86%	48%
Vol Thru, %	82%	75%	0%	0%
Vol Right, %	0%	25%	14%	52%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	280	160	70	210
LT Vol	50	0	60	100
Through Vol	230	120	0	0
RT Vol	0	40	10	110
Lane Flow Rate	304	174	76	228
Geometry Grp	1	1	1	1
Degree of Util (X)	0.41	0.247	0.118	0.298
Departure Headway (Hd)	4.853	5.103	5.601	4.704
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	733	696	644	756
Service Time	2.935	3.2	3.601	2.792
HCM Lane V/C Ratio	0.415	0.25	0.118	0.302
HCM Control Delay	11.3	9.9	9.3	9.8
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2	1	0.4	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	16	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.948			0.958			0.970				
Flt Protected		0.987			0.994			0.981				
Satd. Flow (prot)	0	2000	0	0	1990	0	0	2049	0	0	2153	0
Flt Permitted		0.987			0.994			0.981				
Satd. Flow (perm)	0	2000	0	0	1990	0	0	2049	0	0	2153	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		116			127			139			202	
Travel Time (s)		3.2			3.5			3.8			4.6	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	100	140	150	20	90	50	70	70	40	0	0	0
Future Volume (vph)	100	140	150	20	90	50	70	70	40	0	0	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	109	152	163	22	98	54	76	76	43	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	424	0	0	174	0	0	195	0	0	0	0

Intersection Summary

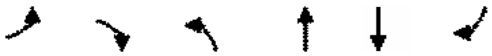
Intersection	
Int Delay, s/veh	13.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	100	140	150	20	90	50	70	70	40	0	0	0
Future Vol, veh/h	100	140	150	20	90	50	70	70	40	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	109	152	163	22	98	54	76	76	43	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	327	272	1	409	251	98	1	0	0	-	-	0
Stage 1	1	1	-	250	250	-	-	-	-	-	-	-
Stage 2	326	271	-	159	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.51	6.21	7.1	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	5.51	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.51	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.009	3.309	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	630	636	1087	556	656	963	1635	-	-	0	-	0
Stage 1	1027	897	-	759	704	-	-	-	-	0	-	0
Stage 2	691	687	-	848	899	-	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	503	604	1087	367	623	963	1635	-	-	-	-	-
Mov Cap-2 Maneuver	503	604	-	367	623	-	-	-	-	-	-	-
Stage 1	976	897	-	721	669	-	-	-	-	-	-	-
Stage 2	529	653	-	599	899	-	-	-	-	-	-	-

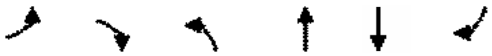
Approach	EB	WB	NB	SB
HCM Control Delay, s	18.4	12.7	2.8	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1635	-	-	686	638	-
HCM Lane V/C Ratio	0.047	-	-	0.618	0.273	-
HCM Control Delay (s)	7.3	0	-	18.4	12.7	-
HCM Lane LOS	A	A	-	C	B	-
HCM 95th %tile Q(veh)	0.1	-	-	4.3	1.1	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	1845	1845	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	1845	1845	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	125			175	164	
Travel Time (s)	3.4			4.8	4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	0	0	0	201	39	0
Future Volume (vph)	0	0	0	201	39	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	0	236	46	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	236	46	0

Intersection Summary

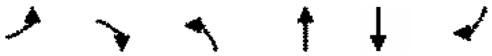
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	201	39	0
Future Vol, veh/h	0	0	0	201	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	3	3	0
Mvmt Flow	0	0	0	236	46	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	282	46	46	0	-	0
Stage 1	46	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	712	1029	1575	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	712	1029	1575	-	-	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	808	-	-	-	-	-

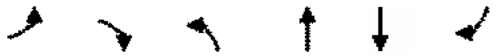
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1575	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	11	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.916				0.946	
Flt Protected	0.981			0.981		
Satd. Flow (prot)	1663	0	0	1855	1674	0
Flt Permitted	0.981			0.981		
Satd. Flow (perm)	1663	0	0	1855	1674	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	175			200	155	
Travel Time (s)	4.8			4.5	3.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	15	24	78	127	182	123
Future Volume (vph)	15	24	78	127	182	123
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	0%	10%	0%	5%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	16	26	85	138	198	134
Shared Lane Traffic (%)						
Lane Group Flow (vph)	42	0	0	223	332	0

Intersection Summary

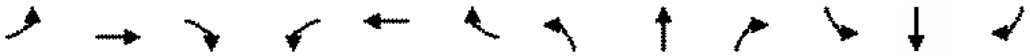
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	24	78	127	182	123
Future Vol, veh/h	15	24	78	127	182	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	7	0	10	0	5	2
Mvmt Flow	16	26	85	138	198	134

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	573	265	332	0	-	0
Stage 1	265	-	-	-	-	-
Stage 2	308	-	-	-	-	-
Critical Hdwy	6.47	6.2	4.2	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	2.29	-	-	-
Pot Cap-1 Maneuver	473	779	1184	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	734	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	436	779	1184	-	-	-
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	734	-	-	-	-	-

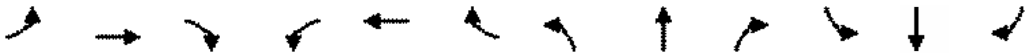
Approach	EB	NB	SB
HCM Control Delay, s	11.5	3.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1184	-	598	-	-
HCM Lane V/C Ratio	0.072	-	0.071	-	-
HCM Control Delay (s)	8.3	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	12	15	12	12	15	15	12	13	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.946			0.987			0.930	
Flt Protected		0.970			0.997			0.982			0.996	
Satd. Flow (prot)	0	1818	0	0	1674	0	0	1981	0	0	1735	0
Flt Permitted		0.970			0.997			0.982			0.996	
Satd. Flow (perm)	0	1818	0	0	1674	0	0	1981	0	0	1735	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		262			196			274			200	
Travel Time (s)		7.1			5.3			7.5			4.5	

Intersection Summary	
Area Type:	Other



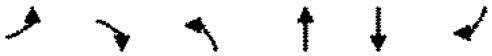
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	133	43	39	2	15	11	44	61	11	17	83	106
Future Volume (vph)	133	43	39	2	15	11	44	61	11	17	83	106
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	7%	13%	50%	0%	36%	6%	0%	0%	0%	3%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	143	46	42	2	16	12	47	66	12	18	89	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	231	0	0	30	0	0	125	0	0	221	0

Intersection Summary

Intersection	
Intersection Delay, s/veh	5.1
Intersection LOS	A

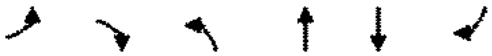
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	231	30	125	221
Demand Flow Rate, veh/h	250	35	128	232
Vehicles Circulating, veh/h	113	270	221	69
Vehicles Exiting, veh/h	66	67	95	220
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	5.0	5.1	4.6
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass
Designated Moves	LT	R	LT	R	LT	R	LT	R
Assumed Moves	LT	R	LT	R	LT	R	LT	R
RT Channelized		Yield		Yield		Yield		Yield
Lane Util	1.000		1.000		1.000		1.000	
Critical Headway, s	5.193		5.193		5.193		5.193	
Entry Flow, veh/h	203	47	19	16	116	12	110	122
Cap Entry Lane, veh/h	1009	1028	863	907	906	1057	1055	1058
Entry HV Adj Factor	0.930	0.885	0.947	0.735	0.974	1.000	0.976	0.935
Flow Entry, veh/h	189	42	18	12	113	12	107	114
Cap Entry, veh/h	939	909	817	667	882	1057	1029	989
V/C Ratio	0.201	0.046	0.022	0.018	0.128	0.011	0.104	0.115
Control Delay, s/veh	5.8	4.4	4.6	5.6	5.3	3.5	4.4	4.7
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	0	0	0	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	1881	1792	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	1881	1792	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	125			175	164	
Travel Time (s)	3.4			4.8	4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	0	0	0	188	68	0
Future Volume (vph)	0	0	0	188	68	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	6%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	0	214	77	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	214	77	0

Intersection Summary

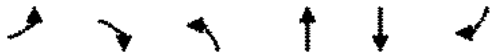
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	188	68	0
Future Vol, veh/h	0	0	0	188	68	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	1	6	0
Mvmt Flow	0	0	0	214	77	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	291	77	77	0	-	0
Stage 1	77	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	704	990	1535	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	704	990	1535	-	-	-
Mov Cap-2 Maneuver	704	-	-	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	826	-	-	-	-	-

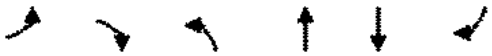
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1535	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	11	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.925				0.967	
Flt Protected	0.978			0.986		
Satd. Flow (prot)	1628	0	0	1922	1750	0
Flt Permitted	0.978			0.986		
Satd. Flow (perm)	1628	0	0	1922	1750	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	175			200	155	
Travel Time (s)	4.8			4.5	3.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	30	38	105	255	258	83
Future Volume (vph)	30	38	105	255	258	83
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	2%	0%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	33	41	114	277	280	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	0	0	391	370	0

Intersection Summary

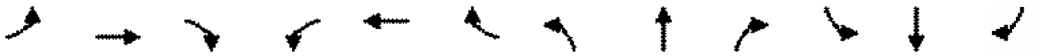
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	38	105	255	258	83
Future Vol, veh/h	30	38	105	255	258	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	2	0	1	2	0
Mvmt Flow	33	41	114	277	280	90

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	830	325	370	0	-	0
Stage 1	325	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.5	6.22	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.318	2.2	-	-	-
Pot Cap-1 Maneuver	329	716	1200	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	292	716	1200	-	-	-
Mov Cap-2 Maneuver	292	-	-	-	-	-
Stage 1	635	-	-	-	-	-
Stage 2	590	-	-	-	-	-

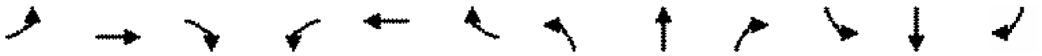
Approach	EB	NB	SB
HCM Control Delay, s	14.9	2.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1200	-	436	-	-
HCM Lane V/C Ratio	0.095	-	0.17	-	-
HCM Control Delay (s)	8.3	0	14.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	12	15	12	12	15	15	12	13	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984			0.934			0.981			0.913	
Flt Protected		0.970			0.997			0.985			0.995	
Satd. Flow (prot)	0	1972	0	0	1927	0	0	1988	0	0	1750	0
Flt Permitted		0.970			0.997			0.985			0.995	
Satd. Flow (perm)	0	1972	0	0	1927	0	0	1988	0	0	1750	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		262			196			274			200	
Travel Time (s)		7.1			5.3			7.5			4.5	

Intersection Summary	
Area Type:	Other



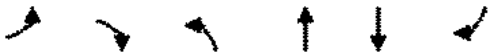
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	193	84	38	7	48	53	60	114	29	27	79	190
Future Volume (vph)	193	84	38	7	48	53	60	114	29	27	79	190
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	0%	0%	0%	2%	2%	1%	3%	0%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	201	88	40	7	50	55	63	119	30	28	82	198
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	329	0	0	112	0	0	212	0	0	308	0

Intersection Summary

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

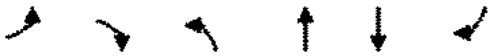
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	329	112	211	308
Demand Flow Rate, veh/h	333	113	214	314
Vehicles Circulating, veh/h	117	386	321	120
Vehicles Exiting, veh/h	113	118	89	323
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	5.3	6.4	5.2
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass
Designated Moves	LT	R	LT	R	LT	R	LT	R
Assumed Moves	LT	R	LT	R	LT	R	LT	R
RT Channelized		Yield		Yield		Yield		Yield
Lane Util	1.000		1.000		1.000		1.000	
Critical Headway, s	5.193		5.193		5.193		5.193	
Entry Flow, veh/h	293	40	57	56	183	31	110	204
Cap Entry Lane, veh/h	1005	1034	768	818	820	1004	1002	1009
Entry HV Adj Factor	0.987	1.000	1.000	0.980	0.988	0.971	1.000	0.971
Flow Entry, veh/h	289	40	57	55	181	30	110	198
Cap Entry, veh/h	992	1034	768	802	810	975	1002	980
V/C Ratio	0.291	0.039	0.074	0.069	0.223	0.031	0.110	0.202
Control Delay, s/veh	6.6	3.8	5.4	5.2	6.8	4.0	4.6	5.6
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1	0	0	1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	1900	1863	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	1900	1863	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	125			175	164	
Travel Time (s)	3.4			4.8	4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	0	0	0	156	57	0
Future Volume (vph)	0	0	0	156	57	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	0	181	66	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	181	66	0

Intersection Summary

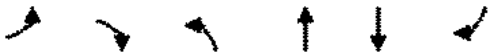
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	156	57	0
Future Vol, veh/h	0	0	0	156	57	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	0	0	0	181	66	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	247	66	66	0	-	0
Stage 1	66	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	746	1003	1549	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	746	1003	1549	-	-	-
Mov Cap-2 Maneuver	746	-	-	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	855	-	-	-	-	-

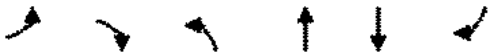
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1549	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	11	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.905				0.959	
Flt Protected	0.985			0.986		
Satd. Flow (prot)	1694	0	0	1895	1761	0
Flt Permitted	0.985			0.986		
Satd. Flow (perm)	1694	0	0	1895	1761	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	175			200	155	
Travel Time (s)	4.8			4.5	3.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	17	40	71	176	191	85
Future Volume (vph)	17	40	71	176	191	85
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	18	43	77	191	208	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	61	0	0	268	300	0

Intersection Summary

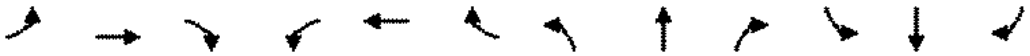
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	40	71	176	191	85
Future Vol, veh/h	17	40	71	176	191	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	3	0	0
Mvmt Flow	18	43	77	191	208	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	599	254	300	0	-	0
Stage 1	254	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	468	790	1273	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	436	790	1273	-	-	-
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	722	-	-	-	-	-

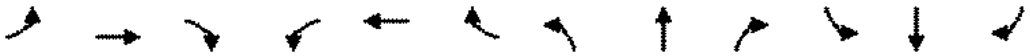
Approach	EB	NB	SB
HCM Control Delay, s	11.3	2.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1273	-	636	-	-
HCM Lane V/C Ratio	0.061	-	0.097	-	-
HCM Control Delay (s)	8	0	11.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	12	15	12	12	15	15	12	13	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.977			0.943			0.971			0.940	
Flt Protected		0.978			0.993			0.984			0.993	
Satd. Flow (prot)	0	1976	0	0	1957	0	0	1997	0	0	1824	0
Flt Permitted		0.978			0.993			0.984			0.993	
Satd. Flow (perm)	0	1976	0	0	1957	0	0	1997	0	0	1824	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		262			196			274			200	
Travel Time (s)		7.1			5.3			7.5			4.5	

Intersection Summary	
Area Type:	Other



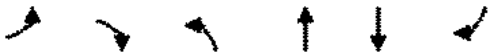
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	119	97	43	19	60	57	49	71	32	34	94	103
Future Volume (vph)	119	97	43	19	60	57	49	71	32	34	94	103
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	129	105	47	21	65	62	53	77	35	37	102	112
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	148	0	0	165	0	0	251	0

Intersection Summary

Intersection	
Intersection Delay, s/veh	5.3
Intersection LOS	A

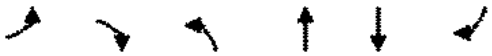
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	281	148	165	251
Demand Flow Rate, veh/h	284	148	165	252
Vehicles Circulating, veh/h	160	259	273	139
Vehicles Exiting, veh/h	118	144	123	206
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.9	4.8	5.3	4.8
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass
Designated Moves	LT	R	LT	R	LT	R	LT	R
Assumed Moves	LT	R	LT	R	LT	R	LT	R
RT Channelized		Yield		Yield		Yield		Yield
Lane Util	1.000		1.000		1.000		1.000	
Critical Headway, s	5.193		5.193		5.193		5.193	
Entry Flow, veh/h	236	48	86	62	130	35	139	113
Cap Entry Lane, veh/h	963	999	872	920	860	978	983	1004
Entry HV Adj Factor	0.991	0.980	1.000	1.000	1.000	1.000	1.000	0.990
Flow Entry, veh/h	234	47	86	62	130	35	139	112
Cap Entry, veh/h	954	980	872	920	860	978	983	994
V/C Ratio	0.245	0.048	0.099	0.067	0.151	0.036	0.141	0.113
Control Delay, s/veh	6.2	4.1	5.1	4.5	5.7	4.0	5.0	4.6
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1	0	0	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	1845	1845	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	1845	1845	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	125			175	164	
Travel Time (s)	3.4			4.8	4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	0	0	0	250	60	0
Future Volume (vph)	0	0	0	250	60	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	0	294	71	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	294	71	0

Intersection Summary

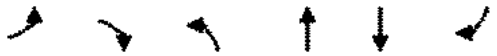
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	250	60	0
Future Vol, veh/h	0	0	0	250	60	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	3	3	0
Mvmt Flow	0	0	0	294	71	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	365	71	71	0	-	0
Stage 1	71	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	639	997	1542	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	639	997	1542	-	-	-
Mov Cap-2 Maneuver	639	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	761	-	-	-	-	-

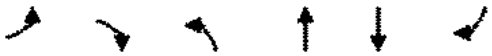
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1542	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	11	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.911				0.944	
Flt Protected	0.983			0.978		
Satd. Flow (prot)	1662	0	0	1836	1671	0
Flt Permitted	0.983			0.978		
Satd. Flow (perm)	1662	0	0	1836	1671	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	175			200	155	
Travel Time (s)	4.8			4.5	3.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	20	40	110	130	200	140
Future Volume (vph)	20	40	110	130	200	140
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	0%	10%	0%	5%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	22	43	120	141	217	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	0	0	261	369	0

Intersection Summary

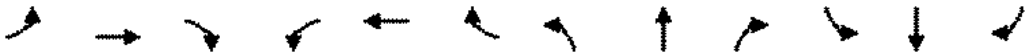
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	40	110	130	200	140
Future Vol, veh/h	20	40	110	130	200	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	7	0	10	0	5	2
Mvmt Flow	22	43	120	141	217	152

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	674	293	369	0	-	0
Stage 1	293	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.47	6.2	4.2	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	2.29	-	-	-
Pot Cap-1 Maneuver	412	751	1147	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	365	751	1147	-	-	-
Mov Cap-2 Maneuver	365	-	-	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	680	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	3.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1147	-	555	-	-
HCM Lane V/C Ratio	0.104	-	0.118	-	-
HCM Control Delay (s)	8.5	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	12	15	12	12	15	15	12	13	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.977			0.946			0.982			0.932	
Flt Protected		0.970			0.990			0.984			0.994	
Satd. Flow (prot)	0	1823	0	0	1573	0	0	1980	0	0	1738	0
Flt Permitted		0.970			0.990			0.984			0.994	
Satd. Flow (perm)	0	1823	0	0	1573	0	0	1980	0	0	1738	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		262			196			274			200	
Travel Time (s)		7.1			5.3			7.5			4.5	

Intersection Summary	
Area Type:	Other



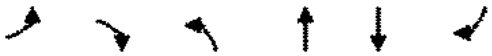
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	140	50	40	10	20	20	50	80	20	30	90	120
Future Volume (vph)	140	50	40	10	20	20	50	80	20	30	90	120
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	7%	13%	50%	0%	36%	6%	0%	0%	0%	3%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	151	54	43	11	22	22	54	86	22	32	97	129
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	248	0	0	55	0	0	162	0	0	258	0

Intersection Summary

Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

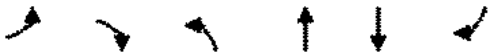
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	248	55	162	258
Demand Flow Rate, veh/h	270	68	165	270
Vehicles Circulating, veh/h	148	306	253	95
Vehicles Exiting, veh/h	79	90	116	249
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.0	5.6	5.5	4.8
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass
Designated Moves	LT	R	LT	R	LT	R	LT	R
Assumed Moves	LT	R	LT	R	LT	R	LT	R
RT Channelized		Yield		Yield		Yield		Yield
Lane Util	1.000		1.000		1.000		1.000	
Critical Headway, s	5.193		5.193		5.193		5.193	
Entry Flow, veh/h	221	49	38	30	143	22	132	138
Cap Entry Lane, veh/h	974	1006	832	881	877	1033	1028	1044
Entry HV Adj Factor	0.929	0.885	0.868	0.735	0.979	1.000	0.978	0.935
Flow Entry, veh/h	205	43	33	22	140	22	129	129
Cap Entry, veh/h	905	890	723	648	859	1033	1005	976
V/C Ratio	0.227	0.048	0.046	0.034	0.163	0.021	0.128	0.132
Control Delay, s/veh	6.3	4.5	5.4	5.9	5.8	3.7	4.8	4.9
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1	0	0	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	1881	1792	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	1881	1792	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	125			175	164	
Travel Time (s)	3.4			4.8	4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	0	0	0	220	90	0
Future Volume (vph)	0	0	0	220	90	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	6%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	0	250	102	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	250	102	0

Intersection Summary

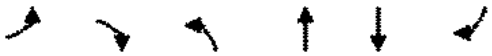
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	220	90	0
Future Vol, veh/h	0	0	0	220	90	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	1	6	0
Mvmt Flow	0	0	0	250	102	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	352	102	102	0	-	0
Stage 1	102	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	650	959	1503	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	650	959	1503	-	-	-
Mov Cap-2 Maneuver	650	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	796	-	-	-	-	-

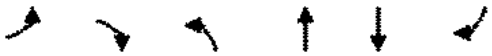
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1503	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	11	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.925				0.968	
Flt Protected	0.978			0.984		
Satd. Flow (prot)	1629	0	0	1919	1751	0
Flt Permitted	0.978			0.984		
Satd. Flow (perm)	1629	0	0	1919	1751	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	175			200	155	
Travel Time (s)	4.8			4.5	3.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	40	50	130	270	290	90
Future Volume (vph)	40	50	130	270	290	90
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	2%	0%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	43	54	141	293	315	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	0	0	434	413	0

Intersection Summary

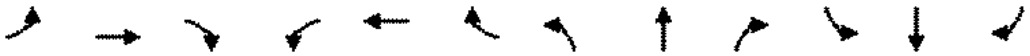
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	50	130	270	290	90
Future Vol, veh/h	40	50	130	270	290	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	2	0	1	2	0
Mvmt Flow	43	54	141	293	315	98

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	939	364	413	0	-	0
Stage 1	364	-	-	-	-	-
Stage 2	575	-	-	-	-	-
Critical Hdwy	6.5	6.22	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.318	2.2	-	-	-
Pot Cap-1 Maneuver	283	681	1157	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	242	681	1157	-	-	-
Mov Cap-2 Maneuver	242	-	-	-	-	-
Stage 1	586	-	-	-	-	-
Stage 2	547	-	-	-	-	-

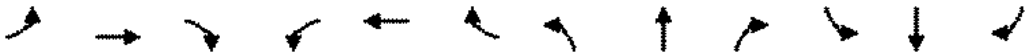
Approach	EB	NB	SB
HCM Control Delay, s	17.9	2.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1157	-	377	-	-
HCM Lane V/C Ratio	0.122	-	0.259	-	-
HCM Control Delay (s)	8.5	0	17.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.4	-	1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	12	15	12	12	15	15	12	13	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984			0.927			0.982			0.917	
Flt Protected		0.970			0.996			0.984			0.994	
Satd. Flow (prot)	0	1972	0	0	1909	0	0	1988	0	0	1757	0
Flt Permitted		0.970			0.996			0.984			0.994	
Satd. Flow (perm)	0	1972	0	0	1909	0	0	1988	0	0	1757	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		262			196			274			200	
Travel Time (s)		7.1			5.3			7.5			4.5	

Intersection Summary	
Area Type:	Other



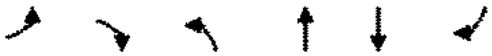
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	210	90	40	10	50	70	70	120	30	40	90	210
Future Volume (vph)	210	90	40	10	50	70	70	120	30	40	90	210
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	0%	0%	0%	2%	2%	1%	3%	0%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	219	94	42	10	52	73	73	125	31	42	94	219
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	355	0	0	135	0	0	229	0	0	355	0

Intersection Summary

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

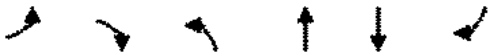
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	355	135	229	355
Demand Flow Rate, veh/h	359	136	232	362
Vehicles Circulating, veh/h	146	421	359	136
Vehicles Exiting, veh/h	126	138	104	347
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.8	5.6	7.0	5.6
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass
Designated Moves	LT	R	LT	R	LT	R	LT	R
Assumed Moves	LT	R	LT	R	LT	R	LT	R
RT Channelized		Yield		Yield		Yield		Yield
Lane Util	1.000		1.000		1.000		1.000	
Critical Headway, s	5.193		5.193		5.193		5.193	
Entry Flow, veh/h	317	42	62	74	200	32	136	226
Cap Entry Lane, veh/h	976	1018	742	799	789	984	986	996
Entry HV Adj Factor	0.988	1.000	1.000	0.980	0.989	0.971	1.000	0.971
Flow Entry, veh/h	313	42	62	73	198	31	136	219
Cap Entry, veh/h	964	1018	742	783	780	956	986	967
V/C Ratio	0.325	0.041	0.084	0.093	0.253	0.032	0.138	0.226
Control Delay, s/veh	7.1	3.9	5.7	5.5	7.4	4.1	4.9	5.9
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1	0	0	1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	1900	1863	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	1900	1863	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	125			175	164	
Travel Time (s)	3.4			4.8	4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	0	0	0	190	60	0
Future Volume (vph)	0	0	0	190	60	0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	0	0	0	221	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	221	70	0

Intersection Summary

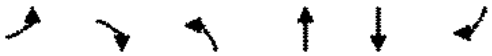
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	190	60	0
Future Vol, veh/h	0	0	0	190	60	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	0	0	0	221	70	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	291	70	70	0	-	0
Stage 1	70	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	704	998	1544	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	704	998	1544	-	-	-
Mov Cap-2 Maneuver	704	-	-	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	821	-	-	-	-	-

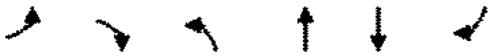
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	11	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.911				0.959	
Flt Protected	0.983			0.983		
Satd. Flow (prot)	1701	0	0	1893	1761	0
Flt Permitted	0.983			0.983		
Satd. Flow (perm)	1701	0	0	1893	1761	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	175			200	155	
Travel Time (s)	4.8			4.5	3.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Volume (vph)	20	40	100	190	210	90
Future Volume (vph)	20	40	100	190	210	90
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	22	43	109	207	228	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	0	0	316	326	0

Intersection Summary

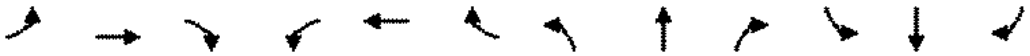
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	40	100	190	210	90
Future Vol, veh/h	20	40	100	190	210	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	3	0	0
Mvmt Flow	22	43	109	207	228	98

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	702	277	326	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	407	767	1245	-	-	-
Stage 1	774	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	367	767	1245	-	-	-
Mov Cap-2 Maneuver	367	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	664	-	-	-	-	-

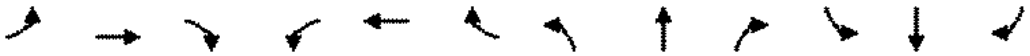
Approach	EB	NB	SB
HCM Control Delay, s	12.2	2.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1245	-	563	-	-
HCM Lane V/C Ratio	0.087	-	0.116	-	-
HCM Control Delay (s)	8.2	0	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	12	15	12	12	15	15	12	13	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.976			0.941			0.970			0.940	
Flt Protected		0.977			0.994			0.986			0.992	
Satd. Flow (prot)	0	1972	0	0	1955	0	0	1999	0	0	1823	0
Flt Permitted		0.977			0.994			0.986			0.992	
Satd. Flow (perm)	0	1972	0	0	1955	0	0	1999	0	0	1823	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		262			196			274			200	
Travel Time (s)		7.1			5.3			7.5			4.5	

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	130	100	50	20	70	70	50	90	40	40	100	110
Future Volume (vph)	130	100	50	20	70	70	50	90	40	40	100	110
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	141	109	54	22	76	76	54	98	43	43	109	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	304	0	0	174	0	0	195	0	0	272	0

Intersection Summary

Intersection	
Intersection Delay, s/veh	5.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	304	174	195	272
Demand Flow Rate, veh/h	307	174	195	273
Vehicles Circulating, veh/h	174	293	295	152
Vehicles Exiting, veh/h	130	154	131	239
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.1	5.2	5.7	5.0
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass
Designated Moves	LT	R	LT	R	LT	R	LT	R
Assumed Moves	LT	R	LT	R	LT	R	LT	R
RT Channelized		Yield		Yield		Yield		Yield
Lane Util	1.000		1.000		1.000		1.000	
Critical Headway, s	5.193		5.193		5.193		5.193	
Entry Flow, veh/h	252	55	98	76	152	43	152	121
Cap Entry Lane, veh/h	949	991	843	890	841	969	971	992
Entry HV Adj Factor	0.991	0.980	1.000	1.000	1.000	1.000	1.000	0.990
Flow Entry, veh/h	250	54	98	76	152	43	152	120
Cap Entry, veh/h	941	972	843	890	841	969	971	982
V/C Ratio	0.265	0.056	0.116	0.085	0.181	0.044	0.157	0.122
Control Delay, s/veh	6.5	4.2	5.4	4.9	6.1	4.1	5.2	4.8
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1	0	1	0

Section M

There are no attachments for Section M.

Section N

There are no attachments for Section N.

FUSS & O'NEILL

Section O

Pavement Core Memo

Classification Analysis

Roundabout Average Daily Traffic

Roundabout ESALs Calculation

Roundabout Flexible Pavement Tool

Phillips Street Average Daily Traffic

Phillips Street ESALs Calculation

Phillips Street Flexible Pavement Tool

Vauxhall Street Average Daily Traffic

Vauxhall Street ESALs Calculation

Vauxhall Street Flexible Pavement Tool

Vauxhall Street Extension Average Daily Traffic

Vauxhall Street Extension ESALs Calculation

Vauxhall Street Extension Flexible Pavement Tool

Pavement Cores – Vauxhall Roundabout Project

TO: Kate Rattan, SCCOG
John Guzze, Fuss & O'Neill

FROM: Tim Schwartz, Tighe & Bond

COPY: Chris Granatini, Tighe & Bond

DATE: September 27, 2024

On Wednesday September 25, 2024, General Borings, Inc performed pavement cores in the vicinity of the Vauxhall Street and Phillips Street Intersection in New London, Connecticut, in connection with the Vauxhall Street Roundabout Improvements LOCTIP Project Application by Fuss & O'Neill. Tighe & Bond observed the work performed and recorded the existing pavement depths at representative locations within the proposed project area.

The following table summarizes the coring locations and existing pavement depths. Refer to the attached plan for the approximate pavement core locations, and photos of recovered pavement cores.

ID	Location	Pavement Depth (inches)
B-1	Vauxhall St Ext SB Lane, north of intersection	4.75
B-2	Vauxhall St NB Lane, north of intersection	5
B-3	Phillips St EB Lane, west of intersection	5.5
B-4	Vauxhall St NB Lane, south of intersection	2
B-5	Plaza exit driveway, east of intersection	2
B-6	Vauxhall St SB Lane, at intersection	4
B-7	Vauxhall St Ext NB Lane, north of intersection	4.5

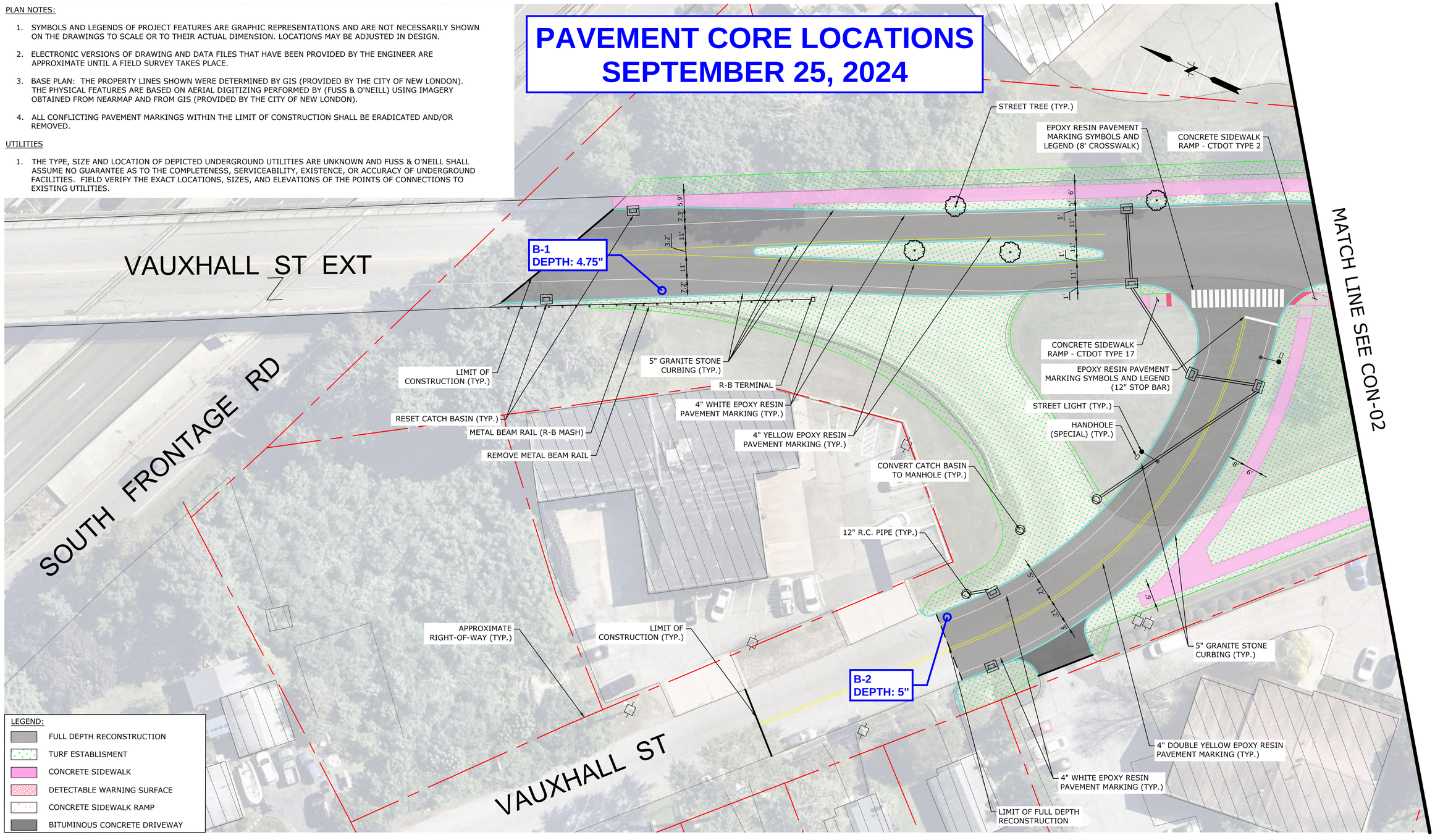
PLAN NOTES:

1. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR ACTUAL DIMENSION. LOCATIONS MAY BE ADJUSTED IN DESIGN.
2. ELECTRONIC VERSIONS OF DRAWING AND DATA FILES THAT HAVE BEEN PROVIDED BY THE ENGINEER ARE APPROXIMATE UNTIL A FIELD SURVEY TAKES PLACE.
3. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY GIS (PROVIDED BY THE CITY OF NEW LONDON). THE PHYSICAL FEATURES ARE BASED ON AERIAL DIGITIZING PERFORMED BY (FUSS & O'NEILL) USING IMAGERY OBTAINED FROM NEARMAP AND FROM GIS (PROVIDED BY THE CITY OF NEW LONDON).
4. ALL CONFLICTING PAVEMENT MARKINGS WITHIN THE LIMIT OF CONSTRUCTION SHALL BE ERADICATED AND/OR REMOVED.

UTILITIES

1. THE TYPE, SIZE AND LOCATION OF DEPICTED UNDERGROUND UTILITIES ARE UNKNOWN AND FUSS & O'NEILL SHALL ASSUME NO GUARANTEE AS TO THE COMPLETENESS, SERVICEABILITY, EXISTENCE, OR ACCURACY OF UNDERGROUND FACILITIES. FIELD VERIFY THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES.

PAVEMENT CORE LOCATIONS
SEPTEMBER 25, 2024



FOR INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.: -
DATUM:
HORZ.: -
VERT.: -
0 10' 20' 40'
GRAPHIC SCALE

FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW LONDON

CONCEPT PLAN

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

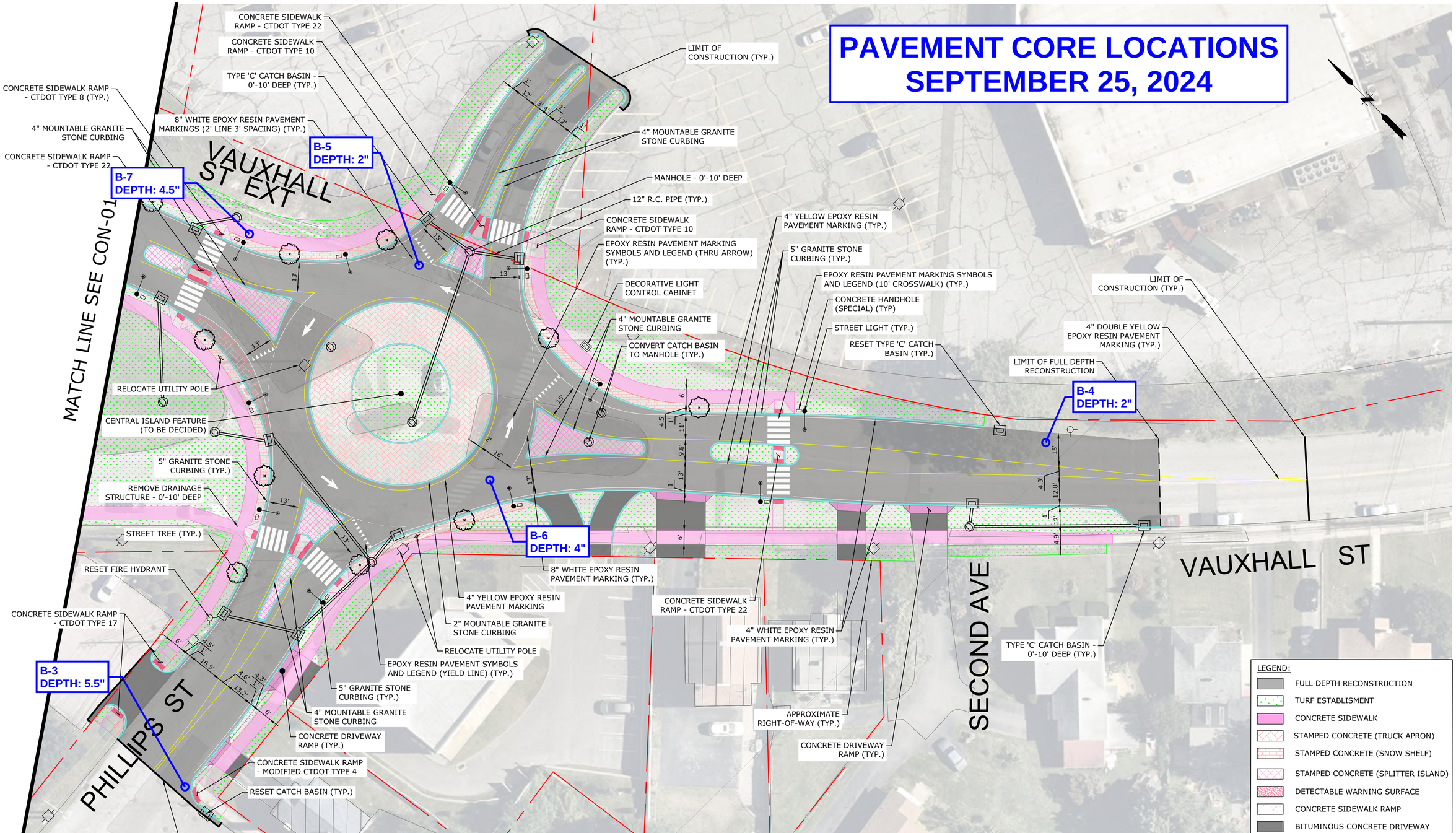
NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: APRIL 2024

CON-01

File: J:\DWG\P2017\0353\A50\Civil\Concept\20170353.A50CON_01.dwg Layout: CON-01 Plotted: 2024-04-14 7:26 AM Saved: 2024-04-14 7:25 AM User: tyler.rudolph
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 STB/CTB: FO.STB
LAYER STATE:
MS VIEW:

PAVEMENT CORE LOCATIONS
SEPTEMBER 25, 2024



FOR INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.: -
DATUM:
HORZ.: -
VERT.: -
0 10' 20' 40'
GRAPHIC SCALE

FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW LONDON

CONCEPT PLAN

VAUXHALL STREET ROUNDABOUT IMPROVEMENTS

NEW LONDON CONNECTICUT

PROJ. No.: 20170353.A50
DATE: APRIL 2024

CON-02

File: J:\DWG\P20170353\A50\Civil\Concept\20170353.A50CON_01.dwg Layout: CON-02 Plotted: 2024-04-14 7:26 AM Saved: 2024-04-14 7:25 AM User: tyler.rudolph
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 STB/CTB: FO.STB
LAYER STATE:
MS VIEW:



Photo 1: B-1 Pavement Core – Vauxhall St Ext SB Lane, north of intersection



Photo 2: B-2 Pavement Core – Vauxhall St NB Lane, north of intersection



Photo 3: B-3 Pavement Core – Phillips St EB Lane, west of intersection



Photo 4: B-4 Pavement Core – Vauxhall St NB Lane, south of intersection



Photo 5: B-5 Pavement Core – Plaza exit driveway, east of intersection



Photo 6: B-6 Pavement Core – Vauxhall St SB Lane, at intersection



Photo 7: B-7 Vauxhall St Ext NB Lane, north of intersection

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

10/7/2024	10/7/2024		10/8/2024		10/9/2024		10/10/2024		10/11/2024		Weekday Average		10/12/2024		10/13/2024	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	10	7	7	3	*	*	8	5	*	*	*	*
1:00	*	*	*	*	2	1	1	2	*	*	2	2	*	*	*	*
2:00	*	*	*	*	2	1	4	1	*	*	3	1	*	*	*	*
3:00	*	*	*	*	1	3	2	6	*	*	2	4	*	*	*	*
4:00	*	*	*	*	9	10	11	6	*	*	10	8	*	*	*	*
5:00	*	*	*	*	15	24	19	20	*	*	17	22	*	*	*	*
6:00	*	*	*	*	59	69	52	73	*	*	56	71	*	*	*	*
7:00	*	*	*	*	159	146	145	162	*	*	152	154	*	*	*	*
8:00	*	*	*	*	157	185	126	150	*	*	142	168	*	*	*	*
9:00	*	*	*	*	140	127	147	118	*	*	144	122	*	*	*	*
10:00	*	*	*	*	123	162	118	160	*	*	120	161	*	*	*	*
11:00	*	*	*	*	173	295	169	184	*	*	171	240	*	*	*	*
12:00 PM	*	*	*	*	165	327	174	197	*	*	170	262	*	*	*	*
1:00	*	*	*	*	177	300	184	173	*	*	180	236	*	*	*	*
2:00	*	*	*	*	233	256	188	225	*	*	210	240	*	*	*	*
3:00	*	*	*	*	281	217	246	242	*	*	264	230	*	*	*	*
4:00	*	*	*	*	266	271	261	223	*	*	264	247	*	*	*	*
5:00	*	*	*	*	216	223	221	244	*	*	218	234	*	*	*	*
6:00	*	*	*	*	182	162	197	186	*	*	190	174	*	*	*	*
7:00	*	*	*	*	126	129	121	129	*	*	124	129	*	*	*	*
8:00	*	*	*	*	68	62	113	74	*	*	90	68	*	*	*	*
9:00	*	*	*	*	59	46	49	50	*	*	54	48	*	*	*	*
10:00	*	*	*	*	21	18	23	21	*	*	22	20	*	*	*	*
11:00	*	*	*	*	18	11	19	13	*	*	18	12	*	*	*	*
Total	0	0	0	0	2662	3052	2597	2662	0	0	2631	2858	0	0	0	0
Day	0		0		5714		5259		0		5489		0		0	
AM Peak					11:00	11:00	11:00	11:00			11:00	11:00				
Volume					173	295	169	184			171	240				
PM Peak					3:00	12:00 PM	4:00	5:00			3:00	12:00 PM				
Volume					281	327	261	244			264	262				
Comb Total	0		0		5714		5259		0		5489		0		0	
ADT	ADT: 5,486		AADT: 5,486													

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: WB

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	10	0	0	0	0	0	0	0	0	0	0	0	10
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00	0	5	3	0	0	1	0	0	0	0	0	0	0	9
5:00	1	8	5	1	0	0	0	0	0	0	0	0	0	15
6:00	0	51	4	3	0	1	0	0	0	0	0	0	0	59
7:00	1	115	28	7	8	0	0	0	0	0	0	0	0	159
8:00	1	113	27	7	8	0	0	1	0	0	0	0	0	157
9:00	0	104	27	1	8	0	0	0	0	0	0	0	0	140
10:00	1	91	25	1	5	0	0	0	0	0	0	0	0	123
11:00	1	140	26	1	5	0	0	0	0	0	0	0	0	173
12:00 PM	0	137	20	1	6	1	0	0	0	0	0	0	0	165
1:00	0	143	28	0	5	1	0	0	0	0	0	0	0	177
2:00	5	172	40	4	8	1	0	2	0	1	0	0	0	233
3:00	3	215	39	11	11	1	0	0	1	0	0	0	0	281
4:00	3	219	34	3	6	0	0	1	0	0	0	0	0	266
5:00	0	191	18	4	3	0	0	0	0	0	0	0	0	216
6:00	0	158	21	0	2	0	0	1	0	0	0	0	0	182
7:00	0	110	14	0	2	0	0	0	0	0	0	0	0	126
8:00	0	63	3	0	2	0	0	0	0	0	0	0	0	68
9:00	1	52	6	0	0	0	0	0	0	0	0	0	0	59
10:00	1	19	1	0	0	0	0	0	0	0	0	0	0	21
11:00	0	14	4	0	0	0	0	0	0	0	0	0	0	18
Total	18	2135	373	44	79	6	0	5	1	1	0	0	0	2662
Percent	0.7%	80.2%	14.0%	1.7%	3.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	5:00	11:00	7:00	7:00	7:00	4:00		8:00						11:00
	1	140	28	7	8	1	*	1	*	*	*	*	*	173
PM Peak	2:00	4:00	2:00	3:00	3:00	12:00 PM		2:00	3:00	2:00				3:00
	5	219	40	11	11	1	*	2	1	1	*	*	*	281

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: WB

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	1	3	0	0	0	0	0	0	0	0	0	0	0	4
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11
5:00	0	13	6	0	0	0	0	0	0	0	0	0	0	19
6:00	0	44	3	3	2	0	0	0	0	0	0	0	0	52
7:00	1	111	21	5	6	0	0	1	0	0	0	0	0	145
8:00	1	97	17	6	5	0	0	0	0	0	0	0	0	126
9:00	0	105	23	2	13	1	0	3	0	0	0	0	0	147
10:00	0	95	21	0	2	0	0	0	0	0	0	0	0	118
11:00	0	133	27	1	6	1	0	1	0	0	0	0	0	169
12:00 PM	2	147	21	1	3	0	0	0	0	0	0	0	0	174
1:00	3	141	28	3	8	0	0	0	0	1	0	0	0	184
2:00	0	154	28	1	5	0	0	0	0	0	0	0	0	188
3:00	4	186	38	9	9	0	0	0	0	0	0	0	0	246
4:00	2	219	27	4	8	0	0	0	0	1	0	0	0	261
5:00	1	181	33	0	5	1	0	0	0	0	0	0	0	221
6:00	0	166	28	1	2	0	0	0	0	0	0	0	0	197
7:00	0	105	12	0	4	0	0	0	0	0	0	0	0	121
8:00	1	100	9	1	1	1	0	0	0	0	0	0	0	113
9:00	1	43	4	0	1	0	0	0	0	0	0	0	0	49
10:00	0	20	3	0	0	0	0	0	0	0	0	0	0	23
11:00	1	16	2	0	0	0	0	0	0	0	0	0	0	19
Total	18	2097	353	37	81	4	0	5	0	2	0	0	0	2597
Percent	0.7%	80.7%	13.6%	1.4%	3.1%	0.2%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	
AM Peak	2:00	11:00	11:00	8:00	9:00	9:00		9:00						11:00
	1	133	27	6	13	1	*	3	*	*	*	*	*	169
PM Peak	3:00	4:00	3:00	3:00	3:00	5:00				1:00				4:00
	4	219	38	9	9	1	*	*	*	1	*	*	*	261
Grand Total	36	4232	726	81	160	10	0	10	1	3	0	0	0	5259
Percent	0.7%	80.5%	13.8%	1.5%	3.0%	0.2%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: EB

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	7
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
4:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
5:00	1	16	4	2	1	0	0	0	0	0	0	0	0	24
6:00	0	42	13	7	7	0	0	0	0	0	0	0	0	69
7:00	1	100	25	9	9	0	0	1	1	0	0	0	0	146
8:00	0	122	44	6	12	0	0	1	0	0	0	0	0	185
9:00	0	96	21	0	8	0	0	2	0	0	0	0	0	127
10:00	2	114	31	0	13	0	0	2	0	0	0	0	0	162
11:00	1	217	53	0	21	0	0	2	0	1	0	0	0	295
12:00 PM	3	249	48	2	20	1	0	3	0	0	1	0	0	327
1:00	2	235	39	5	17	0	0	1	0	0	1	0	0	300
2:00	10	186	38	6	16	0	0	0	0	0	0	0	0	256
3:00	2	166	36	2	10	0	0	1	0	0	0	0	0	217
4:00	2	212	40	1	16	0	0	0	0	0	0	0	0	271
5:00	0	173	38	1	9	0	0	2	0	0	0	0	0	223
6:00	1	134	19	2	6	0	0	0	0	0	0	0	0	162
7:00	0	115	8	1	4	1	0	0	0	0	0	0	0	129
8:00	0	49	11	1	1	0	0	0	0	0	0	0	0	62
9:00	0	42	3	1	0	0	0	0	0	0	0	0	0	46
10:00	0	16	1	1	0	0	0	0	0	0	0	0	0	18
11:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
Total	25	2310	476	47	173	2	0	15	1	1	2	0	0	3052
Percent	0.8%	75.7%	15.6%	1.5%	5.7%	0.1%	0.0%	0.5%	0.0%	0.0%	0.1%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	7:00	11:00			9:00	7:00	11:00				11:00
	2	217	53	9	21	*	*	2	1	1	*	*	*	295
PM Peak	2:00	12:00 PM	12:00 PM	2:00	12:00 PM	12:00 PM		12:00 PM			12:00 PM			12:00 PM
	10	249	48	6	20	1	*	3	*	*	1	*	*	327

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: EB

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	3
1:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
4:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
5:00	1	13	3	2	1	0	0	0	0	0	0	0	0	20
6:00	2	44	14	6	6	0	0	1	0	0	0	0	0	73
7:00	0	118	23	11	8	2	0	0	0	0	0	0	0	162
8:00	1	105	31	3	9	0	0	1	0	0	0	0	0	150
9:00	1	86	21	0	8	0	0	1	0	0	1	0	0	118
10:00	0	110	30	1	18	0	0	1	0	0	0	0	0	160
11:00	1	137	30	1	14	0	0	1	0	0	0	0	0	184
12:00 PM	5	146	32	0	13	1	0	0	0	0	0	0	0	197
1:00	1	129	26	2	14	0	0	1	0	0	0	0	0	173
2:00	1	165	38	7	13	0	0	1	0	0	0	0	0	225
3:00	2	191	30	1	15	0	0	3	0	0	0	0	0	242
4:00	0	181	26	2	13	0	0	1	0	0	0	0	0	223
5:00	2	185	39	1	17	0	0	0	0	0	0	0	0	244
6:00	1	153	23	0	9	0	0	0	0	0	0	0	0	186
7:00	0	107	15	0	7	0	0	0	0	0	0	0	0	129
8:00	0	62	9	0	3	0	0	0	0	0	0	0	0	74
9:00	2	41	5	1	1	0	0	0	0	0	0	0	0	50
10:00	1	19	0	0	1	0	0	0	0	0	0	0	0	21
11:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13
Total	21	2014	401	38	173	3	0	11	0	0	1	0	0	2662
Percent	0.8%	75.7%	15.1%	1.4%	6.5%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	11:00	8:00	7:00	10:00	7:00		6:00			9:00			11:00
	2	137	31	11	18	2	*	1	*	*	1	*	*	184
PM Peak	12:00 PM	3:00	5:00	2:00	5:00	12:00 PM		3:00						5:00
	5	191	39	7	17	1	*	3	*	*	*	*	*	244
Grand Total	46	4324	877	85	346	5	0	26	1	1	3	0	0	5714
Percent	0.8%	75.7%	15.3%	1.5%	6.1%	0.1%	0.0%	0.5%	0.0%	0.0%	0.1%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: Combined

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	15	1	0	1	0	0	0	0	0	0	0	0	17
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
4:00	0	12	5	0	1	1	0	0	0	0	0	0	0	19
5:00	2	24	9	3	1	0	0	0	0	0	0	0	0	39
6:00	0	93	17	10	7	1	0	0	0	0	0	0	0	128
7:00	2	215	53	16	17	0	0	1	1	0	0	0	0	305
8:00	1	235	71	13	20	0	0	2	0	0	0	0	0	342
9:00	0	200	48	1	16	0	0	2	0	0	0	0	0	267
10:00	3	205	56	1	18	0	0	2	0	0	0	0	0	285
11:00	2	357	79	1	26	0	0	2	0	1	0	0	0	468
12:00 PM	3	386	68	3	26	2	0	3	0	0	1	0	0	492
1:00	2	378	67	5	22	1	0	1	0	0	1	0	0	477
2:00	15	358	78	10	24	1	0	2	0	1	0	0	0	489
3:00	5	381	75	13	21	1	0	1	1	0	0	0	0	498
4:00	5	431	74	4	22	0	0	1	0	0	0	0	0	537
5:00	0	364	56	5	12	0	0	2	0	0	0	0	0	439
6:00	1	292	40	2	8	0	0	1	0	0	0	0	0	344
7:00	0	225	22	1	6	1	0	0	0	0	0	0	0	255
8:00	0	112	14	1	3	0	0	0	0	0	0	0	0	130
9:00	1	94	9	1	0	0	0	0	0	0	0	0	0	105
10:00	1	35	2	1	0	0	0	0	0	0	0	0	0	39
11:00	0	24	5	0	0	0	0	0	0	0	0	0	0	29
Total	43	4445	849	91	252	8	0	20	2	2	2	0	0	5714
Percent	0.8%	77.8%	14.9%	1.6%	4.4%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	7:00	11:00	4:00		8:00	7:00	11:00				11:00
	3	357	79	16	26	1	*	2	1	1	*	*	*	468
PM Peak	2:00	4:00	2:00	3:00	12:00 PM	12:00 PM		12:00 PM	3:00	2:00	12:00 PM			4:00
	15	431	78	13	26	2	*	3	1	1	1	*	*	537

NE TRAFFIC COUNTS

City: New London
Location 1: Phillips St
Location 2: W/O 3rd Ave
Tech: YVM, KM
Latitude: 41.368949
Longitude: -72.122347

Direction: Combined

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	9	0	0	1	0	0	0	0	0	0	0	0	10
1:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
2:00	1	4	0	0	0	0	0	0	0	0	0	0	0	5
3:00	0	7	0	0	1	0	0	0	0	0	0	0	0	8
4:00	0	12	4	0	1	0	0	0	0	0	0	0	0	17
5:00	1	26	9	2	1	0	0	0	0	0	0	0	0	39
6:00	2	88	17	9	8	0	0	1	0	0	0	0	0	125
7:00	1	229	44	16	14	2	0	1	0	0	0	0	0	307
8:00	2	202	48	9	14	0	0	1	0	0	0	0	0	276
9:00	1	191	44	2	21	1	0	4	0	0	1	0	0	265
10:00	0	205	51	1	20	0	0	1	0	0	0	0	0	278
11:00	1	270	57	2	20	1	0	2	0	0	0	0	0	353
12:00 PM	7	293	53	1	16	1	0	0	0	0	0	0	0	371
1:00	4	270	54	5	22	0	0	1	0	1	0	0	0	357
2:00	1	319	66	8	18	0	0	1	0	0	0	0	0	413
3:00	6	377	68	10	24	0	0	3	0	0	0	0	0	488
4:00	2	400	53	6	21	0	0	1	0	1	0	0	0	484
5:00	3	366	72	1	22	1	0	0	0	0	0	0	0	465
6:00	1	319	51	1	11	0	0	0	0	0	0	0	0	383
7:00	0	212	27	0	11	0	0	0	0	0	0	0	0	250
8:00	1	162	18	1	4	1	0	0	0	0	0	0	0	187
9:00	3	84	9	1	2	0	0	0	0	0	0	0	0	99
10:00	1	39	3	0	1	0	0	0	0	0	0	0	0	44
11:00	1	25	5	0	1	0	0	0	0	0	0	0	0	32
Total	39	4111	754	75	254	7	0	16	0	2	1	0	0	5259
Percent	0.7%	78.2%	14.3%	1.4%	4.8%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	11:00	11:00	7:00	9:00	7:00		9:00			9:00			11:00
	2	270	57	16	21	2	*	4	*	*	1	*	*	353
PM Peak	12:00 PM	4:00	5:00	3:00	3:00	12:00 PM		3:00		1:00				3:00
	7	400	72	10	24	1	*	3	*	1	*	*	*	488
Grand Total	82	8556	1603	166	506	15	0	36	2	4	3	0	0	10973
Percent	0.7%	78.0%	14.6%	1.5%	4.6%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

10/7/2024	10/7/2024		10/8/2024		10/9/2024		10/10/2024		10/11/2024		Weekday Average		10/12/2024		10/13/2024	
Time	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	*	*	8	6	2	6	*	*	5	6	*	*	*	*
1:00	*	*	*	*	1	1	1	3	*	*	1	2	*	*	*	*
2:00	*	*	*	*	1	2	1	1	*	*	1	2	*	*	*	*
3:00	*	*	*	*	0	7	1	9	*	*	0	8	*	*	*	*
4:00	*	*	*	*	2	18	1	20	*	*	2	19	*	*	*	*
5:00	*	*	*	*	5	52	5	54	*	*	5	53	*	*	*	*
6:00	*	*	*	*	19	114	17	103	*	*	18	108	*	*	*	*
7:00	*	*	*	*	37	158	31	163	*	*	34	160	*	*	*	*
8:00	*	*	*	*	41	180	42	159	*	*	42	170	*	*	*	*
9:00	*	*	*	*	50	114	55	109	*	*	52	112	*	*	*	*
10:00	*	*	*	*	40	108	33	102	*	*	36	105	*	*	*	*
11:00	*	*	*	*	41	103	37	106	*	*	39	104	*	*	*	*
12:00 PM	*	*	*	*	58	129	41	105	*	*	50	117	*	*	*	*
1:00	*	*	*	*	48	117	54	125	*	*	51	121	*	*	*	*
2:00	*	*	*	*	60	138	54	136	*	*	57	137	*	*	*	*
3:00	*	*	*	*	67	164	65	158	*	*	66	161	*	*	*	*
4:00	*	*	*	*	54	169	75	164	*	*	64	166	*	*	*	*
5:00	*	*	*	*	56	143	50	156	*	*	53	150	*	*	*	*
6:00	*	*	*	*	34	117	46	120	*	*	40	118	*	*	*	*
7:00	*	*	*	*	24	69	32	65	*	*	28	67	*	*	*	*
8:00	*	*	*	*	22	39	20	53	*	*	21	46	*	*	*	*
9:00	*	*	*	*	12	24	17	36	*	*	14	30	*	*	*	*
10:00	*	*	*	*	8	21	9	19	*	*	8	20	*	*	*	*
11:00	*	*	*	*	6	10	3	10	*	*	4	10	*	*	*	*
Total	0	0	0	0	694	2003	692	1982	0	0	691	1992	0	0	0	0
Day	0		0		2697		2674		0		2683		0		0	
AM Peak					9:00	8:00	9:00	7:00			9:00	8:00				
Volume					50	180	55	163			52	170				
PM Peak					3:00	4:00	4:00	4:00			3:00	4:00				
Volume					67	169	75	164			66	166				
Comb Total	0		0		2697		2674		0		2683		0		0	
ADT	ADT: 2,686		AADT: 2,686													

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: SB

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	1	5	2	0	0	0	0	0	0	0	0	0	0	8
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
6:00	0	12	6	0	0	1	0	0	0	0	0	0	0	19
7:00	1	22	11	1	2	0	0	0	0	0	0	0	0	37
8:00	1	33	5	0	1	0	0	1	0	0	0	0	0	41
9:00	0	38	10	1	1	0	0	0	0	0	0	0	0	50
10:00	0	29	8	1	1	0	0	1	0	0	0	0	0	40
11:00	0	25	13	0	1	0	0	2	0	0	0	0	0	41
12:00 PM	0	43	14	1	0	0	0	0	0	0	0	0	0	58
1:00	0	40	7	0	1	0	0	0	0	0	0	0	0	48
2:00	0	44	15	0	1	0	0	0	0	0	0	0	0	60
3:00	0	52	12	1	2	0	0	0	0	0	0	0	0	67
4:00	0	40	9	0	5	0	0	0	0	0	0	0	0	54
5:00	0	44	11	0	1	0	0	0	0	0	0	0	0	56
6:00	0	25	8	0	0	0	0	1	0	0	0	0	0	34
7:00	0	18	5	0	1	0	0	0	0	0	0	0	0	24
8:00	0	21	1	0	0	0	0	0	0	0	0	0	0	22
9:00	0	9	1	0	2	0	0	0	0	0	0	0	0	12
10:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
11:00	1	5	0	0	0	0	0	0	0	0	0	0	0	6
Total	4	519	141	5	19	1	0	5	0	0	0	0	0	694
Percent	0.6%	74.8%	20.3%	0.7%	2.7%	0.1%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	12:00 AM	9:00	11:00	7:00	7:00	6:00		11:00						9:00
	1	38	13	1	2	1	*	2	*	*	*	*	*	50
PM Peak	11:00	3:00	2:00	12:00 PM	4:00			6:00						3:00
	1	52	15	1	5	*	*	1	*	*	*	*	*	67

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: SB

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
6:00	0	12	3	0	1	0	0	0	1	0	0	0	0	17
7:00	0	17	10	0	3	0	0	1	0	0	0	0	0	31
8:00	1	29	10	0	1	0	0	1	0	0	0	0	0	42
9:00	0	43	7	1	4	0	0	0	0	0	0	0	0	55
10:00	0	22	8	0	2	0	1	0	0	0	0	0	0	33
11:00	1	20	10	2	3	0	0	0	1	0	0	0	0	37
12:00 PM	0	33	5	0	3	0	0	0	0	0	0	0	0	41
1:00	1	33	12	1	4	2	0	0	1	0	0	0	0	54
2:00	2	43	5	0	1	2	0	1	0	0	0	0	0	54
3:00	0	49	13	0	3	0	0	0	0	0	0	0	0	65
4:00	0	62	10	1	2	0	0	0	0	0	0	0	0	75
5:00	0	41	8	0	1	0	0	0	0	0	0	0	0	50
6:00	0	36	7	0	3	0	0	0	0	0	0	0	0	46
7:00	0	28	4	0	0	0	0	0	0	0	0	0	0	32
8:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20
9:00	0	16	1	0	0	0	0	0	0	0	0	0	0	17
10:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
11:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	5	518	120	6	32	4	1	3	3	0	0	0	0	692
Percent	0.7%	74.9%	17.3%	0.9%	4.6%	0.6%	0.1%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	8:00	9:00	7:00	11:00	9:00		10:00	7:00	6:00					9:00
	1	43	10	2	4	*	1	1	1	*	*	*	*	55
PM Peak	2:00	4:00	3:00	1:00	1:00	1:00		2:00	1:00					4:00
	2	62	13	1	4	2	*	1	1	*	*	*	*	75
Grand Total	9	1037	261	11	51	5	1	8	3	0	0	0	0	1386
Percent	0.6%	74.8%	18.8%	0.8%	3.7%	0.4%	0.1%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: NB

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	1	5	0	0	0	0	0	0	0	0	0	0	0	6
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	4	2	0	1	0	0	0	0	0	0	0	0	7
4:00	0	11	3	1	3	0	0	0	0	0	0	0	0	18
5:00	1	32	12	1	6	0	0	0	0	0	0	0	0	52
6:00	1	75	22	3	12	0	0	0	1	0	0	0	0	114
7:00	1	116	26	2	11	2	0	0	0	0	0	0	0	158
8:00	0	131	35	2	12	0	0	0	0	0	0	0	0	180
9:00	1	76	23	3	10	0	0	1	0	0	0	0	0	114
10:00	0	72	25	2	9	0	0	0	0	0	0	0	0	108
11:00	0	71	20	1	9	0	0	2	0	0	0	0	0	103
12:00 PM	0	98	18	1	11	0	0	1	0	0	0	0	0	129
1:00	0	84	22	3	7	0	0	1	0	0	0	0	0	117
2:00	0	106	21	2	9	0	0	0	0	0	0	0	0	138
3:00	1	117	37	0	8	0	0	1	0	0	0	0	0	164
4:00	2	123	32	0	11	1	0	0	0	0	0	0	0	169
5:00	1	111	19	0	10	2	0	0	0	0	0	0	0	143
6:00	0	78	23	1	14	1	0	0	0	0	0	0	0	117
7:00	0	58	7	0	4	0	0	0	0	0	0	0	0	69
8:00	0	34	5	0	0	0	0	0	0	0	0	0	0	39
9:00	0	21	3	0	0	0	0	0	0	0	0	0	0	24
10:00	0	15	5	0	1	0	0	0	0	0	0	0	0	21
11:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Total	9	1451	360	22	148	6	0	6	1	0	0	0	0	2003
Percent	0.4%	72.4%	18.0%	1.1%	7.4%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	12:00 AM	8:00	8:00	6:00	6:00	7:00		11:00	6:00					8:00
	1	131	35	3	12	2	*	2	1	*	*	*	*	180
PM Peak	4:00	4:00	3:00	1:00	6:00	5:00		12:00 PM						4:00
	2	123	37	3	14	2	*	1	*	*	*	*	*	169

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: NB

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	6	2	0	1	0	0	0	0	0	0	0	0	9
4:00	0	15	2	0	3	0	0	0	0	0	0	0	0	20
5:00	1	36	9	1	6	1	0	0	0	0	0	0	0	54
6:00	2	66	22	3	10	0	0	0	0	0	0	0	0	103
7:00	2	117	32	3	8	1	0	0	0	0	0	0	0	163
8:00	1	111	27	1	17	0	0	2	0	0	0	0	0	159
9:00	1	75	24	3	5	0	0	0	0	1	0	0	0	109
10:00	0	74	16	1	11	0	0	0	0	0	0	0	0	102
11:00	0	80	18	1	7	0	0	0	0	0	0	0	0	106
12:00 PM	0	67	28	1	8	1	0	0	0	0	0	0	0	105
1:00	0	91	24	4	5	0	0	1	0	0	0	0	0	125
2:00	1	96	30	2	5	1	0	1	0	0	0	0	0	136
3:00	2	117	25	1	11	1	0	1	0	0	0	0	0	158
4:00	1	128	27	1	5	1	0	1	0	0	0	0	0	164
5:00	0	110	33	0	11	2	0	0	0	0	0	0	0	156
6:00	1	89	18	0	12	0	0	0	0	0	0	0	0	120
7:00	0	51	7	0	7	0	0	0	0	0	0	0	0	65
8:00	1	42	8	0	2	0	0	0	0	0	0	0	0	53
9:00	2	25	8	0	1	0	0	0	0	0	0	0	0	36
10:00	0	18	1	0	0	0	0	0	0	0	0	0	0	19
11:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
Total	15	1431	363	22	136	8	0	6	0	1	0	0	0	1982
Percent	0.8%	72.2%	18.3%	1.1%	6.9%	0.4%	0.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	
AM Peak	6:00	7:00	7:00	6:00	8:00	5:00		8:00		9:00				7:00
	2	117	32	3	17	1	*	2	*	1	*	*	*	163
PM Peak	3:00	4:00	5:00	1:00	6:00	5:00		1:00						4:00
	2	128	33	4	12	2	*	1	*	*	*	*	*	164
Grand Total	24	2882	723	44	284	14	0	12	1	1	0	0	0	3985
Percent	0.6%	72.3%	18.1%	1.1%	7.1%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: Combined

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	2	10	2	0	0	0	0	0	0	0	0	0	0	14
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	4	2	0	1	0	0	0	0	0	0	0	0	7
4:00	0	13	3	1	3	0	0	0	0	0	0	0	0	20
5:00	1	34	15	1	6	0	0	0	0	0	0	0	0	57
6:00	1	87	28	3	12	1	0	0	1	0	0	0	0	133
7:00	2	138	37	3	13	2	0	0	0	0	0	0	0	195
8:00	1	164	40	2	13	0	0	1	0	0	0	0	0	221
9:00	1	114	33	4	11	0	0	1	0	0	0	0	0	164
10:00	0	101	33	3	10	0	0	1	0	0	0	0	0	148
11:00	0	96	33	1	10	0	0	4	0	0	0	0	0	144
12:00 PM	0	141	32	2	11	0	0	1	0	0	0	0	0	187
1:00	0	124	29	3	8	0	0	1	0	0	0	0	0	165
2:00	0	150	36	2	10	0	0	0	0	0	0	0	0	198
3:00	1	169	49	1	10	0	0	1	0	0	0	0	0	231
4:00	2	163	41	0	16	1	0	0	0	0	0	0	0	223
5:00	1	155	30	0	11	2	0	0	0	0	0	0	0	199
6:00	0	103	31	1	14	1	0	1	0	0	0	0	0	151
7:00	0	76	12	0	5	0	0	0	0	0	0	0	0	93
8:00	0	55	6	0	0	0	0	0	0	0	0	0	0	61
9:00	0	30	4	0	2	0	0	0	0	0	0	0	0	36
10:00	0	23	5	0	1	0	0	0	0	0	0	0	0	29
11:00	1	15	0	0	0	0	0	0	0	0	0	0	0	16
Total	13	1970	501	27	167	7	0	11	1	0	0	0	0	2697
Percent	0.5%	73.0%	18.6%	1.0%	6.2%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	12:00 AM	8:00	8:00	9:00	7:00	7:00		11:00	6:00					8:00
	2	164	40	4	13	2	*	4	1	*	*	*	*	221
PM Peak	4:00	3:00	3:00	1:00	4:00	5:00		12:00 PM						3:00
	2	169	49	3	16	2	*	1	*	*	*	*	*	231

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St
Location 2: S/O I-95 Exit
Tech: KM, YVM
Latitude: 41.370412
Longitude: -72.123575

Direction: Combined

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	8
1:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
3:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
4:00	0	15	2	1	3	0	0	0	0	0	0	0	0	21
5:00	1	39	11	1	6	1	0	0	0	0	0	0	0	59
6:00	2	78	25	3	11	0	0	0	1	0	0	0	0	120
7:00	2	134	42	3	11	1	0	1	0	0	0	0	0	194
8:00	2	140	37	1	18	0	0	3	0	0	0	0	0	201
9:00	1	118	31	4	9	0	0	0	0	1	0	0	0	164
10:00	0	96	24	1	13	0	1	0	0	0	0	0	0	135
11:00	1	100	28	3	10	0	0	0	1	0	0	0	0	143
12:00 PM	0	100	33	1	11	1	0	0	0	0	0	0	0	146
1:00	1	124	36	5	9	2	0	1	1	0	0	0	0	179
2:00	3	139	35	2	6	3	0	2	0	0	0	0	0	190
3:00	2	166	38	1	14	1	0	1	0	0	0	0	0	223
4:00	1	190	37	2	7	1	0	1	0	0	0	0	0	239
5:00	0	151	41	0	12	2	0	0	0	0	0	0	0	206
6:00	1	125	25	0	15	0	0	0	0	0	0	0	0	166
7:00	0	79	11	0	7	0	0	0	0	0	0	0	0	97
8:00	1	59	11	0	2	0	0	0	0	0	0	0	0	73
9:00	2	41	9	0	1	0	0	0	0	0	0	0	0	53
10:00	0	26	2	0	0	0	0	0	0	0	0	0	0	28
11:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
Total	20	1949	483	28	168	12	1	9	3	1	0	0	0	2674
Percent	0.7%	72.9%	18.1%	1.0%	6.3%	0.4%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	8:00	7:00	9:00	8:00	5:00	10:00	8:00	6:00	9:00				8:00
	2	140	42	4	18	1	1	3	1	1	*	*	*	201
PM Peak	2:00	4:00	5:00	1:00	6:00	2:00		2:00	1:00					4:00
	3	190	41	5	15	3	*	2	1	*	*	*	*	239
Grand Total	33	3919	984	55	335	19	1	20	4	1	0	0	0	5371
Percent	0.6%	73.0%	18.3%	1.0%	6.2%	0.4%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

10/7/2024	10/7/2024		10/8/2024		10/9/2024		10/10/2024		10/11/2024		Weekday Average		10/12/2024		10/13/2024	
Time	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	*	*	9	13	12	5	*	*	10	9	*	*	*	*
1:00	*	*	*	*	2	1	5	8	*	*	4	4	*	*	*	*
2:00	*	*	*	*	3	2	4	3	*	*	4	2	*	*	*	*
3:00	*	*	*	*	5	3	6	3	*	*	6	3	*	*	*	*
4:00	*	*	*	*	22	8	24	5	*	*	23	6	*	*	*	*
5:00	*	*	*	*	65	17	73	18	*	*	69	18	*	*	*	*
6:00	*	*	*	*	158	54	148	54	*	*	153	54	*	*	*	*
7:00	*	*	*	*	306	115	295	123	*	*	300	119	*	*	*	*
8:00	*	*	*	*	277	124	256	117	*	*	266	120	*	*	*	*
9:00	*	*	*	*	199	113	237	131	*	*	218	122	*	*	*	*
10:00	*	*	*	*	170	128	197	131	*	*	184	130	*	*	*	*
11:00	*	*	*	*	199	176	207	158	*	*	203	167	*	*	*	*
12:00 PM	*	*	*	*	235	172	220	156	*	*	228	164	*	*	*	*
1:00	*	*	*	*	237	160	232	169	*	*	234	164	*	*	*	*
2:00	*	*	*	*	248	227	241	204	*	*	244	216	*	*	*	*
3:00	*	*	*	*	354	227	304	223	*	*	329	225	*	*	*	*
4:00	*	*	*	*	320	267	298	255	*	*	309	261	*	*	*	*
5:00	*	*	*	*	287	234	278	258	*	*	282	246	*	*	*	*
6:00	*	*	*	*	241	170	251	180	*	*	246	175	*	*	*	*
7:00	*	*	*	*	138	142	136	144	*	*	137	143	*	*	*	*
8:00	*	*	*	*	112	67	142	105	*	*	127	86	*	*	*	*
9:00	*	*	*	*	52	48	60	59	*	*	56	54	*	*	*	*
10:00	*	*	*	*	42	24	36	25	*	*	39	24	*	*	*	*
11:00	*	*	*	*	33	24	32	14	*	*	32	19	*	*	*	*
Total	0	0	0	0	3714	2516	3694	2548	0	0	3703	2531	0	0	0	0
Day	0		0		6230		6242		0		6234		0		0	
AM Peak					7:00	11:00	7:00	11:00			7:00	11:00				
Volume					306	176	295	158			300	167				
PM Peak					3:00	4:00	3:00	5:00			3:00	4:00				
Volume					354	267	304	258			329	261				
Comb Total	0		0		6230		6242		0		6234		0		0	
ADT	ADT: 6,236		AADT: 6,236													

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: SB

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	9
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
4:00	0	14	5	1	1	1	0	0	0	0	0	0	0	22
5:00	1	43	19	0	2	0	0	0	0	0	0	0	0	65
6:00	2	121	24	4	6	0	0	1	0	0	0	0	0	158
7:00	0	235	53	7	8	2	0	1	0	0	0	0	0	306
8:00	0	204	45	7	17	2	0	2	0	0	0	0	0	277
9:00	1	146	40	2	6	3	0	1	0	0	0	0	0	199
10:00	1	122	37	2	6	2	0	0	0	0	0	0	0	170
11:00	2	143	43	0	9	1	0	1	0	0	0	0	0	199
12:00 PM	0	183	42	1	9	0	0	0	0	0	0	0	0	235
1:00	1	178	50	0	5	2	0	1	0	0	0	0	0	237
2:00	2	191	42	1	10	1	0	1	0	0	0	0	0	248
3:00	0	258	68	9	14	3	0	1	0	0	0	0	1	354
4:00	1	258	47	1	11	1	0	1	0	0	0	0	0	320
5:00	3	239	37	1	7	0	0	0	0	0	0	0	0	287
6:00	0	190	44	1	4	1	0	0	1	0	0	0	0	241
7:00	0	119	17	0	2	0	0	0	0	0	0	0	0	138
8:00	3	95	12	0	1	1	0	0	0	0	0	0	0	112
9:00	1	43	4	0	1	3	0	0	0	0	0	0	0	52
10:00	0	37	3	0	1	1	0	0	0	0	0	0	0	42
11:00	2	28	3	0	0	0	0	0	0	0	0	0	0	33
Total	20	2864	637	37	120	24	0	10	1	0	0	0	1	3714
Percent	0.5%	77.1%	17.2%	1.0%	3.2%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	7:00	7:00	7:00	8:00	9:00		8:00						7:00
	2	235	53	7	17	3	*	2	*	*	*	*	*	306
PM Peak	5:00	3:00	3:00	3:00	3:00	3:00		1:00	6:00				3:00	3:00
	3	258	68	9	14	3	*	1	1	*	*	*	1	354

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: SB

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	11	0	0	0	1	0	0	0	0	0	0	0	12
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
3:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
4:00	0	20	4	0	0	0	0	0	0	0	0	0	0	24
5:00	1	49	19	0	4	0	0	0	0	0	0	0	0	73
6:00	3	110	24	3	8	0	0	0	0	0	0	0	0	148
7:00	3	232	45	7	5	3	0	0	0	0	0	0	0	295
8:00	1	186	47	7	10	3	0	2	0	0	0	0	0	256
9:00	0	169	43	3	16	3	1	0	2	0	0	0	0	237
10:00	0	151	38	1	5	2	0	0	0	0	0	0	0	197
11:00	1	152	40	1	8	3	0	1	1	0	0	0	0	207
12:00 PM	1	170	42	1	3	2	0	1	0	0	0	0	0	220
1:00	1	183	34	1	10	3	0	0	0	0	0	0	0	232
2:00	1	189	40	0	10	0	0	1	0	0	0	0	0	241
3:00	3	234	45	7	10	3	1	1	0	0	0	0	0	304
4:00	0	252	36	1	5	3	0	1	0	0	0	0	0	298
5:00	4	216	48	0	8	2	0	0	0	0	0	0	0	278
6:00	1	201	41	1	5	2	0	0	0	0	0	0	0	251
7:00	0	114	20	0	2	0	0	0	0	0	0	0	0	136
8:00	2	120	16	1	2	0	0	1	0	0	0	0	0	142
9:00	1	51	7	0	0	1	0	0	0	0	0	0	0	60
10:00	1	30	3	0	2	0	0	0	0	0	0	0	0	36
11:00	1	28	2	0	0	1	0	0	0	0	0	0	0	32
Total	25	2880	596	34	114	32	2	8	3	0	0	0	0	3694
Percent	0.7%	78.0%	16.1%	0.9%	3.1%	0.9%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	7:00	8:00	7:00	9:00	7:00	9:00	8:00	9:00					7:00
	3	232	47	7	16	3	1	2	2	*	*	*	*	295
PM Peak	5:00	4:00	5:00	3:00	1:00	1:00	3:00	12:00 PM						3:00
	4	252	48	7	10	3	1	1	*	*	*	*	*	304
Grand Total	45	5744	1233	71	234	56	2	18	4	0	0	0	1	7408
Percent	0.6%	77.5%	16.6%	1.0%	3.2%	0.8%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: NB

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	9	2	0	2	0	0	0	0	0	0	0	0	13
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
4:00	0	4	2	1	1	0	0	0	0	0	0	0	0	8
5:00	0	11	3	1	2	0	0	0	0	0	0	0	0	17
6:00	1	37	7	3	6	0	0	0	0	0	0	0	0	54
7:00	0	65	26	7	16	0	0	1	0	0	0	0	0	115
8:00	0	69	37	1	17	0	0	0	0	0	0	0	0	124
9:00	1	73	25	3	10	0	0	0	1	0	0	0	0	113
10:00	0	82	30	1	13	0	0	1	1	0	0	0	0	128
11:00	0	113	43	0	17	0	0	2	1	0	0	0	0	176
12:00 PM	0	122	31	2	13	2	0	2	0	0	0	0	0	172
1:00	2	118	29	0	11	0	0	0	0	0	0	0	0	160
2:00	3	146	53	1	23	0	0	1	0	0	0	0	0	227
3:00	0	160	41	3	22	0	0	1	0	0	0	0	0	227
4:00	2	194	43	1	26	0	0	1	0	0	0	0	0	267
5:00	0	177	41	1	15	0	0	0	0	0	0	0	0	234
6:00	1	127	22	0	20	0	0	0	0	0	0	0	0	170
7:00	0	103	26	0	12	0	0	1	0	0	0	0	0	142
8:00	0	46	18	0	3	0	0	0	0	0	0	0	0	67
9:00	0	42	5	0	1	0	0	0	0	0	0	0	0	48
10:00	0	22	1	0	1	0	0	0	0	0	0	0	0	24
11:00	0	21	3	0	0	0	0	0	0	0	0	0	0	24
Total	10	1745	489	25	232	2	0	10	3	0	0	0	0	2516
Percent	0.4%	69.4%	19.4%	1.0%	9.2%	0.1%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	11:00	11:00	7:00	8:00			11:00	9:00					11:00
	1	113	43	7	17	*	*	2	1	*	*	*	*	176
PM Peak	2:00	4:00	2:00	3:00	4:00	12:00 PM		12:00 PM						4:00
	3	194	53	3	26	2	*	2	*	*	*	*	*	267

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: NB

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:00	0	3	4	0	1	0	0	0	0	0	0	0	0	8
2:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
4:00	0	1	1	1	0	2	0	0	0	0	0	0	0	5
5:00	0	12	5	1	0	0	0	0	0	0	0	0	0	18
6:00	1	38	5	2	7	0	0	0	1	0	0	0	0	54
7:00	0	80	21	5	17	0	0	0	0	0	0	0	0	123
8:00	0	70	25	2	19	0	0	1	0	0	0	0	0	117
9:00	0	93	22	1	13	1	0	1	0	0	0	0	0	131
10:00	0	80	26	1	21	0	1	2	0	0	0	0	0	131
11:00	0	100	33	3	20	0	0	2	0	0	0	0	0	158
12:00 PM	0	110	28	0	18	0	0	0	0	0	0	0	0	156
1:00	3	106	33	3	22	0	0	2	0	0	0	0	0	169
2:00	1	131	47	3	22	0	0	0	0	0	0	0	0	204
3:00	1	162	44	2	12	0	0	2	0	0	0	0	0	223
4:00	1	177	48	1	27	0	0	1	0	0	0	0	0	255
5:00	1	176	55	0	26	0	0	0	0	0	0	0	0	258
6:00	1	138	25	0	16	0	0	0	0	0	0	0	0	180
7:00	0	104	30	0	10	0	0	0	0	0	0	0	0	144
8:00	1	75	22	0	7	0	0	0	0	0	0	0	0	105
9:00	0	45	11	0	3	0	0	0	0	0	0	0	0	59
10:00	0	23	1	0	1	0	0	0	0	0	0	0	0	25
11:00	0	9	3	0	2	0	0	0	0	0	0	0	0	14
Total	10	1743	489	25	265	3	1	11	1	0	0	0	0	2548
Percent	0.4%	68.4%	19.2%	1.0%	10.4%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	11:00	11:00	7:00	10:00	4:00	10:00	10:00	6:00					11:00
	1	100	33	5	21	2	1	2	1	*	*	*	*	158
PM Peak	1:00	4:00	5:00	1:00	4:00			1:00						5:00
	3	177	55	3	27	*	*	2	*	*	*	*	*	258
Grand Total	20	3488	978	50	497	5	1	21	4	0	0	0	0	5064
Percent	0.4%	68.9%	19.3%	1.0%	9.8%	0.1%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: Combined

10/9/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	18	2	0	2	0	0	0	0	0	0	0	0	22
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
3:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
4:00	0	18	7	2	2	1	0	0	0	0	0	0	0	30
5:00	1	54	22	1	4	0	0	0	0	0	0	0	0	82
6:00	3	158	31	7	12	0	0	1	0	0	0	0	0	212
7:00	0	300	79	14	24	2	0	2	0	0	0	0	0	421
8:00	0	273	82	8	34	2	0	2	0	0	0	0	0	401
9:00	2	219	65	5	16	3	0	1	1	0	0	0	0	312
10:00	1	204	67	3	19	2	0	1	1	0	0	0	0	298
11:00	2	256	86	0	26	1	0	3	1	0	0	0	0	375
12:00 PM	0	305	73	3	22	2	0	2	0	0	0	0	0	407
1:00	3	296	79	0	16	2	0	1	0	0	0	0	0	397
2:00	5	337	95	2	33	1	0	2	0	0	0	0	0	475
3:00	0	418	109	12	36	3	0	2	0	0	0	0	1	581
4:00	3	452	90	2	37	1	0	2	0	0	0	0	0	587
5:00	3	416	78	2	22	0	0	0	0	0	0	0	0	521
6:00	1	317	66	1	24	1	0	0	1	0	0	0	0	411
7:00	0	222	43	0	14	0	0	1	0	0	0	0	0	280
8:00	3	141	30	0	4	1	0	0	0	0	0	0	0	179
9:00	1	85	9	0	2	3	0	0	0	0	0	0	0	100
10:00	0	59	4	0	2	1	0	0	0	0	0	0	0	66
11:00	2	49	6	0	0	0	0	0	0	0	0	0	0	57
Total	30	4609	1126	62	352	26	0	20	4	0	0	0	1	6230
Percent	0.5%	74.0%	18.1%	1.0%	5.7%	0.4%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	7:00	11:00	7:00	8:00	9:00		11:00	9:00					7:00
	3	300	86	14	34	3	*	3	1	*	*	*	*	421
PM Peak	2:00	4:00	3:00	3:00	4:00	3:00		12:00 PM	6:00				3:00	4:00
	5	452	109	12	37	3	*	2	1	*	*	*	1	587

NE TRAFFIC COUNTS

City: New London
Location 1: Vauxhall St Extension
Location 2: N/O Phillips St
Tech: YVM, KM
Latitude: 41.370058
Longitude: -72.122140

Direction: Combined

10/10/2024 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	16	0	0	0	1	0	0	0	0	0	0	0	17
1:00	0	8	4	0	1	0	0	0	0	0	0	0	0	13
2:00	0	5	0	0	2	0	0	0	0	0	0	0	0	7
3:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
4:00	0	21	5	1	0	2	0	0	0	0	0	0	0	29
5:00	1	61	24	1	4	0	0	0	0	0	0	0	0	91
6:00	4	148	29	5	15	0	0	0	1	0	0	0	0	202
7:00	3	312	66	12	22	3	0	0	0	0	0	0	0	418
8:00	1	256	72	9	29	3	0	3	0	0	0	0	0	373
9:00	0	262	65	4	29	4	1	1	2	0	0	0	0	368
10:00	0	231	64	2	26	2	1	2	0	0	0	0	0	328
11:00	1	252	73	4	28	3	0	3	1	0	0	0	0	365
12:00 PM	1	280	70	1	21	2	0	1	0	0	0	0	0	376
1:00	4	289	67	4	32	3	0	2	0	0	0	0	0	401
2:00	2	320	87	3	32	0	0	1	0	0	0	0	0	445
3:00	4	396	89	9	22	3	1	3	0	0	0	0	0	527
4:00	1	429	84	2	32	3	0	2	0	0	0	0	0	553
5:00	5	392	103	0	34	2	0	0	0	0	0	0	0	536
6:00	2	339	66	1	21	2	0	0	0	0	0	0	0	431
7:00	0	218	50	0	12	0	0	0	0	0	0	0	0	280
8:00	3	195	38	1	9	0	0	1	0	0	0	0	0	247
9:00	1	96	18	0	3	1	0	0	0	0	0	0	0	119
10:00	1	53	4	0	3	0	0	0	0	0	0	0	0	61
11:00	1	37	5	0	2	1	0	0	0	0	0	0	0	46
Total	35	4623	1085	59	379	35	3	19	4	0	0	0	0	6242
Percent	0.6%	74.1%	17.4%	0.9%	6.1%	0.6%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	6:00	7:00	11:00	7:00	8:00	9:00	9:00	8:00	9:00					7:00
	4	312	73	12	29	4	1	3	2	*	*	*	*	418
PM Peak	5:00	4:00	5:00	3:00	5:00	1:00	3:00	3:00						4:00
	5	429	103	9	34	3	1	3	*	*	*	*	*	553
Grand Total	65	9232	2211	121	731	61	3	39	8	0	0	0	1	12472
Percent	0.5%	74.0%	17.7%	1.0%	5.9%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	

Pavement Engineering Services
Traffic Analysis and Classifications

Vauxhall Street Roundabout Improvements.
New London, CT

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St South of I-95 Exit	10/9/2024	24	SB	694	4	519	141	5	19	1	0	5	0	0	0	0	0	4.32
	10/10/2024	24	SB	692	5	518	120	6	32	4	1	3	3	0	0	0	0	7.08
			Totals	1386	9	1037	261	11	51	5	1	8	3	0	0	0	0	79.00
			Percent of Total =		0.65	74.82	18.83	0.79	3.68	0.36	0.07	0.58	0.22	0.00	0.00	0.00	0.00	
			Percent of Trucks & Buses =	5.70														

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Phillips St west of 3rd Ave	10/9/2024	24	EB	3052	25	2310	476	47	173	2	0	15	1	1	2	0	0	7.90
	10/10/2024	24	EB	2662	21	2014	401	38	173	3	0	11	0	0	1	0	0	8.49
			Totals	5714	46	4324	877	85	346	5	0	26	1	1	3	0	0	467.00
			Percent of Total =		0.81	75.67	15.35	1.49	6.06	0.09	0.00	0.46	0.02	0.02	0.05	0.00	0.00	
			Percent of Trucks & Buses =	8.17														

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St Ext. North of Phillips St	10/9/2024	24	SB	3714	20	2864	637	37	120	24	0	10	1	0	0	0	1	5.20
	10/10/2024	24	SB	3694	25	2880	596	34	114	32	2	8	3	0	0	0	0	5.22
			Totals	7408	45	5744	1233	71	234	56	2	18	4	0	0	0	1	386.00
			Percent of Total =		0.61	77.54	16.64	0.96	3.16	0.76	0.03	0.24	0.05	0.00	0.00	0.00	0.01	
			Percent of Trucks & Buses =	5.21														

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St Ext. North of Phillips St	10/9/2024	24	NB	2516	10	1745	489	25	232	2	0	10	3	0	0	0	0	10.81
	10/10/2024	24	NB	2548	10	1743	489	25	265	3	1	11	1	0	0	0	0	12.01
			Totals	5064	20	3488	978	50	497	5	1	21	4	0	0	0	0	578.00
			Percent of Total =		0.39	68.88	19.31	0.99	9.81	0.10	0.02	0.41	0.08	0.00	0.00	0.00	0.00	
			Percent of Trucks & Buses =	11.41														

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Phillips St west of 3rd Ave	10/9/2024	24	WB	2662	18	2135	373	44	79	6	0	5	1	1	0	0	0	5.11
	10/10/2024	24	WB	2597	18	2097	353	37	81	4	0	5	0	2	0	0	0	4.97
			Totals	5259	36	4232	726	81	160	10	0	10	1	3	0	0	0	265.00
			Percent of Total =		0.68	80.47	13.80	1.54	3.04	0.19	0.00	0.19	0.02	0.06	0.00	0.00	0.00	
			Percent of Trucks & Buses =	5.04														

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St South of I-95 Exit	10/9/2024	24	NB	2003	9	1451	360	22	148	6	0	6	1	0	0	0	0	9.14
	10/10/2024	24	NB	1982	15	1431	363	22	136	8	0	6	0	1	0	0	0	8.73
			Totals	3985	24	2882	723	44	284	14	0	12	1	1	0	0	0	356.00
			Percent of Total =		0.60	72.32	18.14	1.10	7.13	0.35	0.00	0.30	0.03	0.03	0.00	0.00	0.00	
			Percent of Trucks & Buses =	8.93														

AVERAGE ADT FOR VAUXHALL ST SB =	693		
AVERAGE ADT FOR PHILLIPS ST EB =	2857		
AVERAGE ADT FOR VAUXHALL ST EXT SB =	3704		
AVERAGE ADT FOR VAUXHALL ST EXT NB =	868	COMMENT	Assummed 34.27% of ADT from Vauxhall Street
AVERAGE ADT FOR PHILLIPS ST WB =	615	COMMENT	Assummed 23.40% of ADT from Vauxhall Street
AVERAGE ADT FOR VAUXHALL ST NB =	311	COMMENT	Assummed 15.63% of ADT from Vauxhall Street

AVERAGE TOTAL ADT =	9048												
VEHICLE CLASS PERCENTAGE =	0.62	74.95	17.01	1.15	5.48	0.31	0.02	0.36	0.07	0.02	0.01	0.00	0.00
AVERAGE % TRUCKS & BUSES =	7.41												

NARRATIVE The ESALs number for the roundabout was calculated using the eastbound ADT values from Phillips St and southbound ADT values from Vauxhall St and Vauxhall St Extension that converge in the intersection. ADT values from the northbound of Vauxhall St getting into the intersection were not collected. To account for the cars entering the intersection from the northbound approach, a percentage of cars coming from the northbound of Vauxhall St into the westbound of Phillips St, the northbound of Vauxhall St (after the intersection), and the northbound of Vauxhall St Extension was utilized. The percentages of cars coming from the south of Vauxhall St into the westbound of Phillips St, the northbound of Vauxhall St (after the intersection), and the northbound of Vauxhall St Extension were obtained using the turning counts from the weekday AM and PM peak hours under the assumption that they are a reasonable representation of the traffic movement at the intersection; their counts are available in section L. The ADT values from the westbound of Phillips St, the northbound of Vauxhall St (after the intersection) and the northbound of Vauxhall St Extension were multiplied by the appropriate percentages. This was done to obtain an ADT for each approach leg in order to calculate the ESAL properly based total traffic utilizing the roundabout. Traffic Analysis and ESALs numbers were also generated for each road individually.

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	CTDOT - Pavement Design Unit
Road Name	Vauxhall St Roundabout
Pavement Surface Age	19 years

Legend	
	= automatically calculated or linked value (do not edit)
	= user input
	= solution(s)
	= accumulated ESALs for the designated functional class
	= not applicable

Step		Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)
Step 1: Available ADT		9,048	vpd (vehicles per day)	Available ADT (Average Daily Traffic) is the measured total volume of vehicle traffic on the subject roadway in *both directions*. The top link, below, contains an interactive AADT map for all roadways in CT that can be used to locate traffic data. The bottom link contains expressway ADT maps for limited access facilities as well as ADT maps for towns. https://portal.ct.gov/DOT/PP_SysInfo/Traffic-Monitoring https://portal.ct.gov/DOT/PP_Bureau/Documents/Maps	**Double click to expand notes:** • Please note that ADT is general measure of mean daily traffic and may represent a short-term traffic study (i.e. 3-day or 7-day count) while AADT (Average Annual Daily Traffic) represents data for the entire year. Both values are acceptable for use in this calculator; however, it should be recognized that AADT may provide a more precise solution because of a larger traffic data		Appendix D https://www.fhwa.dot.gov/policyinformation/pubs/pl18027_traffic_data_pocket_guide.pdf
Step 2: Year	ADT Year	2024		Year for the available ADT data	The year for the ADT should be from the same source where the ADT value was taken.		N/A
	EOC Year	2028		End of construction (EOC) year for the project	The year for EOC may not always be known or provided. In this case, reach out to the lead design staff for the latest project schedule. For CTDOT projects please refer to the link to Compass below: https://ctgovexec.sharepoint.com/projects/Pages/Projects.aspx		
Step 3: Directional Distribution		100	%	Directional distribution is the percentage of traffic traveling in one direction along the roadway. 50% is the default value for two-way traffic on undivided roadways, or if using combined directional data for a divided highway. Please enter 100% for a one-way road design (ramps, roundabouts, etc.), or if using single direction traffic data for a divided highway (i.e. using northbound data on a N/S expressway).	If there is more specific information available that indicates a directional distribution other than 100% or 50%, then the input should be adjusted accordingly for the design direction.		I-11, 1.4.1
Step 4: Lane Distribution		100	%	Lane distribution is the percentage of traffic that will be carried in the design lane proposed in the *final* project configuration, not the existing lane conditions (check the project final plans and/or coordinate with the designer or traffic engineer if necessary). "Lanes" refers to the through lanes only, not auxiliary lanes (turning, passing, climbing, acceleration/deceleration, etc.)	Lane distribution varies by the number of through lanes, and values lower than 100% may be used for the lane distribution (see chart below). Please use the CTDOT lane distribution values unless noted otherwise.		I-11, 1.4.1 I-9, 2.1.2, Table 2.2

	Percent of ESALs in Design Lane	
Number of Lanes	**CTDOT**	**AASHTO**
2 lanes (1 per direction)	100%	100%
4 lanes (2 per direction)	90%	80-100%
6+ lanes (3+ per direction)	70%	50-80%

Step 5: Design ADT		9,794	vpd (vehicles per day)	Design ADT is a calculated value that will be used to determine the accumulated ESALs in the design lane	The Design ADT value is calculated by using a default 2% growth rate from the year of the provided ADT to EOC. Typical practice is to project from the ADT year to EOC and use that number as the initial value for the start of the pavement structure's design life.		Appendix D
Step 6: Growth Rates		2.0	% (cars)	Annual growth rate of cars over the design period	Please use a default growth rate of 2% for cars and heavy vehicles unless another value is specifically provided or researched.		I-11, 1.4.1 Appendix D
		2.0	% (trucks)	Annual growth rate of all heavy vehicle types over the design period			
Step 7: Design Life		20	years	Period of time for which the pavement design/analysis is to be conducted	**Double click to expand notes:** • 20 year design life is standard for state roadway design and should be the default value. It can also be used for most town roads and highway ramps. 15 year design life may be used for town roads as well depending on the program and treatment proposed.		I-43 to I-47, 3.4.2 to 3.6.7 II-6 to II-7, 2.1.1 https://pavementinteractive.org/reference-desk/design/structural-design/perpetual-pavements/
Step 8: Roadway Functional Class		Urban Collector	*(please click green cell and then choose drop down selection)*	A roadway functional class (FC) is the designation of a roadway into systems according to the character of service it provides in relation to the total roadway network. Please note that in this case the "Multi-lane" class is equivalent to an interstate highway. The link below is an interactive GIS map which includes the FC of the roadways in Connecticut https://connecticut-ctdot.opendata.arcgis.com/apps/functional-classification-interactive-app/explor	After determining the roadway FC, the ESAL value will be calculated automatically using the appropriate vehicle distributions. The result will be displayed in green in Step 8 corresponding to a Rural or Urban functional class. The red cell labeled "FALSE" is not applicable.		https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf
Step 9: Accumulated ESALs	Rural	FALSE	ESALs (W18)	Predicted number of 18-kip equivalent single axle load applications to the roadway over the selected design life. This value should only be used for flexible (asphalt) pavement design calculations. Design ESALs for rigid (concrete) or composite (asphalt on concrete) pavement design will require an adjustment to this value (accumulated ESALs multiplied by a factor of 1.5). See Rigid-Composite Design Tool for implementation	The accumulated ESALs is calculated automatically within the roadway FC sheets that have been hidden. They can be unhidden by right clicking on the tabs below. Default percentages have already been provided, but may be changed if more specific information on vehicle type/class percentages is available. Please note that the assumed vehicle type distribution varies for each roadway functional classification.		I-10 to II-13, 1.4 Appendix D
	Urban	2,816,047	ESALs (W18)				

General Information	
Project ID	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia

VEHICLE TYPES	PERCENTAGES	CURRENT TRAFFIC	GROWTH FACTORS	DESIGN TRAFFIC	E.S.A.L. FACTOR	DESIGN E.S.A.L.
MOTORCYCLES	0.620	61	24.30	538514	0.0001	54
PASSENGER CARS	74.950	7340	24.30	65099409	0.0020	130199
FOUR TIRE	17.010	1666	24.30	14774396	0.0389	574724
HEAVY VEHICLES						
BUSES	1.150	113	24.30	998857	0.4111	410630
SINGLE UNITS						
SIX TIRE TRUCKS	5.480	537	24.30	4759770	0.2004	953858
THREE AXLE TRUCKS	0.310	30	24.30	269257	1.1384	306522
FOUR AXLE TRUCKS	0.020	2	24.30	17371	3.4784	60425
SINGLE-TRAILER TRUCKS						
FOUR OR LESS AXLES	0.360	35	24.30	312686	0.8005	250305
FIVE AXLES	0.070	7	24.30	60800	1.3377	81332
SIX OR MORE AXLES	0.020	2	24.30	17371	1.2303	21372
MULTI-TRAILER TRUCKS						
FIVE OR LESS AXLES	0.010	1	24.30	8686	3.0655	26626
SIX AXLES	0.000	0	24.30	0	2.1102	0
SEVEN OR MORE AXLES	0.000	0	24.30	0	2.1102	0
UNCLASSIFIED	0.000	0	24.30	0	1.4500	0
SUM OF ALL TYPES	100.000	9794				2816047 ESALs

AVERAGE DAILY TRAFFIC	9794		
LANE DISTRIBUTION	100		
GROWTH RATE OF CARS	2.0	20	24.30
GROWTH RATE OF TRUCKS	2.0	20	24.30
	Annual G.Rate in %	Life (yrs)	Growth Factor

G.F. = ((1+g)^n - 1) / g

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	Fuss & O'Neill
Road Name	Vauxhall Street Roundabout
Pavement Surface Age	19 years

Legend	
	= automatically calculated/linked value (do not edit)
	= user input
	= solution(s)
	= solved target cell/adequate pavement structure
	= unsolved target cell/inadequate pavement structure

Step	Parameter	Variable	Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)	
Step 1: General Information	Initial Serviceability	Po	4.2		Initial design serviceability index	Default value for flexible pavements		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Terminal Serviceability	Pt	2.0		Terminal design serviceability index	Use a value of 2.5 for all functional classifications, except collectors (urban/rural, major or minor) and local roads which may use a value of 2.0		I-6 to I-9, 1.2 to 1.3 II-10, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Change in Present Serviceability Index (PSI)	ΔPSI	2.20		Difference between initial and terminal design serviceability index	Value is calculated automatically		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Reliability Level	R	90	%	Reliability	Use a value of 95% for Interstates/Expressways (limited access), and use 90% for all other lower functional classifications (unlimited access) as defined in the ESAL Calculator		I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-9, 2.1.3, Table 2.2 II-31 and II-34, 3.1.1 to 3.1.3
	Standard Normal Deviate	ZR	-1.28		Standard normal deviate corresponding to a level of reliability, R	Value is calculated automatically		I-5, 1.2 I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-8, 2.1.3 II-31, 3.1.1
	Overall Standard Deviation	S	0.45		Combined standard error of the traffic prediction and performance prediction	Default value selected (AASHTO allows 0.40 to 0.50 for flexible pavement design)		I-5, 1.2 II-9, 2.1.3	II-10, 2.2.1
Step 2: Traffic Analysis	Accumulated ESALs	W18	2,816,047	ESALs	Predicted number of 18-kip equivalent single axle load applications over the design life. The design life is the period of time for which the pavement design/analysis is to be conducted (determined with the ESAL Calculator linked on the previous sheet).	**Double click to expand notes:**		I-5, 1.2 I-10 to I-13, 1.4	I-54 to I-55, 4.1.3 II-31 to II-35, 3.1.1 to 3.1.4
Step 3: Soil Analysis	Subgrade Resilient Modulus	M[r]	10,000	psi	Definitive material property used to characterize roadbed soil for pavement design and is a measure of the elastic property of soil recognizing certain nonlinear characteristics	**Double click for M[r] values:**		I-6, 1.2 and I-13 to I-15, 1.5 II-12 to II-15, 2.3.1	II-31 to II-35, 3.1.1 to 3.1.4 III-91 to III-97, 5.3.4 to 5.4.5

Step 4: Proposed Pavement Structure - Layer Thicknesses	**Layer**	**Coefficient, a[i]**	**Thickness**	**Unit**				
	Surface Mix	0.44	2.00	inch	**Thickness:** Identifying and defining pavement layer thicknesses will provide the load-carrying capacity corresponding to the design SN, or in this spreadsheet the "Provided SN"	**Double click to expand notes:** **Thickness:** Please insert the depth of each layer being constructed within the proposed pavement structure in the cells on the left		II-17 to II-22, 2.3.5 II-35 to II-37, 3.1.4 and 3.1.5 III-95 to III-105, 5.4.5, Table 5.2
	Base Mix	0.34	4.00	inch				
	Processed Aggregate Base (P.A.B.)	0.14	12.00	inch	**Layer Coefficient, a[i]:** The layer coefficient is a measure of the relative ability of the material to function as a structural component of the pavement	• A minimum total pavement structure depth of 18" - 20" (asphalt and granular base layers combined) is recommended for the purpose of mitigating potential damage from frost action. This is approximately half the frost depth in CT (~ 40").		MTG Pavement Design Catalog (see for typical pavement structures):
	Subbase	0.11	0.00	inch		• For pavement structures with a single mix type, it is recommended to split the depth		https://portal.ct.gov/DOT/Engineering/Pavement-Design/Pavement-Design-Unit
	Total Pavement Structure Thickness:		18.00	inch				

Step 5: Solve Design Equation	Target Cell	0.00	Solved target cell =	Please **solve** the target cell by clicking on the "Data" tab > under the "Analyze" category > click "Solver" and then click "Solve" in order to determine the pavement structure adequacy. The cell should be green and read "0.00" when successfully solved. If values have been changed, the cell will turn red and should be solved again.	If the "Solver" Add-in is not loaded in Excel, please use the link below: https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel
			Unsolved target cell =		

Step 6: Pavement Structure Adequacy					
Provided Structural Number (SN)	3.92	The Provided SN expresses the predicted structural strength of the roadway provided by the proposed pavement structure	This value is calculated by multiplying each pavement layer's thickness by the corresponding layer coefficient. The Provided SN is the sum of these values.		I-6, 1.2 III-95 to III-96	III-101, 5.4.5
Required Structural Number (SN)	3.51	The Required SN represents the structural number required to carry the future traffic according to inputs such as accumulated ESALs, subgrade resilient modulus, etc.	This value is calculated automatically after Step 5		II-31 to II-32 III-95 to III-96	III-101, 5.4.5
Difference between provided and required SN	0.41	This value represents the difference between the SN provided by the pavement design and the SN required for all future traffic on the pavement structure	A suggested factor of safety for this value is approximately 0.5. The larger this value, the more conservative the design.			
Adequate?	Yes	If the pavement structure is adequate given the design life, the output is "Yes". If it is not adequate, the output is "No".	If the output reads "Invalid", please refer to Step 5 and solve the Target Cell as instructed			

Pavement Engineering Services
Traffic Analysis and Classifications

Vauxhall Street Roundabout Improvements.
New London, CT

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Phillips St west of 3rd Ave	10/9/2024	24	WB	2662	18	2135	373	44	79	6	0	5	1	1	0	0	0	5.11
	10/10/2024	24	WB	2597	18	2097	353	37	81	4	0	5	0	2	0	0	0	4.97
	Totals			**5259**	36	4232	726	81	160	10	0	10	1	3	0	0	0	265.00
	Percent of Total =				0.68	80.47	13.80	1.54	3.04	0.19	0.00	0.19	0.02	0.06	0.00	0.00	0.00	
	Percent of Trucks & Buses =				**5.04**													

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Phillips St west of 3rd Ave	10/9/2024	24	EB	3052	25	2310	476	47	173	2	0	15	1	1	2	0	0	7.90
	10/10/2024	24	EB	2662	21	2014	401	38	173	3	0	11	0	0	1	0	0	8.49
	Totals			**5714**	46	4324	877	85	346	5	0	26	1	1	3	0	0	467.00
	Percent of Total =				0.81	75.67	15.35	1.49	6.06	0.09	0.00	0.46	0.02	0.02	0.05	0.00	0.00	
	Percent of Trucks & Buses =				**8.17**													

AVERAGE TOTAL ADT =	**5487**													
VEHICLE CLASS PERCENTAGE =	**0.74**	**78.07**	**14.58**	**1.51**	**4.55**	**0.14**	**0.00**	**0.32**	**0.02**	**0.04**	**0.03**	**0.00**	**0.00**	
AVERAGE % TRUCKS & BUSES =	**6.61**													
% TRUCKS & BUSES WB =	**36.2%**													
% TRUCKS & BUSES EB =	**63.8%**													

COMMENTS Traffic data collected between 10/09/2024-10/10/2024 by NE Counts

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	CTDOT - Pavement Design Unit
Road Name	Phillips St
Pavement Surface Age	19 years

Legend	
	= automatically calculated or linked value (do not edit)
	= user input
	= solution(s)
	= accumulated ESALs for the designated functional class
	= not applicable

Step		Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)
Step 1: Available ADT		5,487	vpd (vehicles per day)	Available ADT (Average Daily Traffic) is the measured total volume of vehicle traffic on the subject roadway in *both directions*. The top link, below, contains an interactive AADT map for all roadways in CT that can be used to locate traffic data. The bottom link contains expressway ADT maps for limited access facilities as well as ADT maps for towns. https://portal.ct.gov/DOT/PP_SysInfo/Traffic-Monitoring https://portal.ct.gov/DOT/PP_Bureau/Documents/Maps	**Double click to expand notes:** • Please note that ADT is general measure of mean daily traffic and may represent a short-term traffic study (i.e. 3-day or 7-day count) while AADT (Average Annual Daily Traffic) represents data for the entire year. Both values are acceptable for use in this calculator; however, it should be recognized that AADT may provide a more precise solution because of a larger traffic data		Appendix D https://www.fhwa.dot.gov/policyinformation/pubs/pl18027_traffic_data_pocket_guide.pdf
Step 2: Year	ADT Year	2024		Year for the available ADT data	The year for the ADT should be from the same source where the ADT value was taken.		N/A
	EOC Year	2028		End of construction (EOC) year for the project	The year for EOC may not always be known or provided. In this case, reach out to the lead design staff for the latest project schedule. For CTDOT projects please refer to the link to Compass below: https://ctgovexec.sharepoint.com/projects/Pages/Projects.aspx		
Step 3: Directional Distribution		50	%	Directional distribution is the percentage of traffic traveling in one direction along the roadway. 50% is the default value for two-way traffic on undivided roadways, or if using combined directional data for a divided highway. Please enter 100% for a one-way road design (ramps, roundabouts, etc.), or if using single direction traffic data for a divided highway (i.e. using northbound data on a N/S expressway).	If there is more specific information available that indicates a directional distribution other than 100% or 50%, then the input should be adjusted accordingly for the design direction.		I-11, 1.4.1
Step 4: Lane Distribution		100	%	Lane distribution is the percentage of traffic that will be carried in the design lane proposed in the *final* project configuration, not the existing lane conditions (check the project final plans and/or coordinate with the designer or traffic engineer if necessary). "Lanes" refers to the through lanes only, not auxiliary lanes (turning, passing, climbing, acceleration/deceleration, etc.)	Lane distribution varies by the number of through lanes, and values lower than 100% may be used for the lane distribution (see chart below). Please use the CTDOT lane distribution values unless noted otherwise.		I-11, 1.4.1 I-9, 2.1.2, Table 2.2

	Percent of ESALs in Design Lane	
Number of Lanes	**CTDOT**	**AASHTO**
2 lanes (1 per direction)	100%	100%
4 lanes (2 per direction)	90%	80-100%
6+ lanes (3+ per direction)	70%	50-80%

Step 5: Design ADT		2,970	vpd (vehicles per day)	Design ADT is a calculated value that will be used to determine the accumulated ESALs in the design lane	The Design ADT value is calculated by using a default 2% growth rate from the year of the provided ADT to EOC. Typical practice is to project from the ADT year to EOC and use that number as the initial value for the start of the pavement structure's design life.		Appendix D
Step 6: Growth Rates		2.0	% (cars)	Annual growth rate of cars over the design period	Please use a default growth rate of 2% for cars and heavy vehicles unless another value is specifically provided or researched.		I-11, 1.4.1 Appendix D
		2.0	% (trucks)	Annual growth rate of all heavy vehicle types over the design period			
Step 7: Design Life		20	years	Period of time for which the pavement design/analysis is to be conducted	**Double click to expand notes:** • 20 year design life is standard for state roadway design and should be the default value. It can also be used for most town roads and highway ramps. 15 year design life may be used for town roads as well depending on the program and treatment proposed.		I-43 to I-47, 3.4.2 to 3.6.7 II-6 to II-7, 2.1.1 https://pavementinteractive.org/reference-desk/design/structural-design/perpetual-pavements/
Step 8: Roadway Functional Class		Urban Local	*(please click green cell and then choose drop down selection)*	A roadway functional class (FC) is the designation of a roadway into systems according to the character of service it provides in relation to the total roadway network. Please note that in this case the "Multi-lane" class is equivalent to an interstate highway. The link below is an interactive GIS map which includes the FC of the roadways in Connecticut https://connecticut-ctdot.opendata.arcgis.com/apps/functional-classification-interactive-app/explor	After determining the roadway FC, the ESAL value will be calculated automatically using the appropriate vehicle distributions. The result will be displayed in green in Step 8 corresponding to a Rural or Urban functional class. The red cell labeled "FALSE" is not applicable.		https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf
Step 9: Accumulated ESALs	Rural	FALSE	ESALs (W18)	Predicted number of 18-kip equivalent single axle load applications to the roadway over the selected design life. This value should only be used for flexible (asphalt) pavement design calculations. Design ESALs for rigid (concrete) or composite (asphalt on concrete) pavement design will require an adjustment to this value (accumulated ESALs multiplied by a factor of 1.5). See Rigid-Composite Design Tool for implementation	The accumulated ESALs is calculated automatically within the roadway FC sheets that have been hidden. They can be unhidden by right clicking on the tabs below. Default percentages have already been provided, but may be changed if more specific information on vehicle type/class percentages is available. Please note that the assumed vehicle type distribution varies for each roadway functional classification.		I-10 to II-13, 1.4 Appendix D
	Urban	747,804	ESALs (W18)				

General Information	
Project ID	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia

VEHICLE TYPES	PERCENTAGES	CURRENT TRAFFIC	GROWTH FACTORS	DESIGN TRAFFIC	E.S.A.L. FACTOR	DESIGN E.S.A.L.
MOTORCYCLES	0.740	22	24.30	194890	0.0001	19
PASSENGER CARS	78.070	2318	24.30	20560892	0.0020	41122
FOUR TIRE	14.580	433	24.30	3839859	0.0389	149371
HEAVY VEHICLES						
BUSES	1.510	45	24.30	397681	0.4111	163487
SINGLE UNITS						
SIX TIRE TRUCKS	4.550	135	24.30	1198310	0.2004	240141
THREE AXLE TRUCKS	0.140	4	24.30	36871	1.1384	41974
FOUR AXLE TRUCKS	0.000	0	24.30	0	3.4784	0
SINGLE-TRAILER TRUCKS						
FOUR OR LESS AXLES	0.320	10	24.30	84277	0.8005	67464
FIVE AXLES	0.020	1	24.30	5267	1.3377	7046
SIX OR MORE AXLES	0.040	1	24.30	10535	1.2303	12961
MULTI-TRAILER TRUCKS						
FIVE OR LESS AXLES	0.030	1	24.30	7901	3.0655	24220
SIX AXLES	0.000	0	24.30	0	2.1102	0
SEVEN OR MORE AXLES	0.000	0	24.30	0	2.1102	0
UNCLASSIFIED	0.000	0	24.30	0	1.4500	0
SUM OF ALL TYPES	100.000	2970				747804 ESALs

AVERAGE DAILY TRAFFIC	2970		
LANE DISTRIBUTION	100		
GROWTH RATE OF CARS	2.0	20	24.30
GROWTH RATE OF TRUCKS	2.0	20	24.30
	Annual G.Rate in %	Life (yrs)	Growth Factor

G.F. = ((1+g)^n - 1) / g

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	Fuss & O'Neill
Road Name	Phillips St
Pavement Surface Age	19 years

Legend	
	= automatically calculated/linked value (do not edit)
	= user input
	= solution(s)
	= solved target cell/adequate pavement structure
	= unsolved target cell/inadequate pavement structure

Step	Parameter	Variable	Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)	
Step 1: General Information	Initial Serviceability	Po	4.2		Initial design serviceability index	Default value for flexible pavements		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Terminal Serviceability	Pt	2.0		Terminal design serviceability index	Use a value of 2.5 for all functional classifications, except collectors (urban/rural, major or minor) and local roads which may use a value of 2.0		I-6 to I-9, 1.2 to 1.3 II-10, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Change in Present Serviceability Index (PSI)	ΔPSI	2.20		Difference between initial and terminal design serviceability index	Value is calculated automatically		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Reliability Level	R	90	%	Reliability	Use a value of 95% for Interstates/Expressways (limited access), and use 90% for all other lower functional classifications (unlimited access) as defined in the ESAL Calculator		I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-9, 2.1.3, Table 2.2 II-31 and II-34, 3.1.1 to 3.1.3
	Standard Normal Deviate	ZR	-1.28		Standard normal deviate corresponding to a level of reliability, R	Value is calculated automatically		I-5, 1.2 I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-8, 2.1.3 II-31, 3.1.1
	Overall Standard Deviation	S	0.45		Combined standard error of the traffic prediction and performance prediction	Default value selected (AASHTO allows 0.40 to 0.50 for flexible pavement design)		I-5, 1.2 II-9, 2.1.3	II-10, 2.2.1
Step 2: Traffic Analysis	Accumulated ESALs	W18	747,804	ESALs	Predicted number of 18-kip equivalent single axle load applications over the design life. The design life is the period of time for which the pavement design/analysis is to be conducted (determined with the ESAL Calculator linked on the previous sheet).	**Double click to expand notes:**		I-5, 1.2 I-10 to I-13, 1.4	I-54 to I-55, 4.1.3 II-31 to II-35, 3.1.1 to 3.1.4
Step 3: Soil Analysis	Subgrade Resilient Modulus	M[r]	10,000	psi	Definitive material property used to characterize roadbed soil for pavement design and is a measure of the elastic property of soil recognizing certain nonlinear characteristics	**Double click for M[r] values:**		I-6, 1.2 and I-13 to I-15, 1.5 II-12 to II-15, 2.3.1	II-31 to II-35, 3.1.1 to 3.1.4 III-91 to III-97, 5.3.4 to 5.4.5

Step 4: Proposed Pavement Structure - Layer Thicknesses	**Layer**	**Coefficient, a[i]**	**Thickness**	**Unit**				
	Surface Mix	0.44	2.00	inch	**Thickness:** Identifying and defining pavement layer thicknesses will provide the load-carrying capacity corresponding to the design SN, or in this spreadsheet the "Provided SN"	**Double click to expand notes:** **Thickness:** Please insert the depth of each layer being constructed within the proposed pavement structure in the cells on the left		II-17 to II-22, 2.3.5 II-35 to II-37, 3.1.4 and 3.1.5 III-95 to III-105, 5.4.5, Table 5.2
	Base Mix	0.34	4.00	inch				
	Processed Aggregate Base (P.A.B.)	0.14	12.00	inch	**Layer Coefficient, a[i]:** The layer coefficient is a measure of the relative ability of the material to function as a structural component of the pavement	• A minimum total pavement structure depth of 18" - 20" (asphalt and granular base layers combined) is recommended for the purpose of mitigating potential damage from frost action. This is approximately half the frost depth in CT (~ 40").		MTG Pavement Design Catalog (see for typical pavement structures):
	Subbase	0.11	0.00	inch		• For pavement structures with a single mix type, it is recommended to split the depth		https://portal.ct.gov/DOT/Engineering/Pavement-Design/Pavement-Design-Unit
	Total Pavement Structure Thickness:		18.00	inch				

Step 5: Solve Design Equation	Target Cell		0.00		Solved target cell =	Please ***solve*** the target cell by clicking on the "Data" tab > under the "Analyze" category > click "Solver" and then click "Solve" in order to determine the pavement structure adequacy. The cell should be green and read "0.00" when successfully solved. If values have been changed, the cell will turn red and should be solved again.		If the "Solver" Add-in is not loaded in Excel, please use the link below: https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel
					Unsolved target cell =			
Step 6: Pavement Structure Adequacy	Provided Structural Number (SN)		3.92		The Provided SN expresses the predicted structural strength of the roadway provided by the proposed pavement structure	This value is calculated by multiplying each pavement layer's thickness by the corresponding layer coefficient. The Provided SN is the sum of these values.		I-6, 1.2 III-95 to III-96	III-101, 5.4.5
	Required Structural Number (SN)		2.87		The Required SN represents the structural number required to carry the future traffic according to inputs such as accumulated ESALs, subgrade resilient modulus, etc.	This value is calculated automatically after Step 5		II-31 to II-32 III-95 to III-96	III-101, 5.4.5
	Difference between provided and required SN		1.05		This value represents the difference between the SN provided by the pavement design and the SN required for all future traffic on the pavement structure	A suggested factor of safety for this value is approximately 0.5. The larger this value, the more conservative the design.			
	Adequate?		Yes		If the pavement structure is adequate given the design life, the output is "Yes". If it is not adequate, the output is "No".	If the output reads "Invalid", please refer to Step 5 and solve the Target Cell as instructed			

Pavement Engineering Services
Traffic Analysis and Classifications

Vauxhall Street Roundabout Improvements.
New London, CT

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St South of I-95 Exit	10/9/2024	24	SB	694	4	519	141	5	19	1	0	5	0	0	0	0	0	4.32
	10/10/2024	24	SB	692	5	518	120	6	32	4	1	3	3	0	0	0	0	7.08
			Totals	1386	9	1037	261	11	51	5	1	8	3	0	0	0	0	79.00
			Percent of Total =		0.65	74.82	18.83	0.79	3.68	0.36	0.07	0.58	0.22	0.00	0.00	0.00	0.00	
			Percent of Trucks & Buses =		5.70													

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St South of I-95 Exit	10/9/2024	24	NB	2003	9	1451	360	22	148	6	0	6	1	0	0	0	0	9.14
	10/10/2024	24	NB	1982	15	1431	363	22	136	8	0	6	0	1	0	0	0	8.73
			Totals	3985	24	2882	723	44	284	14	0	12	1	1	0	0	0	356.00
			Percent of Total =		0.60	72.32	18.14	1.10	7.13	0.35	0.00	0.30	0.03	0.03	0.00	0.00	0.00	
			Percent of Trucks & Buses =		8.93													

AVERAGE TOTAL ADT =	2686																
VEHICLE CLASS PERCENTAGE =	0.63	73.57	18.49	0.95	5.40	0.36	0.04	0.44	0.12	0.01	0.00	0.00	0.00				
AVERAGE % TRUCKS & BUSES =	7.32																
% TRUCKS & BUSES SB =	18.2%																
% TRUCKS & BUSES NB =	81.8%																

COMMENTS Traffic data collected between 10/09/2024-10/10/2024 by NE Counts

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	CTDOT - Pavement Design Unit
Road Name	Vauxhall St
Pavement Surface Age	19 years

Legend	
	= automatically calculated or linked value (do not edit)
	= user input
	= solution(s)
	= accumulated ESALs for the designated functional class
	= not applicable

Step		Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)
Step 1: Available ADT		2,686	vpd (vehicles per day)	Available ADT (Average Daily Traffic) is the measured total volume of vehicle traffic on the subject roadway in *both directions*. The top link, below, contains an interactive AADT map for all roadways in CT that can be used to locate traffic data. The bottom link contains expressway ADT maps for limited access facilities as well as ADT maps for towns. https://portal.ct.gov/DOT/PP_SysInfo/Traffic-Monitoring https://portal.ct.gov/DOT/PP_Bureau/Documents/Maps	**Double click to expand notes:** • Please note that ADT is general measure of mean daily traffic and may represent a short-term traffic study (i.e. 3-day or 7-day count) while AADT (Average Annual Daily Traffic) represents data for the entire year. Both values are acceptable for use in this calculator; however, it should be recognized that AADT may provide a more precise solution because of a larger traffic data		Appendix D https://www.fhwa.dot.gov/policyinformation/pubs/pl18027_traffic_data_pocket_guide.pdf
Step 2: Year	ADT Year	2024		Year for the available ADT data	The year for the ADT should be from the same source where the ADT value was taken.		N/A
	EOC Year	2028		End of construction (EOC) year for the project	The year for EOC may not always be known or provided. In this case, reach out to the lead design staff for the latest project schedule. For CTDOT projects please refer to the link to Compass below: https://ctgovexec.sharepoint.com/projects/Pages/Projects.aspx		
Step 3: Directional Distribution		50	%	Directional distribution is the percentage of traffic traveling in one direction along the roadway. 50% is the default value for two-way traffic on undivided roadways, or if using combined directional data for a divided highway. Please enter 100% for a one-way road design (ramps, roundabouts, etc.), or if using single direction traffic data for a divided highway (i.e. using northbound data on a N/S expressway).	If there is more specific information available that indicates a directional distribution other than 100% or 50%, then the input should be adjusted accordingly for the design direction.		I-11, 1.4.1
Step 4: Lane Distribution		100	%	Lane distribution is the percentage of traffic that will be carried in the design lane proposed in the *final* project configuration, not the existing lane conditions (check the project final plans and/or coordinate with the designer or traffic engineer if necessary). "Lanes" refers to the through lanes only, not auxiliary lanes (turning, passing, climbing, acceleration/deceleration, etc.)	Lane distribution varies by the number of through lanes, and values lower than 100% may be used for the lane distribution (see chart below). Please use the CTDOT lane distribution values unless noted otherwise.		I-11, 1.4.1 I-9, 2.1.2, Table 2.2

	Percent of ESALs in Design Lane	
Number of Lanes	**CTDOT**	**AASHTO**
2 lanes (1 per direction)	100%	100%
4 lanes (2 per direction)	90%	80-100%
6+ lanes (3+ per direction)	70%	50-80%

Step 5: Design ADT		1,454	vpd (vehicles per day)	Design ADT is a calculated value that will be used to determine the accumulated ESALs in the design lane	The Design ADT value is calculated by using a default 2% growth rate from the year of the provided ADT to EOC. Typical practice is to project from the ADT year to EOC and use that number as the initial value for the start of the pavement structure's design life.		Appendix D
Step 6: Growth Rates		2.0	% (cars)	Annual growth rate of cars over the design period	Please use a default growth rate of 2% for cars and heavy vehicles unless another value is specifically provided or researched.		I-11, 1.4.1 Appendix D
		2.0	% (trucks)	Annual growth rate of all heavy vehicle types over the design period			
Step 7: Design Life		20	years	Period of time for which the pavement design/analysis is to be conducted	**Double click to expand notes:** • 20 year design life is standard for state roadway design and should be the default value. It can also be used for most town roads and highway ramps. 15 year design life may be used for town roads as well depending on the program and treatment proposed.		I-43 to I-47, 3.4.2 to 3.6.7 II-6 to II-7, 2.1.1 https://pavementinteractive.org/reference-desk/design/structural-design/perpetual-pavements/
Step 8: Roadway Functional Class		Urban Collector	*(please click green cell and then choose drop down selection)*	A roadway functional class (FC) is the designation of a roadway into systems according to the character of service it provides in relation to the total roadway network. Please note that in this case the "Multi-lane" class is equivalent to an interstate highway. The link below is an interactive GIS map which includes the FC of the roadways in Connecticut https://connecticut-ctdot.opendata.arcgis.com/apps/functional-classification-interactive-app/explor	After determining the roadway FC, the ESAL value will be calculated automatically using the appropriate vehicle distributions. The result will be displayed in green in Step 8 corresponding to a Rural or Urban functional class. The red cell labeled "FALSE" is not applicable.		https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf
Step 9: Accumulated ESALs	Rural	FALSE	ESALs (W18)	Predicted number of 18-kip equivalent single axle load applications to the roadway over the selected design life. This value should only be used for flexible (asphalt) pavement design calculations. Design ESALs for rigid (concrete) or composite (asphalt on concrete) pavement design will require an adjustment to this value (accumulated ESALs multiplied by a factor of 1.5). See Rigid-Composite Design Tool for implementation	The accumulated ESALs is calculated automatically within the roadway FC sheets that have been hidden. They can be unhidden by right clicking on the tabs below. Default percentages have already been provided, but may be changed if more specific information on vehicle type/class percentages is available. Please note that the assumed vehicle type distribution varies for each roadway functional classification.		I-10 to II-13, 1.4 Appendix D
	Urban	438,449	ESALs (W18)				

General Information	
Project ID	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia

VEHICLE TYPES	PERCENTAGES	CURRENT TRAFFIC	GROWTH FACTORS	DESIGN TRAFFIC	E.S.A.L. FACTOR	DESIGN E.S.A.L.
MOTORCYCLES	0.630	9	24.30	81221	0.0001	8
PASSENGER CARS	73.570	1069	24.30	9484831	0.0020	18970
FOUR TIRE	18.490	269	24.30	2383778	0.0389	92729
HEAVY VEHICLES						
BUSES	0.950	14	24.30	122476	0.4111	50350
SINGLE UNITS						
SIX TIRE TRUCKS	5.400	79	24.30	696182	0.2004	139515
THREE AXLE TRUCKS	0.360	5	24.30	46412	1.1384	52836
FOUR AXLE TRUCKS	0.040	1	24.30	5157	3.4784	17938
SINGLE-TRAILER TRUCKS						
FOUR OR LESS AXLES	0.440	6	24.30	56726	0.8005	45409
FIVE AXLES	0.120	2	24.30	15471	1.3377	20695
SIX OR MORE AXLES	0.000	0	24.30	0	1.2303	0
MULTI-TRAILER TRUCKS						
FIVE OR LESS AXLES	0.000	0	24.30	0	3.0655	0
SIX AXLES		0	24.30	0	2.1102	0
SEVEN OR MORE AXLES	0.000	0	24.30	0	2.1102	0
UNCLASSIFIED	0.000	0	24.30	0	1.4500	0
SUM OF ALL TYPES	100.000	1454				438449 ESALs

AVERAGE DAILY TRAFFIC	1454		
LANE DISTRIBUTION	100		
GROWTH RATE OF CARS	2.0	20	24.30
GROWTH RATE OF TRUCKS	2.0	20	24.30
	Annual G.Rate in %	Life (yrs)	Growth Factor

G.F. = ((1+g)^n - 1) / g

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	Fuss & O'Neill
Road Name	Vauxhall St
Pavement Surface Age	19 years

Legend	
	= automatically calculated/linked value (do not edit)
	= user input
	= solution(s)
	= solved target cell/adequate pavement structure
	= unsolved target cell/inadequate pavement structure

Step	Parameter	Variable	Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)	
Step 1: General Information	Initial Serviceability	Po	4.2		Initial design serviceability index	Default value for flexible pavements		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Terminal Serviceability	Pt	2.0		Terminal design serviceability index	Use a value of 2.5 for all functional classifications, except collectors (urban/rural, major or minor) and local roads which may use a value of 2.0		I-6 to I-9, 1.2 to 1.3 II-10, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Change in Present Serviceability Index (PSI)	ΔPSI	2.20		Difference between initial and terminal design serviceability index	Value is calculated automatically		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Reliability Level	R	90	%	Reliability	Use a value of 95% for Interstates/Expressways (limited access), and use 90% for all other lower functional classifications (unlimited access) as defined in the ESAL Calculator		I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-9, 2.1.3, Table 2.2 II-31 and II-34, 3.1.1 to 3.1.3
	Standard Normal Deviate	ZR	-1.28		Standard normal deviate corresponding to a level of reliability, R	Value is calculated automatically		I-5, 1.2 I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-8, 2.1.3 II-31, 3.1.1
	Overall Standard Deviation	S	0.45		Combined standard error of the traffic prediction and performance prediction	Default value selected (AASHTO allows 0.40 to 0.50 for flexible pavement design)		I-5, 1.2 II-9, 2.1.3	II-10, 2.2.1
Step 2: Traffic Analysis	Accumulated ESALs	W18	438,449	ESALs	Predicted number of 18-kip equivalent single axle load applications over the design life. The design life is the period of time for which the pavement design/analysis is to be conducted (determined with the ESAL Calculator linked on the previous sheet).	**Double click to expand notes:**		I-5, 1.2 I-10 to I-13, 1.4	I-54 to I-55, 4.1.3 II-31 to II-35, 3.1.1 to 3.1.4
Step 3: Soil Analysis	Subgrade Resilient Modulus	M[r]	10,000	psi	Definitive material property used to characterize roadbed soil for pavement design and is a measure of the elastic property of soil recognizing certain nonlinear characteristics	**Double click for M[r] values:**		I-6, 1.2 and I-13 to I-15, 1.5 II-12 to II-15, 2.3.1	II-31 to II-35, 3.1.1 to 3.1.4 III-91 to III-97, 5.3.4 to 5.4.5

Step 4: Proposed Pavement Structure - Layer Thicknesses	**Layer**	**Coefficient, a[i]**	**Thickness**	**Unit**				
	Surface Mix	0.44	2.00	inch	**Thickness:** Identifying and defining pavement layer thicknesses will provide the load-carrying capacity corresponding to the design SN, or in this spreadsheet the "Provided SN"	**Double click to expand notes:** **Thickness:** Please insert the depth of each layer being constructed within the proposed pavement structure in the cells on the left		II-17 to II-22, 2.3.5 II-35 to II-37, 3.1.4 and 3.1.5 III-95 to III-105, 5.4.5, Table 5.2
	Base Mix	0.34	3.00	inch				
	Processed Aggregate Base (P.A.B.)	0.14	10.00	inch	**Layer Coefficient, a[i]:** The layer coefficient is a measure of the relative ability of the material to function as a structural component of the pavement	• A minimum total pavement structure depth of 18" - 20" (asphalt and granular base layers combined) is recommended for the purpose of mitigating potential damage from frost action. This is approximately half the frost depth in CT (~ 40").		MTG Pavement Design Catalog (see for typical pavement structures):
	Subbase	0.11	0.00	inch		• For pavement structures with a single mix type, it is recommended to split the depth		https://portal.ct.gov/DOT/Engineering/Pavement-Design/Pavement-Design-Unit
	Total Pavement Structure Thickness:		15.00	inch				

Step 5: Solve Design Equation	Target Cell		0.00		Solved target cell =	Please ***solve*** the target cell by clicking on the "Data" tab > under the "Analyze" category > click "Solver" and then click "Solve" in order to determine the pavement structure adequacy. The cell should be green and read "0.00" when successfully solved. If values have been changed, the cell will turn red and should be solved again.		If the "Solver" Add-in is not loaded in Excel, please use the link below: https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel
					Unsolved target cell =			

Step 6: Pavement Structure Adequacy								
	Provided Structural Number (SN)		3.30		The Provided SN expresses the predicted structural strength of the roadway provided by the proposed pavement structure	This value is calculated by multiplying each pavement layer's thickness by the corresponding layer coefficient. The Provided SN is the sum of these values.		I-6, 1.2 III-95 to III-96	III-101, 5.4.5
	Required Structural Number (SN)		2.65		The Required SN represents the structural number required to carry the future traffic according to inputs such as accumulated ESALs, subgrade resilient modulus, etc.	This value is calculated automatically after Step 5		II-31 to II-32 III-95 to III-96	III-101, 5.4.5
	Difference between provided and required SN		0.65		This value represents the difference between the SN provided by the pavement design and the SN required for all future traffic on the pavement structure	A suggested factor of safety for this value is approximately 0.5. The larger this value, the more conservative the design.			
	Adequate?		Yes		If the pavement structure is adequate given the design life, the output is "Yes". If it is not adequate, the output is "No".	If the output reads "Invalid", please refer to Step 5 and solve the Target Cell as instructed			

Pavement Engineering Services
Traffic Analysis and Classifications

Vauxhall Street Roundabout Improvements.

New London, CT

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St Ext. North of Phillips St	10/9/2024	24	SB	3714	20	2864	637	37	120	24	0	10	1	0	0	0	1	5.20
	10/10/2024	24	SB	3694	25	2880	596	34	114	32	2	8	3	0	0	0	0	5.22
			Totals	7408	45	5744	1233	71	234	56	2	18	4	0	0	0	1	386.00
			Percent of Total =		0.61	77.54	16.64	0.96	3.16	0.76	0.03	0.24	0.05	0.00	0.00	0.00	0.01	
			Percent of Trucks & Buses =		5.21													

LOCATION	DATE	HRS	LANE	TOTAL ADT	BIKES	CARS	2-AXLE LONG	BUSES	CLASS 5	6	7	8	9	10	11	12	13	% TRUCKS & Buses
Vauxhall St Ext. North of Phillips St	10/9/2024	24	NB	2516	10	1745	489	25	232	2	0	10	3	0	0	0	0	10.81
	10/10/2024	24	NB	2548	10	1743	489	25	265	3	1	11	1	0	0	0	0	12.01
			Totals	5064	20	3488	978	50	497	5	1	21	4	0	0	0	0	578.00
			Percent of Total =		0.39	68.88	19.31	0.99	9.81	0.10	0.02	0.41	0.08	0.00	0.00	0.00	0.00	
			Percent of Trucks & Buses =		11.41													

AVERAGE TOTAL ADT =	6236																	
VEHICLE CLASS PERCENTAGE =	0.50	73.21	17.98	0.97	6.49	0.43	0.02	0.33	0.07	0.00	0.00	0.00	0.01					
AVERAGE % TRUCKS & BUSES =	8.31																	
% TRUCKS & BUSES SB =	40.0%																	
% TRUCKS & BUSES NB =	60.0%																	

COMMENTS Traffic data collected between 10/09/2024-10/10/2024 by NE Counts

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	CTDOT - Pavement Design Unit
Road Name	Vauxhall St Ext.
Pavement Surface Age	19 years

Legend	
	= automatically calculated or linked value (do not edit)
	= user input
	= solution(s)
	= accumulated ESALs for the designated functional class
	= not applicable

Step		Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)
Step 1: Available ADT		6,236	vpd (vehicles per day)	Available ADT (Average Daily Traffic) is the measured total volume of vehicle traffic on the subject roadway in *both directions*. The top link, below, contains an interactive AADT map for all roadways in CT that can be used to locate traffic data. The bottom link contains expressway ADT maps for limited access facilities as well as ADT maps for towns. https://portal.ct.gov/DOT/PP_SysInfo/Traffic-Monitoring https://portal.ct.gov/DOT/PP_Bureau/Documents/Maps	**Double click to expand notes:** • Please note that ADT is general measure of mean daily traffic and may represent a short-term traffic study (i.e. 3-day or 7-day count) while AADT (Average Annual Daily Traffic) represents data for the entire year. Both values are acceptable for use in this calculator; however, it should be recognized that AADT may provide a more precise solution because of a larger traffic data		Appendix D https://www.fhwa.dot.gov/policyinformation/pubs/pl18027_traffic_data_pocket_guide.pdf
Step 2: Year	ADT Year	2024		Year for the available ADT data	The year for the ADT should be from the same source where the ADT value was taken.		N/A
	EOC Year	2028		End of construction (EOC) year for the project	The year for EOC may not always be known or provided. In this case, reach out to the lead design staff for the latest project schedule. For CTDOT projects please refer to the link to Compass below: https://ctgovexec.sharepoint.com/projects/Pages/Projects.aspx		
Step 3: Directional Distribution		50	%	Directional distribution is the percentage of traffic traveling in one direction along the roadway. 50% is the default value for two-way traffic on undivided roadways, or if using combined directional data for a divided highway. Please enter 100% for a one-way road design (ramps, roundabouts, etc.), or if using single direction traffic data for a divided highway (i.e. using northbound data on a N/S expressway).	If there is more specific information available that indicates a directional distribution other than 100% or 50%, then the input should be adjusted accordingly for the design direction.		I-11, 1.4.1
Step 4: Lane Distribution		100	%	Lane distribution is the percentage of traffic that will be carried in the design lane proposed in the *final* project configuration, not the existing lane conditions (check the project final plans and/or coordinate with the designer or traffic engineer if necessary). "Lanes" refers to the through lanes only, not auxiliary lanes (turning, passing, climbing, acceleration/deceleration, etc.)	Lane distribution varies by the number of through lanes, and values lower than 100% may be used for the lane distribution (see chart below). Please use the CTDOT lane distribution values unless noted otherwise.		I-11, 1.4.1 I-9, 2.1.2, Table 2.2

	Percent of ESALs in Design Lane	
Number of Lanes	**CTDOT**	**AASHTO**
2 lanes (1 per direction)	100%	100%
4 lanes (2 per direction)	90%	80-100%
6+ lanes (3+ per direction)	70%	50-80%

Step 5: Design ADT		3,375	vpd (vehicles per day)	Design ADT is a calculated value that will be used to determine the accumulated ESALs in the design lane	The Design ADT value is calculated by using a default 2% growth rate from the year of the provided ADT to EOC. Typical practice is to project from the ADT year to EOC and use that number as the initial value for the start of the pavement structure's design life.		Appendix D
Step 6: Growth Rates		2.0	% (cars)	Annual growth rate of cars over the design period	Please use a default growth rate of 2% for cars and heavy vehicles unless another value is specifically provided or researched.		I-11, 1.4.1 Appendix D
		2.0	% (trucks)	Annual growth rate of all heavy vehicle types over the design period			
Step 7: Design Life		20	years	Period of time for which the pavement design/analysis is to be conducted	**Double click to expand notes:** • 20 year design life is standard for state roadway design and should be the default value. It can also be used for most town roads and highway ramps. 15 year design life may be used for town roads as well depending on the program and treatment proposed.		I-43 to I-47, 3.4.2 to 3.6.7 II-6 to II-7, 2.1.1 https://pavementinteractive.org/reference-desk/design/structural-design/perpetual-pavements/
Step 8: Roadway Functional Class		Urban Local	*(please click green cell and then choose drop down selection)*	A roadway functional class (FC) is the designation of a roadway into systems according to the character of service it provides in relation to the total roadway network. Please note that in this case the "Multi-lane" class is equivalent to an interstate highway. The link below is an interactive GIS map which includes the FC of the roadways in Connecticut https://connecticut-ctdot.opendata.arcgis.com/apps/functional-classification-interactive-app/explor	After determining the roadway FC, the ESAL value will be calculated automatically using the appropriate vehicle distributions. The result will be displayed in green in Step 8 corresponding to a Rural or Urban functional class. The red cell labeled "FALSE" is not applicable.		https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf
Step 9: Accumulated ESALs	Rural	FALSE	ESALs (W18)	Predicted number of 18-kip equivalent single axle load applications to the roadway over the selected design life. This value should only be used for flexible (asphalt) pavement design calculations. Design ESALs for rigid (concrete) or composite (asphalt on concrete) pavement design will require an adjustment to this value (accumulated ESALs multiplied by a factor of 1.5). See Rigid-Composite Design Tool for implementation	The accumulated ESALs is calculated automatically within the roadway FC sheets that have been hidden. They can be unhidden by right clicking on the tabs below. Default percentages have already been provided, but may be changed if more specific information on vehicle type/class percentages is available. Please note that the assumed vehicle type distribution varies for each roadway functional classification.		I-10 to II-13, 1.4 Appendix D
	Urban	1,036,271	ESALs (W18)				

General Information	
Project ID	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia

VEHICLE TYPES	PERCENTAGES	CURRENT TRAFFIC	GROWTH FACTORS	DESIGN TRAFFIC	E.S.A.L. FACTOR	DESIGN E.S.A.L.
MOTORCYCLES	0.500	17	24.30	149658	0.0001	15
PASSENGER CARS	73.210	2471	24.30	21912874	0.0020	43826
FOUR TIRE	17.980	607	24.30	5381689	0.0389	209348
HEAVY VEHICLES						
BUSES	0.970	33	24.30	290336	0.4111	119357
SINGLE UNITS						
SIX TIRE TRUCKS	6.490	219	24.30	1942556	0.2004	389288
THREE AXLE TRUCKS	0.430	15	24.30	128706	1.1384	146518
FOUR AXLE TRUCKS	0.020	1	24.30	5986	3.4784	20823
SINGLE-TRAILER TRUCKS						
FOUR OR LESS AXLES	0.330	11	24.30	98774	0.8005	79069
FIVE AXLES	0.070	2	24.30	20952	1.3377	28028
SIX OR MORE AXLES	0.000	0	24.30	0	1.2303	0
MULTI-TRAILER TRUCKS						
FIVE OR LESS AXLES	0.000	0	24.30	0	3.0655	0
SIX AXLES	0.000	0	24.30	0	2.1102	0
SEVEN OR MORE AXLES	0.000	0	24.30	0	2.1102	0
UNCLASSIFIED	0.000	0	24.30	0	1.4500	0
SUM OF ALL TYPES	100.000	3375				1036271 ESALs

AVERAGE DAILY TRAFFIC	3375		
LANE DISTRIBUTION	100		
GROWTH RATE OF CARS	2.0	20	24.30
GROWTH RATE OF TRUCKS	2.0	20	24.30
	Annual G.Rate in %	Life (yrs)	Growth Factor

G.F. = ((1+g)^n - 1) / g

General Information	
Project Number	20170353.A50
Project Description	Vauxhall Street Roundabout Improvements
Town(s)	New London
Pavement Scope Description	Full Depth Reconstruction (20-year)
Completed By	Juan Javier Mejia
Reviewed By	John Guzze
Company Name	Fuss & O'Neill
Road Name	Vauxhall St Ext.
Pavement Surface Age	19 years

Legend	
	= automatically calculated/linked value (do not edit)
	= user input
	= solution(s)
	= solved target cell/adequate pavement structure
	= unsolved target cell/inadequate pavement structure

Step	Parameter	Variable	Value	Unit	Variable Definition	Commentary	User Notes	AASHTO93 Reference (or Other)	
Step 1: General Information	Initial Serviceability	Po	4.2		Initial design serviceability index	Default value for flexible pavements		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Terminal Serviceability	Pt	2.0		Terminal design serviceability index	Use a value of 2.5 for all functional classifications, except collectors (urban/rural, major or minor) and local roads which may use a value of 2.0		I-6 to I-9, 1.2 to 1.3 II-10, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Change in Present Serviceability Index (PSI)	ΔPSI	2.20		Difference between initial and terminal design serviceability index	Value is calculated automatically		I-6 to I-9, 1.2 to 1.3 II-10 to II-11, 2.2.1	II-31 and II-34, 3.1.1 to 3.1.3
	Reliability Level	R	90	%	Reliability	Use a value of 95% for Interstates/Expressways (limited access), and use 90% for all other lower functional classifications (unlimited access) as defined in the ESAL Calculator		I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-9, 2.1.3, Table 2.2 II-31 and II-34, 3.1.1 to 3.1.3
	Standard Normal Deviate	ZR	-1.28		Standard normal deviate corresponding to a level of reliability, R	Value is calculated automatically		I-5, 1.2 I-60 to I-64, 4.2.3 to 4.5, Table 4.1	II-8, 2.1.3 II-31, 3.1.1
	Overall Standard Deviation	S	0.45		Combined standard error of the traffic prediction and performance prediction	Default value selected (AASHTO allows 0.40 to 0.50 for flexible pavement design)		I-5, 1.2 II-9, 2.1.3	II-10, 2.2.1
Step 2: Traffic Analysis	Accumulated ESALs	W18	1,036,271	ESALs	Predicted number of 18-kip equivalent single axle load applications over the design life. The design life is the period of time for which the pavement design/analysis is to be conducted (determined with the ESAL Calculator linked on the previous sheet).	**Double click to expand notes:**		I-5, 1.2 I-10 to I-13, 1.4	I-54 to I-55, 4.1.3 II-31 to II-35, 3.1.1 to 3.1.4
Step 3: Soil Analysis	Subgrade Resilient Modulus	M[r]	10,000	psi	Definitive material property used to characterize roadbed soil for pavement design and is a measure of the elastic property of soil recognizing certain nonlinear characteristics	**Double click for M[r] values:**		I-6, 1.2 and I-13 to I-15, 1.5 II-12 to II-15, 2.3.1	II-31 to II-35, 3.1.1 to 3.1.4 III-91 to III-97, 5.3.4 to 5.4.5

Step 4: Proposed Pavement Structure - Layer Thicknesses	**Layer**	**Coefficient, a[i]**	**Thickness**	**Unit**				
	Surface Mix	0.44	2.00	inch	**Thickness:** Identifying and defining pavement layer thicknesses will provide the load-carrying capacity corresponding to the design SN, or in this spreadsheet the "Provided SN"	**Double click to expand notes:** **Thickness:** Please insert the depth of each layer being constructed within the proposed pavement structure in the cells on the left • A minimum total pavement structure depth of 18" - 20" (asphalt and granular base layers combined) is recommended for the purpose of mitigating potential damage from frost action. This is approximately half the frost depth in CT (~ 40"). • For pavement structures with a single mix type, it is recommended to split the depth		II-17 to II-22, 2.3.5 II-35 to II-37, 3.1.4 and 3.1.5 III-95 to III-105, 5.4.5, Table 5.2	
	Base Mix	0.34	4.00	inch					
	Processed Aggregate Base (P.A.B.)	0.14	12.00	inch	**Layer Coefficient, a[i]:** The layer coefficient is a measure of the relative ability of the material to function as a structural component of the pavement			MTG Pavement Design Catalog (see for typical pavement structures):	
	Subbase	0.11	0.00	inch				https://portal.ct.gov/DOT/Engineering/Pavement-Design/Pavement-Design-Unit	
	Total Pavement Structure Thickness:		18.00	inch					
Step 5: Solve Design Equation	Target Cell		0.00		Solved target cell = Unsolved target cell =	Please **solve** the target cell by clicking on the "Data" tab > under the "Analyze" category > click "Solver" and then click "Solve" in order to determine the pavement structure adequacy. The cell should be green and read "0.00" when successfully solved. If values have been changed, the cell will turn red and should be solved again.		If the "Solver" Add-in is not loaded in Excel, please use the link below: https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel	
Step 6: Pavement Structure Adequacy	Provided Structural Number (SN)		3.92		The Provided SN expresses the predicted structural strength of the roadway provided by the proposed pavement structure	This value is calculated by multiplying each pavement layer's thickness by the corresponding layer coefficient. The Provided SN is the sum of these values.		I-6, 1.2 III-95 to III-96	III-101, 5.4.5
	Required Structural Number (SN)		3.02		The Required SN represents the structural number required to carry the future traffic according to inputs such as accumulated ESALs, subgrade resilient modulus, etc.	This value is calculated automatically after Step 5		II-31 to II-32 III-95 to III-96	III-101, 5.4.5
	Difference between provided and required SN		0.90		This value represents the difference between the SN provided by the pavement design and the SN required for all future traffic on the pavement structure	A suggested factor of safety for this value is approximately 0.5. The larger this value, the more conservative the design.			
	Adequate?		Yes		If the pavement structure is adequate given the design life, the output is "Yes". If it is not adequate, the output is "No".	If the output reads "Invalid", please refer to Step 5 and solve the Target Cell as instructed			

Section P

There are no attachments for Section P.

FUSS & O'NEILL

Section Q

Images

Conditional Survey

Letter of Mayor's Approval

FUSS & O'NEILL
One Financial Plaza, 15th Floor
Hartford, CT 06103
860.646.2469
www.fando.com

Vauxhall Street Roundabout Improvements



Photo 1: Project Location
Roadway Geometry



Photo 2: Northern project limit – Looking Southbound
Sidewalk condition.



Photo 3: Northern project limit – Looking Eastbound
Sidewalk ends. Clear footpath on north side of Vauxhall Street due to pedestrian usage.



Photo 4: Vauxhall Street at Phillips Street – Looking Westbound
Pavement raveling.



Photo 5: Vauxhall Street at Phillips Street – Looking Eastbound
Pavement raveling.



Photo 6: Vauxhall Street at Site Driveway – Looking Westbound
Drainage concern. Ponding. Block cracking.



Photo 7: Vauxhall Street at Site Driveway – Looking Southbound
Crosswalk condition. No sidewalk ramp on the north side of road. No ADA amenities.



Photo 8: Southeastern Project Limit – Looking Northwestbound
Longitudinal (wheelpath) cracking.



Photo 9: Western Project Limit – Looking Northbound
Block cracking.

					CONDITION RATING:	**CONDITION COLOR CODE:**											City of New London												
					1 - EXCELLENT	**1 = BLUE**			** Proposed for Year 2016								Public Works Department												
					2 - GOOD	**2 = GREEN**			*** Proposed Sidewalk Only								Roadway, Sidewalk and Curbing												
					3 - FAIR	**3 = ORANGE**											**CONDITIONAL SURVEY**												
					4 - POOR	**4 = RED**											**2011**												
																	REVISED 9/25/15												
			Region	Group	Street Name	General Information				Pavement					Curbing					Concrete Sidewalk						Catch Basins		Total
										Type of Repair																		Trees
						Length	Avg Width	Square	Condition	None	Crack	Milling	Reclaim	Other	Condition	Type	Install	Replace	Reset	Condition	Remove	Replace	Install	Not	ADA Ramp	Total	Need	
		Year				(FT)	(FT)	Yards	Rating	Required	Seal	(SY)	(SY)	(SY)	Rating		(FT)	(FT)	(FT)	Rating	(FT)	(SF)	(SF)	Required	Req'd (EA)	(EA)	Replacing	(EA)
Plow route	Category	Completed																										
2		5	1	17	Phillips Street	903	36	3650	4			3650			4	Gran	1000			3		2300			2	10		5
2	Collector	2010	1	arterial	Vauxhall St - Williams to Briggs	2300	38	9700	1		X				1	Gran				1						11		3
2	Minor Arterial	5	1	arterial	Vauxhall St - Briggs to Coleman	2350	38	10000	4			7900		*2100	4	Gran	3450		265	4	450	16500	900			6	3		10
2	Minor Arterial		1	arterial	Vauxhall St - Coleman to T.L.	2330	40	10400	3			10400			4	Gran	1280			4		1200	200			5	13	2	

City of New London
Office of the Mayor
181 State Street • New London, CT 06320 • Phone (860) 447-5201 • Fax (860) 447-7971

November 26, 2024

Ms. Kate Rattan
Transportation Program Manager
Southeastern Connecticut Council
of Governments Norwich, CT

RE: FY 2024 LOTCIP Project Application: Vauxhall Street Roundabout

Dear Ms. Rattan:

The intersection of Vauxhall Street, Vauxhall Street Extension, and Phillips Street in New London is a connection point between a large residential community and visitors from I-95 to restaurants, shopping areas, gas stations, and access to downtown.

The intersection is currently stop controlled with five legs with a mix of stop control and uncontrolled movements. There is a small center median that separates the intersection into two sections causing navigational confusion. Within a three-year study window (2021 to 2023), there were 16 crashes with a significant amount during the day and clear weather. Additionally, there is non-ADA compliant and insufficient pedestrian infrastructure causing vulnerable road users to cross long distances with poor visibility.

Replacing this unusual geometry with a modern roundabout will increase safety for motorists, pedestrians, and bicyclists. A roundabout will reduce the number of conflict points, slow drivers down, and provide safer and shorter crossing distances for pedestrians. Transforming this intersection aligns with the SCCOG Regional Transportation Safety Plan that identifies speeding as a major concern in the City of New London.

The City of New London is committed to enhancing the safety, connectivity, and public access for residents and visitors in our vibrant City. Thank you for your consideration.

Respectfully,

Michael E. Passero
Mayor, City of New London