June 2, 2023

Ref: 15542.00

Mr. Gary Simons – Chair
Planning Board
Town of Somerset
140 Wood Street
Somerset, MA 02726

Re: Prysmian Submarine Cable Factory
Definitive Subdivision Plan

Dear Chairman Simons and Members of the Board:

On behalf of Prysmian Cables and Systems USA, LLC a subsidiary of the Prysmian Group, (the Proponent), VHB is pleased to submit the enclosed Definitive Subdivision Plan application and submission materials in accordance with the Town of Somerset Rules and Regulations Governing the Subdivision of Land, dated June 2004.

The Proponent is acquiring approximately 47 acres of the approximately 300-acre former power station site, zoned Industrial District, and located at 1 Brayton Point Road, Assessors Map A2 Lot 2 for the purpose of developing a new state-of-the-art submarine cable factory. The Preliminary Subdivision Plan has been submitted to create the new 47-acre parcel as a separate lot accessed by a proposed Private Way from Brayton Point Road.

The Project's 47-acre parcel will be accessed through a new primary access Private Way roadway from Brayton Point Road that will run through the former power plant site to the Prysmian main gate entrance. Private Way roadway improvements will include; improved pavement surfaces, curbing, sidewalk, lighting, traffic striping and signage, gate-controlled access, and improvements to the existing stormwater systems to the maximum extent practicable.

Please find the following submission materials enclosed for your review:

- Form C: Application for Approval of Definitive Subdivision Plan, (13 copies);
- Definitive Subdivision Plan Checklist Letter, (13 copies);
- Application Filing Fee, ($1,100.00);
- Certified Abutters List, with the addition of Massachusetts DCR, (13 copies);
- Current Property Deed, (13 copies);
- Owner – Applicant Agent Authorization Letter, (13 copies);

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Suite 400
Providence, RI 02903
P 401.272.8100
F 401.277.8400

- Owner – Applicant Subdivision Covenant, (13 copies);
- BP LLC Future Lease Area Plan, (13 copies);
- Project Definitive Subdivision Plans, (13 copies);
- Offsite Supplemental Stormwater Summary, (13 Copies)
- Offsite Emergency Access Plan, (13 Copies)
- Final Environmental Impact Report dated January 3, 2023 and Draft Environmental Impact Report dated August 31, 2022 (by reference), and Prysmian Traffic Impact Analysis Report dated December 15, 2023 (previously submitted). New copies if required are available for download at Prysmian Brayton Point (prysmianatbraytonpoint.com).

In addition, the above materials have been submitted to the Town of Somerset electronically via a USB drive.

If you have any questions regarding the submission materials included herein, or if you require any additional information pertaining to this application, please do not hesitate to contact me at 401-457-7812 or slindgren@vhb.com. I look forward to your review of this Project.

Sincerely,



Scott D. Lindgren, PE

Senior Project Manager
sdlindgren@vhb.com

APPENDIX C

PLANNING BOARD
SOMERSET, MASSACHUSETTS
FORM C

APPLICATION FOR APPROVAL OF A DEFINITIVE SUBDIVISION PLAN

June 2 , 2023

The undersigned, on behalf of Brayton Point, LLC (Owner's name or self)
of 1515 Des Peres Road, Suite 300 St. Louis, MO 63131 (address) (314 835-1515) (Phone Number), owner of land in the description of said

land being submitted herewith, desiring to make a subdivision of said land, hereby submits the following required plans and documents:

a. the original tracing and thirteen full sized copies of each of the following plans:

I. a locus map,
II. a lot plan,
III. a profile plan,.
IV. a municipal services and utility plan,
V. any detail plan, required
VI. a topographic plan

Each plan bearing titles, endorsements and imprints required;

b. a filing fee of $ 1,100.00
c. a copy of deed or a boundary description
d. a list of the names and addresses of all abutters as they appear the most recent Somerset Assessor's record; certified by the Assessor and
e. Attached supporting documentation
(specify any additional material or information submitted)

and petitions to the Planning Board to consider and approve such subdivision plans under the provisions of the Subdivision Control Law (Massachusetts General Laws, Chapter 41, Sections 81-L through 81CC inclusive, as amended) and in accordance with the Regulations of the Planning Board and the applicable By-Laws of the Town of Somerset.

The undersigned certifies that the applicant (s) is/are the sole owner (s) of the entire land proposed to be subdivided and that the subdivision plans and the description submitted indicate that true boundaries of said land and the correct names of all abutters, as shown on the most recent records of the Assessors. The applicant's title to the land derives from deed recorded in Bristol Deeds, Book 9433 , Page 29 .

(If the applicant is not the owner, nor the owner's attorney, written authorization to act as agent must be attached)

Brayton Point, LLC (Owners)

By: (Agent)
Prysmian Cables and Systems USA, LLC

The applicant is accepted by the Somerset Planning Board in accordance with Section 81-Q and 8-T of the Subdivision Control Law.

SOMERSET PLANNING BOARD

_____, 20_____ By: _____
(Chairman or Clerk)

THE SUBDIVISION CONTROL LAW REQUIRES SIMULTANEOUS SUBMISSION OF SUBDIVISION PLAN TO THE BOARD OF HEALTH NAD THAT THE APPLICANT NOTIFY THE TOWN CLERK OF THIS SUBMISSION.

_____, RECEIVED, SOMERET TOWN CLERK
(DATE)

_____, RECEIVED, SOMERET BOARD OF HEALTH
(DATE)

June 2, 2023

Ref: 15542.00

Mr. Gary Simons – Chair
Planning Board
Town of Somerset
140 Wood Street
Somerset, MA 02726

Re: Prysmian Submarine Cable Factory
Definitive Subdivision Plan - Checklist

Dear Chairman Simons and Members of the Board:

On behalf of Prysmian Cables and Systems USA, LLC a subsidiary of the Prysmian Group, (the Proponent), VHB has prepared the following checklist to assist the Somerset Planning Board and their peer review consultant in the review for the Definitive Subdivision application package. The definitive plan required content items and design requirements have been listed below and have been checked off as included, included with clarification (notes in red), and/or not applicable (NA in red).

ARTICLE 6- DEFINITIVE PLAN

☒ 6.1 SUBMITTAL (Application Fee Provided)

☒ 6.1.1 CONSULTANT REVIEW FEE (NA)

☒ 6.2 CONTENTS

The definitive plan shall contain the following information:

☒ Locus map 1' = 25,000' scale; (U.S.G.S.). (A locus plan 1'=2,000' USGS plan has been provided as a locus for clarity)

☒ A completed and signed Application Form C (see Appendix)

☒ A list of abutters and their addresses based on the most recent tax list, including those separated from the subdivision by a street or a watercourse, and those in other towns but abutting the subdivision. (A certified list has been provided)

☒ The return receipts of the certified mailing of notice. (Abutters list provided, certified mailing notice to be submitted upon receipt of Somerset Meeting Notice)

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Suite 400
Providence, RI 02903
P 401.272.8100
F 401.277.8400

☒ All contiguous property owned by the applicant shall be included in the plan regardless of whether or not a substantial portion of the applicant's land remains undivided. Such remaining area shall be considered as a single lot, requiring approval as a re-subdivision before further division of the remaining area occurs. This information shall be provided on a scale that one-inch equals to hundred feet. (Provided at a 1"-200' scale to document full property on one plan sheet)

☒ Within the standard title block, the name of the subdivision, town, owner's name or names, engineer's or surveyor's name and address, date, including revision dates if any, scales, graphic and numerical, and sheet identification.

☒ Any detail drawings, calculations, and test results required.

☒ A copy of the deed to the property and of any licenses, permits, or approvals needed to build the subdivision.

☒ The drawings shall include lot plans, street construction plans and profiles; and if appropriate, easement plans and profiles, including natural watercourses, and proposed topographic plans, and any detail drawings of non-standard design such as retaining walls, bridges, large culverts, detention ponds, identification of the appropriate zoning district(s) and the like. In any instance where the required side-sloping will extend beyond the right-of-way into an abutting lot, the above-required cross-section drawings shall show the grade and extent of such side-slope beyond the right-of-way, and the area affected by such side-slope shall be depicted as a slope easement within the lots.

☒ Lines, angles of intersection, and radii of curves of existing and proposed streets, ways, lots, easements, and public or common areas within the subdivision. The proposed names of proposed streets shall be shown in pencil until they have been approved by the Board. Proposed lots shall be numbered sequentially. (The proposed roadway has been labeled as Private Drive, until the Town has determined an appropriate designation for each lot)

☒ Directly above or below the layout plan of each proposed street, a profile shall be drawn at a horizontal scale of forty (40) feet to an inch and a vertical scale of eight (8) feet to an inch, showing for such street existing centerline grades in fine solid lines, existing exterior line grades in fine dash lines, and proposed finished centerline grades in heavy solid lines. Proposed grade elevations shall be shown by figures at fifty (50) foot stations, except on vertical curves where they shall be shown at twenty-five (25) foot stations. Rates of gradient in percentage shall also be shown. All elevations shall refer to 1929 Mean Sea Level and the benchmarks shall be identified. Profiles shall also indicate the location of any intersecting public or private ways, and the location of existing and proposed storm drains, water mains, and sewers and their appurtenances. Invert elevations of drains and sewers are required for each manhole, catch basins, or change in grade, and the slope (in

percent) between manholes. (Plans have been provided at a horizontal scale of 1"=40' and 1"=6' to provide clarity and more information) (Elevations refer to the most current datum NAVD of 1988)

☒ Existing watercourses shall be shown, including intermittent streams and ponds, and their proposed relocations, if any.

☒ Sufficient data to determine the location, direction, and length of every street and way, line, lot line and boundary line, and to establish these lines on the ground.

☒ Locations of all permanent monuments properly identified as to whether existing or proposed. Cross-sections of the proposed street, properly located and identified by station number, at such intervals along the street as will adequately indicate any variations in its section, supplemented, where necessary, by lines on the layout plan showing the width and location of proposed roadways, grass plots, gutters, sidewalks, and similar physical features. Provided, however, that where all cross-sections of the street will coincide with the appropriate cross-section shown on the Board's Typical Cross-Section Plan such agreements may be indicated by proper notation on the layout plan, and the cross-section drawings may be omitted therefrom.

☒ Location, names and present widths of streets bounding, approaching or within reasonable proximity of the subdivision.

☒ Location on the plan and draft language of easements for utilities, drainage or any necessary off-site uses, improvements or structures. In the case of any necessary off-street easements, such as for drainage, water mains, or other needs, copies of the fully executed easements must be provided to the Board prior to final plan approval. (Executed easements will be provided as public record upon the recording and transfer of property. An owner and applicant covenant has been provided)

☒ Existing and proposed topography of the land in two-foot intervals based on USGS datum should be shown on separate sheets. The proposed amount of clearing and information on the finished surfaces of areas to be cleared should be provided on the proposed topography/grading sheet. Reference benchmarks must be identified.

☒ Proposed layout (including plans and profiles) of street construction, storm drainage, water supply and sewage disposal systems, including grades. Size of existing and proposed storm drains, water mains, utilities and their appurtenances, including hydrants, within and adjacent to the subdivision. (Refer to Design Standards Herein). The applicant shall submit calculations for the determination of all waterway openings to justify culvert and drain sizes as hereinafter set forth. Such calculations shall be prepared by a Massachusetts Registered Professional Engineer.

☒ Landscaping and planting plan, showing treatment of all planting strips, roadway islands and medians, and disturbed slope areas by species, location, size and quantity. (All landscaping medians and roadway edges shall be loamed and seeded and are noted on the layout and materials plans)

☒ Base flood elevation data shall be provided for the subdivision proposals and other proposed development.

☒ A sketch plan showing a feasible, prospective street layout for any adjacent un-subdivided land owned or controlled by the owner or applicant of the subdivision, unless such a plan has already been filed with the Board. In the case where the applicant does not own or control any contiguous land, a statement to this effect shall appear in the application. (A sketch plan has been attached to the application showing available lease areas and existing and proposed road layouts for the remaining land owned by BP LLC)

☒ Names, approximate location and widths of adjacent streets. Also, the status of said streets and ways (private or public) should be noted.

☒ The zoning classification and location of any zoning district boundaries that may lie within the locus of the plan.

☒ Elevations and limits of base flood zone.

☒ Distance to nearest public water supply. (Public water supply available within Brayton Point Roadway)

☒ The identity and location of all covenants and/or restrictions applying to the land and their purposes, including any decisions of any variances made by the Zoning Board of Appeals applicable to the subdivision of the land or any building thereon.

☒ Location of approved percolation test pits and deep observation pits, if any, in accordance with the Rules and Regulations of the Board of Health and Department of Environmental Protection Soil Evaluation Procedures Under Title V. Whether or not septic systems are proposed, general soil logs and groundwater profiles shall be shown based on on-site observation pits and/or wells and/or percolation tests. Soil logs shall be sufficient in detail to show the depth of organized matter sub-soil thickness, and depth to bedrock (up to 8'), as well as percent composition of soil and sub- soil types. Locations of test pits shall be adequately distributed throughout the land area to the satisfaction of the Planning Board, providing at least 1 test hole per every two lots, and 1 test hole per each 500' of proposed roadway. Additional test holes and test pit locations shall be developed through consultation with the Board or Board's Consultant as may be required by the specific conditions on the site. (NA)

☒ Location of proposed sewage disposal facilities with the elevation of the bottom of the leaching bed or trenches shown. (NA)

☒ An erosion control and construction management plan showing the construction methods, scheduling (including any necessary or proposed phasing of work), winter stabilization measures, and location of necessary water pollution and erosion control measures.

☒ Designation of stump burial or spoils material areas, in accordance with local and state regulations. (NA no tree removal required)

☒ A street lighting plan, showing location, type and details of the proposed street lights. A copy of which shall be submitted to the Selectman for approval by the applicant.

☒ Suitable space for the signatures of the board shall be located on the top right hand side of the first sheet. The following notations are to be provided on the first page of all Definitive Subdivision Plans:

☒ 6.2.1 ENVIRONMENTAL IMPACT (Final Environmental Impact Report Dated January 3, 2023 and Draft Environmental Impact Report Dated August 31, 2022 (by reference) have been provided to the Town as part of the Massachusetts Environmental Protection Agency permitting process. These reports detail a full comprehensive environmental impact report for the full project including the Subdivision primary access roadway.

These reports outline the project and supplies the required data for review of the project's impact to the following:

☒ Physical Environmental

☒ Surface Water and Soils

☒ Sub-surface Conditions

☒ Town Services

☒ General Impact

New copies if required by the Town of Somerset are available for download at Prysmian Brayton Point (prysmianatbraytonpoint.com)

☒ 6.2.2 COPY BOARD OF HEALTH (Copy has been provided)

☒ 6.2.3 NOTICE (The certified mailing will be delivered within 15 days before the date of the hearing)

☒ 6.2.4 PAYMENT OF FEES

☒ 6.8.1 SUBDIVISION INSPECTION FEE: (NA)

☒ 6.10 PERFORMANCE GUARANTEES (NA)

ARTICLE 7 DESIGN STANDARDS

7.1 STREETS - Rights-of-ways, traveled way and layout shall conform to the following standards.

☒ 7.1.1 LOCATION

☒ Streets in the subdivision shall be coordinated with each other and with the existing street system in a manner satisfactory to the Board, with due regard to providing safety and convenience of vehicular travel. Due consideration shall also be given by the subdivider to the attractiveness of the street layout in order to obtain the maximum livability and amenity of the subdivision.

☒ The proposed streets shall conform, so far as practicable, to the Master or Study Plan as adopted in whole or in part by the Board. (NA)

☒ Provision satisfactory to the board shall be made for the proper projection of streets or for access to adjoining property, which is not yet subdivided.

☒ Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Board, such strips shall be in the public interest. (NA)

☒ 7.1.2 ALIGNMENT

☒ Streets entering opposite sides of another street shall be laid out either directly opposite one another or with a minimum of one hundred twenty-five (125) feet between their centerlines, unless a variance is specifically approved by the Board. (NA)

☒ Streets shall be laid out so as to intersect as nearly as possible at right angle. No street shall intersect any other street at less than sixty (60) degrees.

☒ Property lines at a street intersection shall be rounded or cut back to provide for a curb radius of not less than twenty (20) feet. (NA)

☒ 7.1.3 GRADE - Where the grade of any street at the approach to an intersection exceeds five percent, a leveling area shall be provided having not greater than three percent grades for a distance of twenty-five feet, measured form the nearest street line of an intersecting street.

☒ 7.1.4 DEAD – END STREETS

☒ The creation of dead-end streets is discouraged, and will be approved only when, in the opinion of the board, no possibility exists for eventual coordination with the existing or planned street system of the Town as determined by the Board. (No extension to or coordination with existing or planned street systems are planned due to the site configuration and usage. Adequate emergency access and egress has been provided utilizing the dead-end private way through the private Prysmian roadway system.)

☒ Dead-end streets shall not be longer than five hundred (500) feet, unless, in the opinion of the board, a greater length is necessitated by topography or other local conditions. On dead-end streets having a greater length than five hundred (500) feet, the board may require the separation of travel lanes by the median strip of suitable width. (A greater than 500' length of private roadway is required due to the physical conditions and planned usage of the property. Adequate emergency access and egress has been provided utilizing the dead-end private way through the private Prysmian roadway system.)

☒ Dead-end streets shall be provided at the closed end with a turnaround having an outside right of way radius of 60 feet and roadway radius of 45 feet and no island, or a dead-end street shall be provided at the closed end with a turnaround having an outside right of way radius of 60 feet and roadway radius of 55 feet, and with a landscape island. (A closed end turn around at the end of the dead end street has not been proposed due

to the configuration and usage of the roadway. Adequate emergency access and egress has been provided utilizing the dead-end private way through the private Prysmian roadway system.)

☒ 7.1.5 TABLE OF STREET DESIGN (The proposed roadway meets or exceeds the following street design parameters with the exception of the center line radius prior to entering the Prysmian parcel. Appropriate pavement widths, striping and traffic controls have been implemented for safe and adequate travel by emergency service vehicles and for trucking deliveries.)

	Street Classification		
	Collector	Local	Minor
Min. Radius –Centerline-	400’	250’	125’
Right of way width	60’	50’	40‘
Pavement Width	32’	28’	24’
Pavement Thickness	2”top	1”top	1”top
	2”base	2”base	2”base
Maximum	5%	7%	8 ½%
Minimum Grade	.7%	.7%	.7%
Curbing	Vertical Granite	Cape Cod Berm	Cape Cod Berm
Sidewalk	Two 4’	One 4’	One 4’
Sidewalk Thickness	1”top	1”top	1”top
	1 ½”base	1 ½ base	1 ½ base

☒ 7.1.6 GENERAL

☒ When an applicant is required to cut into existing pavement, the applicant shall repave the full width of the roadway pavement and for a distance of five feet (5’) in each direction from the end of the cut. The pavement shall provide for a smooth transition from the existing to new surface. Such repaving shall meet the subdivision street standards and recommendation of the superintendent of the Somerset Department of Public Works.

☒ The planning board may require space reserve for future streets (shown on said plan as paper streets) to provide for interconnecting ways and to avoid excessive dead-end streets. All portions of the tract being subdivided shall be taken up in lots, streets, public lands, or other proposed uses, so that remnants and land-locked areas shall not be created. (NA)

☒ Roadways, cul-de-sacs, detention facilities, sidewalks and other required infrastructure or improvements shall not be placed within easements but within the right-of-way or on parcels not buildable for residential, commercial or industrial structures. Sewer and water, utilities and drainage lines may be exempted from this provision by the express waive of the Board. (NA – Private Way)

☒ All areas within street right of way not used for walks, driveways, pavement, or structures shall be loamed and seeded at a transverse slope not to exceed 1 ½ horizontal to 1 vertical, except that between sidewalk and roadway the transverse slope shall be 3/8'' per foot unless the board allows otherwise.

☒ A period of no more than one year shall elapse between the rough and finish coats. (NA – Private Way)

☒ Multiple intersections involving a junction of more than two streets shall be prohibited. (NA)

☒ Road foundations, all peat, mud, etc. will be cleaned out and replaced with gravel, at least one (1) foot in thickness, a dress coat of four (4) inches of crusher run grave, and finished with a minimum of three (3) inches of asphalt. (NA)

☒ 7.2 EASEMENT (NA)

☒ 7.3 OPEN SPACE (NA)

☒ 7.4 NATURAL FEATURES (NA)

☒ 7.4.1 TOPSOIL

☒ 7.4.2 FLOOD PLAINS

☒ 7.4.3 GRADING AND TOPOGRAPHY

☒ 7.4.4 WETLANDS PROTECION

☒ 7.5 UNDERGROUND WIRING (Private)

☒ 7.5.1 STREET LIGHTS (Private)

☒ 7.6 STREET NAME SIGNS (Private)

☒ 7.7 MONUMENT (NA Private Way Easement)

☒ 7.8 FIRE ALARM SYSTEM (NA Private)

☒ 7.9 WATER SUPPLY (Private)

☒ 7.10 SEWERAGE (Private)

☒ 7.11 DRAINAGE

☒ 7.11.1 CRITERIA

☒ 7.11.2 DRAINAGE ANALYSIS

Drainage analysis shall include at least the following information:

☒ Soil test information and groundwater elevations; (Urban Land)

☒ Soil map for the watershed including locations of soil tests; (SCS Soil Maps)

☒ Topography map for the watershed;

☒ Land use map for the watershed;

☒ Pre-development drainage patterns on the site;

☒ Post development drainage patterns on the site.

For on-site system, the following information shall be required:

☒ Calculations of wetland areas on-site; (NA)

☒ Analysis of soil conditions throughout the site; (NA)

☒ Analysis of the square footage and % of impervious coverage in relation to the square footage and % of area devoted to drainage proposed;

☒ Consideration of density of development appropriate to the above conditions;

☒ Proposed use and assessment of effectiveness of water pollution and erosion control devices (e.g. absorption pillows, hay bales, swales, etc.);

☒ Conformance with DPW standards for maintenance and performance; (Conformance to MA Stormwater Management Regulations and Somerset Stormwater Bylaw)

☒ Consideration of existing or potential "public water" supply on or near the site;

☒ Design calculations shall be based on the 100 year storm event;

☒ All TR-55 or model calculations and information shall be furnished to the Board;

☒ Demonstration of no "significant" increase in the rate of discharge, the definition of significant to include consideration of the degree of urbanization within the watershed. (See attached Supplemental Stormwater Management Summary)

☒ 7.11.3 PERFORMANCE STANDARDS

☒ A 30' buffer zone of existing vegetation shall be retained between all detention or siltation structures and adjacent uses or structures for protection of scenic corridors, surface water and wetlands subject to Ch. 131, and Ch. 131, MGL and/or local wetland bylaws. However, the provisions of this section shall not prohibit the selective clearing of trees and shrubs, the establishment of new vegetation better suited to the proposed considerations, or the discharge of stormwater across such buffer areas as any if these actions may be permitted by the Conservation Commission under an Order of Conditions.

☒ Use of retention basins shall not be permitted except in combination with detention facilities and for the express purpose of containing the design storm for a 24-48 hour period. Detention facilities shall be permitted insofar as such systems are designed to function as natural wetlands, having characteristics of side slopes, gradients, vegetation and topographic location which follow naturally occurring wetland types. Use of such artificial storm drainage systems shall not substitute for proper erosion control measures including appropriate design for soil and slope conditions. Design of such facilities shall observe the following guidelines: (NA)

☒ Side slopes of wetland/detention areas should be no steeper than 4:1 horizontal to vertical relationship unless steeper slopes can be shown to be typical for conditions on the site. (NA)

☒ A maximum of 2% slope shall be permitted for the bottom of the wetland/basin. (NA)

☒ Where clearing and/or regrading of the site may be unavoidable for installation of the basin and necessary structures, vegetation shall be reestablished in conformance with the proposed landscape plan. (NA)

☒ The prohibition of undesirable or unnatural accumulation of water shall refer to stagnant, ponded waters, but not to wet systems, which are designed to have continuous stream flow through the basin. (NA)

☒ Drainage outfalls shall be designed in conformance with sub-section 7.11.5.f of this section, and shall further provide rip-rapped aprons in accordance with typical details shown in the Appendix of these regulations, and, in every case shall provide a minimum of 20 feet of vegetation swale before the property line and above the high water line of any stream, swamp, bank or wetlands by law. As with other drainage structures, detention areas shall have a positive outfall connection to an existing water body, including wetlands as defined above. Basins and swales shall be incorporated into separate land parcels for this exclusive purpose rather than be shown as easements over areas required

for other uses, or required to service purposes of other bylaws or regulations of the Town of Somerset.

☒ 7.11.4 SUB-SURFACE DRAINS OR SUB-DRAINS (NA)

☒ 7.11.5 STORM DRAINS

☒ Catchbasins and manhole structures shall be preferably reinforced, pre-cast concrete. Structures are not to be backfilled until inspected by the subdivision inspector. (NA for inspections)

☒ Catchbasins shall be located in pairs, one on each side of the road, at all low points or sag curves in the roadway, at intervals of: (See Drainage Plan)

- 400 feet for grades up to 4%
- 300 feet for grades from 4% to 6%, and 250 feet for grades more than 6%, and at or near the corners of the way at intersecting streets. Catchbasins will be in conformance with the Somerset D.P.W. standards.

☒ In general, the design shall be such as to provide for a flow of water at speeds between 2 and 12 feet per second; the minimum grade shall not be less than 0.4 percent for pipes greater than 12 inches in diameter and less in diameter and 0.25 percent as absolute minimum; the minimum pipe diameter shall be 12 inches, except that a 10 inch pipe may be used to connect a single catchbasin across the street; catchbasins shall have a 2 ½ feet sump below invert; and all drop manholes or inlets with a drop of six feet or more shall be provided with a splash pad. All final out-falls within or serving the subdivision shall extend to a natural waterway, or to drainage easements or pipe systems leading to waterways, and such pipe shall have a capacity 25% greater than required by the calculations. Provisions shall be made for the disposal of surface water intercepted or collected by the system in such a manner that no flow is conducted over Town ways or over the Land of others unless a drainage easement is obtained or unless such flow, in essentially the same quantity, previously existed in the same location. Where adjacent property is not subdivided, provision shall be made for extension of the system by continuing appropriate drainage to the boundary of the subdivision at such size and grade as will allow their proper projection.

☒ Culverts shall be designed on the basis of a one hundred (100) year storm and on the assumption that the entire drainage area is built up to the maximum density and in the manner, which the applicable section of the Zoning Bylaw allows. The calculations (or a copy thereof) necessary to determine the size of any culvert which carried a brook, stream, river or other natural waterway shall be submitted to the Board for review. Such calculations shall be based on the Rational Method to determine the size of waterway

openings. All culverts shall have a headwall at each end and any culvert over thirty-six inches in diameter shall include at the upstream end additional protection, as approved by the board, for the roadway side slopes. (NA)

☒ A headwall with wing walls shall be provided at the outfall end of all drains. Use of pre-formed flared and section of this purpose are also acceptable.

☒ No drainage outfall shall discharge below the highwater line of a swamp, stream, or body of water as defined in MGL Chapter 131, Section 40.

☒ Pipe outfalls shall be located away from dwellings a distance downgrade equivalent to the required lot depth in the applicable zone.

☒ In the event that no specific requirement is given in these regulations, Massachusetts Department of Public Works standards shall apply. (NA Private Way)

☒ 7.11.6 CALCULATIONS (Provided)

☒ 7.11.7 EROSION CONTROL FACILITIES

☒ Keep disturbed areas small No more than 50' wide, 100' long, and 20% of a single lot, or 5 acres of the overall tract are recommended guidelines: Consideration of topographic, soil, and vegetative characteristics shall be demonstrated through identification of erodible soils, steep slopes, stream-banks and drainage-ways, and measure designed to limit disturbance of these areas.

☒ Stabilize and protect disturbed areas quickly Exposed areas and stockpiles should be revegetated within 30-60 days. Two methods are available for stabilizing disturbed areas: mechanical (or structural) methods and vegetative methods. In some cases, both are combined in order to retard erosion. The selected measure should be identified in a Construction Management Plan submitted with the subdivision application

☒ Keep storm-water runoff velocities low. Acceptable velocities are in the 2-10feet/second range. The removal of existing vegetative cover during development and the resulting increase in impermeable surface area after development will increase both the volume and velocity of runoff. These increases must be taken into account when providing for erosion control.

☒ Protect disturbed areas from storm-water runoff Conservation measures can be utilized to prevent water from entering and running over the disturbed area. Diversions and other control practices to intercept runoff from higher watershed areas, store or divert it away from vulnerable areas, and direct it toward stabilized outlets should be utilized. Selected measures should be identified in the proposed construction management plan.

☒ Retain Sediment Within Site Area Sediment can be retained by two methods: filtering runoff as it flows and detaining sediment; or detain runoff for a period of time so that the soil particles settle out. The best way to control sediment, however, is to prevent erosion.

☒ 7.11.8 GENERAL DRAINAGE CONCERNS

☒ 7.12 SHADE TREE (NA Private Way)

☒ 7.13 STANDARD DESIGNS (NA Private Way, see proposed cross section plans)

☒ 7.14 INSPECTION AND CONTROL (NA Private Way)

We hope this material will be helpful in your review of the Definitive Plan application. Please do not hesitate to contact me at 401-457-7812 or slindgren@vhb.com. I look forward to your review of this Project.

Sincerely,



Scott D. Lindgren, PE

Senior Project Manager
sdlindgren@vhb.com

BERUBE DAVID R TRUSTEE
OF DAVID R BERUBE TRUST
21 PERKINS ST
SOMERSET MA 02725-
273/001.A-0000-0093.0

BRAYTON POINT LLC
1515 DES PERES RD SUITE 300
ST LOUIS MO 63131-
273/002.A-0000-0002.0

TOWN OF SOMERSET
140 WOOD ST
SOMERSET MA 02726-
273/001.A-0000-0246.0

VALLETT SHEILA
VALLETT ROBERT
91 PERKINS ST
SOMERSET MA 02725-
273/001.A-0000-0250.0

TOWN OF SOMERSET
140 WOOD ST
SOMERSET MA 02379-
273/014.A-0000-0030.0

SOMERSET LAND LLC & HOME STREET
10 NORTH MAIN ST
FALL RIVER MA 02720-
273/014.A-0000-0024.0

BRAYTON POINT LLC
1515 DES PERES ROAD SUITE 300
ST LOUIS MO 63131-
273/001.A-0000-0230.0

BRAYTON POINT LLC
1515 DES PERES RD SUITE 300
ST LOUIS MO 63131-
273/001.A-0000-0256.0

BRAYTON POINT LLC
1515 DES PERES ROAD SUITE 300
ST LOUIS MO 63131-
273/014.A-0000-0026.0

SOUZA JEREMY
39 PERKINS ST
SOMERSET MA 02726-
273/001.A-0000-0092.0

NEW ENGLAND POWER CO
PROPERTY TAX DEPT
40 SYLVAN RD
WALTHAM MA 02451-2286
273/014.A-0000-0025.0

STONE JEANNETTE
73 PERKINS ST
SOMERSET MA 02725-
273/001.A-0000-0089.0

RAPOSA PAUL A
61 PERKINS ST
SOMERSET MA 02725-
273/001.A-0000-0090.0

TALLAGE DAVIS LLC
5 ARCHER WAY
ACUSHNET MA 02743-
OLIVEIRA RONALD TRUSTEE OF ROSO INV REALTY TR
273/001.A-0000-0091.0

BERUBE EMMANUEL J
BERUBE MARY R
21 PERKINS ST
SOMERSET MA 02725-
273/001.A-0000-0098.0

COMMONWEALTH OF MASS
DEPT TRANSPORTATION
BOSTON MA 02113-
273/012.A-0000-0099.0

BEAULIEU PAUL ROBERT
415 ONEIL RD
SOMERSET MA 02725-
273/001.A-0000-0087.0

KING THERESA R TRUSTEE
P O BOX 1586
POCASSET MA 02559-
273/001.A-0000-0088.0

NEW ENGLAND POWER CO
PROPERTY TAX DEPT
40 SYLVAN RD
WALTHAM MA 02451-2286
273/001.A-0000-0255.0

Thomas J. LaRosa, General Counsel
Department of Conservation and Recreation
251 Causeway Street
Boston, MA 02114

2018 00001135
Bk: 9433 Pg: 29 Doc: DEED
Page: 1 of 9 01/23/2018 12:01 PM

Property address: 1 Brayton Point Road, Somerset, Massachusetts 02726

QUITCLAIM DEED AND ASSIGNMENT OF LEASE

BRAYTON POINT ENERGY, LLC (f/k/a Dominion Energy Brayton Point, LLC), a Virginia limited liability company (the "Grantor") having a principal place of business at 601 Travis Street, Suite 1400, Houston, TX 77002, for consideration paid, and in full consideration of EIGHT MILLION FIVE HUNDRED THOUSAND AND 00/100 DOLLARS ($8,500,000.00), grants to BRAYTON POINT LLC, a Missouri limited liability company having a principal place of business at c/o Commercial Development Company, Inc., 1650 Des Peres Road, Suite 303, St. Louis, MO 63131 (the "Grantee"), WITH QUITCLAIM COVENANTS, the land with the buildings and other improvements thereon, together with the rights appurtenant thereto, in the Town of Somerset, Bristol County, Massachusetts, described more particularly in Exhibit A attached hereto as a part hereof (the "Granted Premises").

The Grantor assigns to the Grantee the leasehold estate created by the lease from the Commonwealth of Massachusetts to New England Power Company, dated May 5, 1959, and recorded with the Bristol (Fall River District) Registry of Deeds at Book 714, Page 63. By its acceptance hereof, the Grantee agrees to pay and perform all of the lessee obligations under said lease.

Included in this grant is the transfer to the Grantee of the permits issued by the Department of the Army Corps of Engineers recorded with said Registry of Deeds in Book 1090, Page 494; Book 1123, Page 1050; Book 1222, Page 80, Book 1343, Page 192 and Book 1416, Page 132.

The Granted Premises are conveyed subject to, and with the benefit of the following licenses granted pursuant to M.G.L. Chapter 91: License 4186 recorded with said Deeds in Book 714, Page 60, License 5168 recorded with said Deeds in Book 897, Page 20, License 5367 recorded with said Deeds in Book 930, Page 191, License 5685 recorded with said Deeds in Book 976, Page 263, License 6047 recorded with said Deeds in Book 1078, Page 64, License 6300 recorded with said Deeds in Book 1111, Page 1083, License 258 recorded with said Deeds in Book 1168, Page 76, License 459 recorded with said Deeds in Book 1222, Page 88, License 943 recorded with said Deeds in Book 1417, Page 285, License 12380 recorded with said Deeds in Book 7149, Page 183 (see associated plan recorded with said Deeds in Plan Book 147, Page 49), and License 12677 recorded with said Deeds in Book 7389, Page 227 (see associated plan recorded with said Deeds in Plan Book 149, Page 7).

The Granted Premises are conveyed subject to, and with the benefit of, all matters lawfully appearing of record at the Bristol County (Fall River District) Registry of Deeds, including, without limitation, a Notice of Activity and Use Limitation recorded with said Deeds at Book 3269, Page 306, (see associated plan recorded with said Deeds in Plan Book 112, Pages 9 and 10),

MASSACHUSETTS EXCISE TAX
Bristol ROD Fall River 001
Date: 01/23/2018 12:01 PM
Ctrl# 024488 28574 Doc# 00001135
Fee: $38,760.00 Cons: $8,500,000.00

Notice of Activity and Use Limitation, recorded with said Deeds at Book 3945, Page 63 (see associated plan recorded with said Deeds in Plan Book 120, Page 76, Notice of Activity and Use Limitation recorded with said Deeds in Book 7791, Page 105 (see associated plan recorded with said Deeds in Plan Book 112, Page 9 & 10), and Notice of Activity and Use Limitation recorded with said Deeds in Book 8022, Page 37 (see associated plan recorded with said Deeds in Plan Book 152, Page 48).

Grantor represents that Grantor is not treated as a corporation for federal tax purposes.

For the Grantor's title, see Quitclaim Deed and Assignment of Lease dated December 28, 2004 and recorded with the Bristol County (Fall River District) Registry of Deeds in Book 5707, Page 161.

[signature page follows]

Executed as a sealed instrument this 18 day of January, 2018.

BRAYTON POINT ENERGY, LLC, a Virginia limited liability company

By: Martin W. Daley
Name: Martin W. Daley
Title: Authorized Real Property Signatory, Executive Vice President and Chief Operations Officer

STATE OF NEW YORK

COUNTY OF Ulster

On this 18th day of January, 2018, before me, the undersigned Notary Public, personally appeared the above-named Martin W. Daley, the Authorized Real Property Signatory, Executive Vice President and Chief Operations Officer of BRAYTON POINT ENERGY, LLC, proved to me by satisfactory evidence of identification, being (check whichever applies):

☑ driver's license or other state or federal governmental document bearing a photographic image,
☐ oath or affirmation of a credible witness known to me who knows the above signatory, or
☐ my own personal knowledge of the identity of the signatory,

to be the person whose name is signed above, and acknowledged the foregoing to be signed by him/her voluntarily for its stated purpose, as the free act and deed of said BRAYTON POINT ENERGY, LLC.

Lisa K. Quinlan
(Print Name of Notary Public): Lisa K. Quinlan
My commission expires:

Lisa K. Quinlan
Notary Public, State of New York
No. 01QU6216212
Qualified in Ulster County
Commission Expires January 11, 2020

Exhibit A to Quitclaim Deed
Legal Description

The real property in the Town of Somerset, County of Bristol, Commonwealth of Massachusetts, described as follows:

Parcel 1: FEE SIMPLE

Land beginning at a point on the westerly side of Brayton Point Road in said Somerset, said point being at land now or formerly of Richard R. and Doris R. Chace; thence running

Northwesterly by a stone wall, seven hundred ninety-one and 50/100 (791.50) feet to a point; thence

turning by an interior angle of 90° 12' 40" and running thirty-three (33) feet to a point; thence

turning by an exterior angle of 134° 03' 00" and running four hundred four and 30/100 (404.30) feet by a wall to a point; thence

turning by an exterior angle of 124° 30' 10" and running nine hundred eighty-four (984) feet by a wall to a cove in the Lees River- said last four courses and distances being by said land of Richard R. and Doris R. Chace; thence

by said cove, the Lees River, Mt. Hope Bay and the Taunton River to land formerly of D. Wilbur, et al; thence

Northeasterly by said land formerly of Wilbur, et al, along the division line established by instrument dated November 19, 1894, recorded with Fall River District Deeds in Book 28, Page 460, and a continuation thereof, to the northerly line of the former location of the Fall River and Warren Railroad; thence

Northwesterly by the northerly line of the former location of said Railroad by land formerly of O'Neil, three hundred thirty-five (335) feet more or less to the southwest corner of said land formerly of O'Neil; thence

Northeasterly by land formerly of O'Neil, by two courses, thirteen hundred (1300) feet more or less, crossing O'Neil Road, to land formerly of Richard R. and Doris R. Chace; thence

Northwesterly by said Chace land about five hundred twenty-five (525) feet to Brayton Point Road; thence across said Road to the point of beginning.

Together with all right, title and interest owned by Dominion Energy Brayton Point, LLC in and to the bed, stream and land lying under the waters of said Cove, Lees River, Mount Hope Bay and the Taunton River where the same adjoin the premises hereby conveyed.

Excepting therefrom, the premises described in a deed from Roger P. Chace to Warren R. Chace, et ux, dated December 14, 1955, recorded with Bristol (Fall River) Registry District of Deeds, Book 642, Page 205, bounded and described as follows:

Beginning at the southeasterly corner thereof in the westerly line of Brayton Point Road by other land now or formerly of New England Power Company, which starting point is marked by a granite post set in the ground and is two hundred eleven (211) feet, more or less, northerly from the point which would be indicated by a continuation of the northerly line of O'Neil Road; thence

Westerly by other land now or formerly of New England Power Company and at right angles with Brayton Point Road ninety (90) feet for a corner; thence

Northerly by land now or formerly of New England Power Company and in a line parallel with Brayton Point Road one hundred twelve (112) feet for a corner; thence

Easterly by land now or formerly of New England Power Company and in a line parallel with the first boundary line ninety (90) feet to said Brayton Point Road; and thence

Southerly in the westerly line of said Brayton Point Road one hundred twelve (112) feet to the point of beginning.

Parcel 2: FEE SIMPLE

Land shown as a lot containing 53.2± acres, more or less, on a plan entitled "Plan Showing Land in Somerset, Massachusetts" to be conveyed by Slade Realty Corp. to New England Power Company, dated December 8, 1959, by Kellogg W. Kyle, Registered Land Surveyor, recorded with said Deeds as Plan No. 2189, bounded and described as follows:

Beginning at the southeasterly corner of the land to be described at a point five hundred forty-five and 08/100 (545.08) feet from a drill hole on Brayton Point Road as measured along the boundary wall between land now or formerly of New England Power Company and land now or formerly of Slade Realty Corp.; thence running

N 54° 14' W along said wall two hundred forty-six and 42/100 (246.42) feet to a stone bound for a corner; thence running

S 35° 58' 40" W thirty-three (33) feet to another stone bound for a corner; thence running

S 81° 55' 40" W four hundred four and 30/100 (404.30) feet to another stone bound for a corner; thence running

N 42° 34' 30" W nine hundred and fifty-nine (959) feet to another stone bound, all of said last named courses and distances being by the aforesaid boundary wall; thence
continuing in the same course four hundred twenty-five (425) feet, more or less, to Lees River; thence running

Northerly by said Lees River two hundred thirty (230) feet, more or less, to land conveyed by New England Power Company to The Fall River Broadcasting Company, Inc., by deed dated March 22, 1957, and recorded in Bristol County (Fall River) District Registry of Deeds, Book 669, Page 351; thence running

S 60° 32' 50" E by last named land about nine hundred fifty (950) feet, more or less, to a stone bound at the southeasterly corner of said The Fall River Broadcasting Company, Inc. land; thence running

N 29° 27' 10" E by said last named land ten hundred thirty (1030) feet to a drill hole; thence running

N 60° 32' 50" W one hundred (100) feet to another drill hole in a stone wall at land now or formerly of Edward J. Cox, et ux; thence running

N 26° 01' 00" E by said Cox land two hundred seventy-one and 31/100 (271.31) feet to a drill hole; thence running

S 66° 01' 40" E by said Cox land ninety-eight and 91/100 (98.91) feet to a drill hole; thence
running North 24° 44' 20" East by said Cox land sixty-one and 76/100 (61.76) feet to a drill hole; thence running

S 60° 55' 00" E partly by said Cox land and partly by other land of Dominion Energy Brayton Point, LLC

herein four hundred eighty-one and 82/100 (481.82) feet to a drill hole; thence running

N 30° 15' 00" E by Dominion Energy Brayton Point, LLC land ninety-nine and 05/100 (99.05) feet to a drill hole; thence running

S 60° 11' 00" E by Dominion Energy Brayton Point, LLC land and by land now or formerly of Roger Fortier five hundred ninety and 86/100 (590.86) feet to land now or formerly of Richard R. and Doris R. Chace for a corner; thence running

S 30° 05' 00" W by said Chace land six hundred sixty-five and 70/100 (665.70) feet to a stake and stones at land now or formerly of New England Power Company; thence continuing

S 28° 38' 00" W by land now or formerly of New England Power Company eleven hundred sixty-one and 4/10 (1161.4) feet to the point of beginning, containing 53.2 acres, more or less.

LESS AND EXCEPT that portion of the property taken by the Commonwealth of Massachusetts by Layout No. 4978 for Interstate 195 and Order of Taking recorded June 29, 1960, in Deed Book 734, page 472.

Parcel 3: LEASEHOLD

The leasehold interest in the land shown on a plan entitled "Plan Showing Land of the Commonwealth Under Waters of Mount Hope Bay to be Leased to New England Power Company", dated February 11, 1959 by Kellogg W. Kyle, Registered Land Surveyor, recorded with said Deeds as Plan No. 2153, in Plan Book 32; page 21, as set forth in Indenture from the Commonwealth of Massachusetts (Lessor) to New England Power Company (Lessee), dated May 5, 1959, recorded June 24, 1959, with the Bristol Fall River District County Registry of Deeds, in Book 714, Page 63.

Parcel 4: FEE SIMPLE

Land beginning at the southeasterly corner in the westerly line of Brayton Point Road by land now or formerly of the New England Power Company, which starting point is marked by a granite post set in the ground and is two hundred eleven (211) feet, more or less, northerly from the point which would be indicated by a continuation of the northerly line of O'Neil Road; thence

Westerly by land now or formerly of New England Power Company and at right angles with Brayton Point Road ninety (90) feet for a corner; thence

Northerly by land of the New England Power Company and in a line parallel with Brayton Point Road one hundred twelve (112) feet for a corner; thence

Easterly by land of the New England Power Company and in a line parallel with the first boundary line ninety (90) feet to said Brayton Point Road; and thence

Southerly in the westerly line of said Brayton Point Road one hundred twelve (112) feet to the point of beginning.

The above described Parcel Four contains ten thousand eight (10,008) square feet of land, more or less.

Parcel 5: FEE SIMPLE

Land beginning at a point on the westerly sideline of Interstate 195 at the most northeasterly corner of the parcel to be described, and both sides of Brayton Point Road, now or formerly owned by New England Power Company and shown on a plan by Cullinan Engineering Co., Inc. titled "Plan of Property - Somerset, MA and dated July, 1998", bounded and described as follows:

Beginning at a point on the westerly sideline of Interstate 195 at the most Northeasterly corner of the parcel to be described; said point being:

S 47° 30' 01" W and 198.13 feet from Sta. 28+94.00 of the 1960 Highway layout (#4978) of Interstate195; thence

along said westerly sideline of said 1960 layout the following two (2) courses;

S 22° 59' 14" E a distance of 283.49 feet to a point; and

S 17° 06' 57" E a distance of 1292.63 feet to a point at land now or formerly of Montaup Electric Company; thence

along land now or formerly of Montaup Electric Company the following two (2) courses;

S 28° 35' 26" W a distance of 427.24 feet to a point; and

S 53° 56' 49" E a distance of 545.08 to a point on the northwesterly sideline of Brayton Point Road; thence

along the northwesterly, southwesterly and southeasterly sideline of Brayton Point Road the following six (6) courses;

S 31° 41' 41" W a distance of 105.62 feet to a granite bound;

S 31° 41' 31" W a distance of 115.56 feet to a granite bound;

S 31° 41' 22" W a distance of 327.72 feet to a point;

S 31° 48' 01" W a distance of 1904.50 feet to a point;

S 58° 11' 59" E a distance of 40.00 feet to a point; and

N 31° 48' 01" E a distance of 1860.30 feet to a point at the southwesterly sideline of O'Neil Road; thence

along the southwesterly sideline of O'Neil Road the following two (2) courses;

S 31° 24' 09" E a distance of 302.44 feet; and

S 17° 47' 07" E a distance of 13.69 feet to a granite bound at land of others; thence along various owners, in part by a stone wall, the following six (6) courses;

S 48° 07' 47" W in part by a stone wall, a distance of 299.82 feet to a granite bound;

S 28° 23' 48" W following a stone wall, a distance of 363.76 feet to a drill hole in said stone wall;

S 26° 29' 10" W in part by a stone wall, a distance of 166.44 feet to a point;

S 45° 40' 02" E a distance of 353.59 feet to a granite bound;

S 46° 41' 13" W a distance of 649.15 feet to a granite bound; and continuing

S 46° 41' 13" W a distance of 175.8 feet, more or less, to the mean low water line of Mount Hope Bay; thence

WESTERLY and SOUTHERLY along the mean low water line of Mount Hope Bay, a distance of 1690 feet more or less to a point at the northerly end of a parcel leased to New England Power company from the Commonwealth of Massachusetts; thence

SOUTHWESTERLY along land now or formerly of the Commonwealth of Massachusetts (leased to New England Power Company) and following the mean low water line, a distance of 888 feet more or less to a point at the mean low water line of the Taunton River; thence

WESTERLY, NORTHERLY and EASTERLY along the Taunton River and Lees River and following the mean low water line, a distance of 10,545 feet more or less to a point now or formerly of The 1480 Company; thence

along land now or formerly of The 1480 Company the following three (3) courses;

S 60° 20' 30" E a distance of 728 feet more or less to a point;

N 29° 39' 30" E a distance of 1030.00 feet to a point; and

N 60° 20' 30" W a distance of 100.00 feet to a point at a corner of stone walls at land now or formerly of Olneira; thence

N 26° 13' 20" E along land now or formerly of Olneira, a distance of 107.50 feet to the point of beginning.

The above described Parcel Five contains 285.4360 acres, more or less.

Parcel 6:

Land beginning at a point on the easterly side of Interstate 195 at the most southwesterly corner of the parcel to be described, now or formerly owned by New England Power Company and shown on a plan by Cullinan Engineering Co., Inc. title "Plan of Property - Somerset, MA and dated July, 1998", bounded and described as follows:

Beginning at a point in the easterly sideline of Interstate 195 at the most southerly corner of the parcel to be described said point being:

N 17° 06' 57" W and 207.90 feet from a Massachusetts Highway Bound opposite Sta 44+00 of the 1960 Highway layout #4978; thence

N 17° 06' 57" W along the easterly sideline of I-195, a distance of 457.09 feet to a Massachusetts Highway Bound opposite Sta 37+35.01 of said 1960 State Highway layout; thence

continuing along I-195 off-ramp the following two (2) courses;

NORTHEASTERLY by a curve to the right having radius of 928.93 feet, an arc distance of 450.72 feet to a Massachusetts Highway Bound at a point of tangency; and

N 38° 19' 11" E a distance of 80.89 feet to a point at the other land now or formerly of New England Power Co; thence

S 60° 26' 56" E along land now or formerly of New England Power Company and along land now or formerly of Malone, a distance 359.86 feet to a point at land now or formerly of

Chase; thence

S 30° 02' 26" W along land now or formerly of Chase, a distance of 663.01 feet to a point at land now or formerly of the Town of Somerset; thence

S 28° 35' 26" W along land now or formerly of the Town of Somerset, a distance of 175.32 to the point of beginning.

The above described Parcel Six contains 5.6280 acres, more or less.

Parcel 7:

Land beginning at a point on the southeasterly sideline of Brayton Point Road at the most westerly corner of the parcel to be described, now or formerly owned by New England Power Company, and being at the intersection of Brayton Point Road with the easterly sideline of O'Neil Road and shown on a plan by Cullinan Engineering Co., Inc. title "Plan of Property - Somerset, MA and dated July, 1998", bounded and described as follows:

N31° 41'31"E along the southeasterly sideline of Brayton Point Road, a distance of 518.63 feet to a point at land now or formerly of Montaup Electric Company; thence

S 18° 27' 38" E along land now or formerly of Montaup Electric Company, a distance of 518.58 feet to a granite bound at land now or formerly of Winter; thence

S 56° 36' 00" W along land now or formerly of Winter, a distance of 41.70 feet to a point; thence

S 48° 12' 19" W along land now or formerly of Winter and land now or formerly of the Town of Somerset, a distance of 309.76 feet to a granite bound on the northeasterly sideline of O'Neil Road; thence

N 31° 24' 09" W along O'Neil Road a distance of 328.05 feet to the Brayton Point Road and the point of beginning.

The above described Parcel Seven contains 3.6516 acres, more or less.

ATTEST: BR. COUNTY, F.R. DIST.
Bernard J McDonald III Register

January 9, 2023

Mr. Gary Simons – Chair
Planning Board
Town of Somerset
140 Wood Street
Somerset, MA 02726

Re: Prysmian Submarine Cable Manufacturing Facility
Preliminary Subdivision Plan

Dear Chairman Simons and Members of the Board:

Reference is hereby made to that certain application for a Preliminary Subdivision Plan submitted by Prysmian Cables and Systems USA, LLC a subsidiary of the Prysmian Group (the "Proponent"), with respect to the proposed subdivision of approximately 47 acres of land (the "Site") from the approximately 300 acre former power station site located at 1 Brayton Point Road, Assessors Map A2, Lot 2 (the "Property").

The undersigned is the fee owner of the Site by virtue of a deed recorded in the Bristol County Registry of Deeds at Book 9433, Page 29 ("Owner"). Pursuant to Section 5.1 of the Rules and Regulations Governing the Subdivision of Land, Somerset, Massachusetts dated as of June 2004, we hereby provide you this notarized letter of authorization authorizing the Proponent, as duly authorized agent of Owner, to proceed with the application for Preliminary and Definitive Subdivision Approval of the Site.

This letter of authorization is effective unless withdrawn by a notarized letter of subsequent date.

Thank you for your consideration.

Sincerely,

BRAYTON POINT LLC,
a Missouri limited liability company

By: Environmental Liability Transfer, Inc.
Its: Manager

By: _____
Name: Michael J. Roberts
Its: Vice President

COUNTY OF ST. LOUIS)

) ss.

STATE OF MISSOURI)

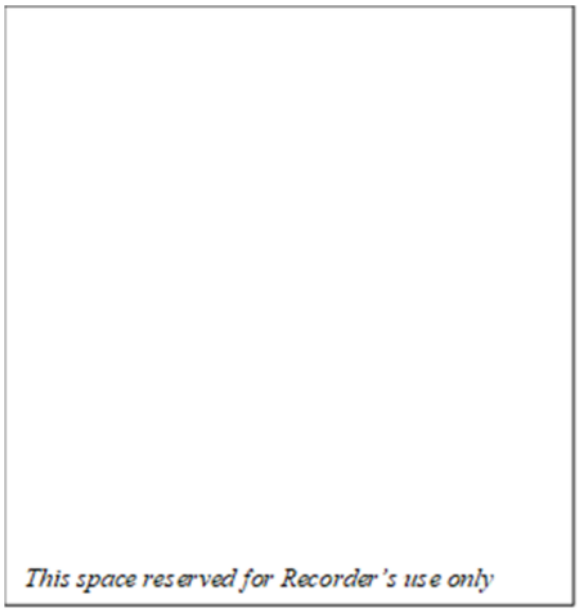
On this 9th day of January, 2023, before me, the undersigned notary public, personally appeared Michael J. Roberts, proved to me through satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose as the Vice President of the Manager of Brayton Point LLC.

REBECCA LYDON
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES NOVEMBER 1, 2025
ST. LOUIS COUNTY
COMMISSION #13540330

Rebecca Lydon

Rebecca Lydon - Notary Public

My commission expires: 11-1-25



DECLARATION OF
RESTRICTIONS AND COVENANTS
FOR
BRAYTON POINT COMMERCE CENTER
SOMERSET, BRISTOL COUNTY, MASSACHUSETTS

This **Declaration of Restrictions and Covenants** is made and dated as of _____ _____, 202_ (this "**Agreement**") by and between **BRAYTON POINT LLC**, a Missouri limited liability company ("**Brayton**") and **PRYSMIAN CABLES AND SYSTEMS USA, LLC**, a Delaware limited liability company ("**Prysmian**")[1]. Brayton and Prysmian may be referred jointly as the "**Parties**" and individually as a "**Party**."

RECITALS

1. Prysmian is purchasing from Brayton approximately forty-six and six/tenths (46.6) gross acres of land together with all existing easement rights, development rights and other appurtenances ("**Prysmian Property**") as further described in that certain quitclaim deed from Brayton to Prysmian dated as of the date hereof (the "**Deed**") and recorded with the Bristol County (Fall River, Massachusetts) Registry of Deeds (the "**Registry**"). The Brayton Property is the property owned by Brayton known as the Brayton Point Commerce Center, consisting of approximately three hundred one (301) acres (exclusive of the Prysmian Property) and further described in that deed to Brayton recorded at Book 9433, Page 29 with the Registry (the "**Brayton Property**"). The Brayton Property and Prysmian Property are further shown on that certain plan of land attached hereto as **Exhibit A** (the "**Subdivision Plan**") and separately recorded at the

[1] The name of the Prysmian entity that signs the Declaration of Easements will be changed to the same name as the Prysmian entity that is the grantee of the Deed from Brayton at closing.

Registry[2]. The closing of the sale of the Prysmian Property to Prysmian and the recording of the Deed and Subdivision Plan is hereinafter referred to as the "**Closing**".

2. Prysmian intends to develop a submarine cable manufacturing facility with related infrastructure, including but not limited to a new marine dock facility (the "**Project**").

3. Because the Prysmian Property has no direct frontage to a public way, Prysmian will construct a private way over the Brayton Property from Brayton Point Road to the Prysmian Property, as further shown on the Subdivision Plan, to provide ingress and egress to and from the Prysmian Property (the "**Primary Access**"). Prysmian shall further require various rights of access on and over Brayton's property as well as utility and other infrastructure easement rights for the present and future development, use and operation of the Prysmian Property. In connection with the foregoing, the Parties desire to enter into this Agreement to establish and define various restrictions, covenants and related obligations among the parties relative to construction and operation of the project.

4. On April 28, 2023, the Town of Somerset Massachusetts issued a Preliminary Subdivision Plan approval, which preliminarily authorized the subdivision of the Prysmian Property from the remainder of the Brayton Property, required a declaration of restrictive covenants to address certain matters in that approval.

5. The provisions of this Agreement, including non-exclusive nature of the easements described herein, allow for orderly and efficient future development of the remaining land at the Brayton property.

DECLARATION

NOW, THEREFORE, in consideration of the mutual obligations of the Parties, and other good and valuable consideration, each of them does hereby covenant and agree with the other, and Brayton hereby grants Prysmian the easements, rights, restrictions and covenants as follows:

ARTICLE 1 CONTAMINANTS

1.1 Environmental Compliance. Each party shall comply with all federal, state, regional, county and local government Environmental Laws applicable to their respective activities and operations, including any notice, direction or order from any Government Authority issued pursuant to Environmental Laws. Such obligations include compliance with the Massachusetts Contingency Plan 310 CMR 40.0000 ("MCP"), including provisions relating to reporting, first-response containment, long-term mitigation and financial liability. In the event Brayton does not comply with its obligations under the MCP on the easements, then Prysmian has the right but not the obligation to take such actions as are required under the MCP on easements granted to Prysmian by Brayton.

[2] The final subdivision plan at Closing will replace existing Exhibit A

1.2 Brayton Point Property Contamination. Prysmian shall not have any liability to Brayton or others under this Agreement resulting from any conditions existing, or events occurring, or any Pollutants or Hazardous Substances existing or generated, at, in, on, under, or in connection with Brayton Property except to the extent Prysmian or Prysmian's agents, contractors, consultants, or the employees of any of the aforementioned negligently or intentionally and knowingly exacerbates the same (including the Primary Access).

ARTICLE 2 ACCESS

2.1 Non-Exclusive Easements. Prysmian shall have perpetual, non-exclusive access to the Prysmian Property via the Primary Access, and shall further have non-exclusive access to all easement areas for utilities, secondary or emergency access and any other areas to perform work, including but not limited to maintenance, construction or restoration work, including maintenance of drainage easements, all as set forth more specifically in the Declaration of Easements, Restrictions and Covenants executed between the parties dated as of the date of this Agreement and recorded contemporaneously herewith at the Registry ("**Reciprocal Easement Agreement")**.

2.2 Drainage. As set forth more specifically in the Declaration of Easements (i) Brayton will conduct stormwater-related operations and maintenance (O&M) activities, relating to Prysmian's planned Primary access roadways and (ii) Brayton grants Prysmian the right to conduct such O&M activities should, for any reason, Brayton does not do so.

ARTICLE 3 MISCELLANEOUS

3.1 In the event of an inconsistency between this Agreement and the Reciprocal Easement Agreement, the Reciprocal Easement shall control.

3.2 Reasonable Consent. Unless otherwise specifically provided in this Agreement, any consents, approvals and the like provided in or required under this Agreement shall not be unreasonably withheld, conditioned or delayed.

3.3 Estoppels. Within ten (10) business days after written request by any Party, the other Party agrees to deliver a certificate certifying (if such be the case) (i) that this Agreement is in full force and effect, (ii) the current amount(s) due under this Agreement, if any, and the basis therefor, (iii) to the knowledge of the certifying Party that the Party requesting such certificate and the parcel owned by such Party are in compliance with this Agreement, and (iv) any other matter relating to this Agreement reasonably requested by the requesting party. Each party acknowledges that this undertaking is materially important to each of them in connection with their respective financings and other business activities.

3.4 Headings. The headings herein are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope or intent of this Agreement nor in any way affect the terms and provisions hereof.

3.5 Amendment and Modification. The Parties from time to time of any of the properties that are subject to this Agreement shall not be entitled to rely upon any statement, promise or representation not herein expressed unless set forth in writing and signed by the party charged with

the same. This Agreement shall not be modified or amended in any respect except by a modification or amendment in writing signed by all of the Parties at such Party's sole discretion and approved by their respective Mortgagees, if any.

3.6 Further Assurances. The Parties from time to time shall execute, acknowledge and deliver such further documents and provide such further assurances as any Party may reasonably request to memorialize any further agreement, terms or arrangements reached pursuant to provisions of this Agreement that contemplate such further agreements, terms or arrangements.

3.7 Notices. Every notice, demand, consent, approval or other document or instrument required or permitted to be served upon or given to any Party hereto shall be in writing and shall be delivered in person or sent by nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested or by Email with a Read Receipt requested, and addressed as follows:

If to Brayton at:	1515 Des Peres Road, Third Floor St. Louis, Missouri 63131 Attn: Michael J. Roberts Email: mroberts@cdcco.com Attn: Thomas E. Roberts Email: troberts@cdcco.com
With a copy to:	1515 Des Peres Road, Third Floor St. Louis, Missouri 63131 Attn: Christopher J. Rausch, Esq. Email: crausch@cdcco.com
If to Prysmian:	Prysmian Cables and Systems USA LLC 4 Tesseneer Dr. Highland Heights, KY 41076 Attention: Alberto Boffelli Email: alberto.boffelli@prysmiangroup.com
With a copy to	Foley Hoag LLP Seaport World Trade Center West 155 Seaport Boulevard Boston, Massachusetts 02210-2600 Attention: Adam Kahn, Esq. akahn@foleyhoag.com

Or to such address as the Parties may direct from time to time by written notice forwarded in accordance with this Section. Any notice so addressed and so delivered or mailed shall be deemed duly given and effective when delivery is tendered whether or not tender of delivery is accepted.

Upon the sale of a Burdened Property the new owners of such Burdened Property shall notify each other Party of its or their notice address(es).

3.8 Covenants Running With Land. The benefits and burdens, rights, obligations, and restrictions created by this Agreement shall be construed as covenants running with the land and shall be appurtenant to and run with each of the Brayton Property and Prysmian Property, as the case may be in the context, and shall inure to the benefit of and be binding upon the owner of each such property, their successors and assigns.

3.9 No Merger. It is the intention of the Parties that this Agreement and the rights granted hereunder shall survive, and shall not be merged or extinguished, in the event that there is a merger of title in whole or in part of the Brayton Property and Prysmian Property, unless and to the extent that the Parties expressly agree otherwise by an instrument recorded with the Registry of subsequent to the recording and filing hereof.

3.10 Prior Encumbrances. This Agreement is subject to all agreements, restrictions, leases, easements and encumbrances of record as of the date hereof insofar as now in force and applicable which affect the Prysmian Property and Brayton Property; provided that Brayton agrees to discharge, or fully subordinate to this Agreement, any mortgage encumbering the Brayton Property as of the execution of this Agreement.

3.11 Counterparts. This Agreement may be executed and delivered in one or more counterparts which together shall constitute one and the same document.

[The remainder of this page has been intentionally left blank.]

EXECUTED as a sealed Massachusetts instrument dated as of the date first set forth above.

BRAYTON POINT LLC,
a Missouri limited liability company

By: Environmental Liability Transfer, Inc.
Its: Manager

By: _____
Name: Michael J. Roberts
Its: Vice President

COUNTY OF ST. LOUIS)) ss.
STATE OF MISSOURI)

On this _____ day of _____, 202__, before me, the undersigned notary public, personally appeared Michael J. Roberts, proved to me through satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose as the Vice President of the Manager of Brayton Point LLC.

_____
_____ - Notary Public
(typed or printed name)

My commission expires: _____

PRYSMIAN CABLES AND SYSTEMS USA, LLC, a Delaware limited liability company

By: _____
Name:
Title:

THE COMMONWEALTH OF MASSACHUSETTS

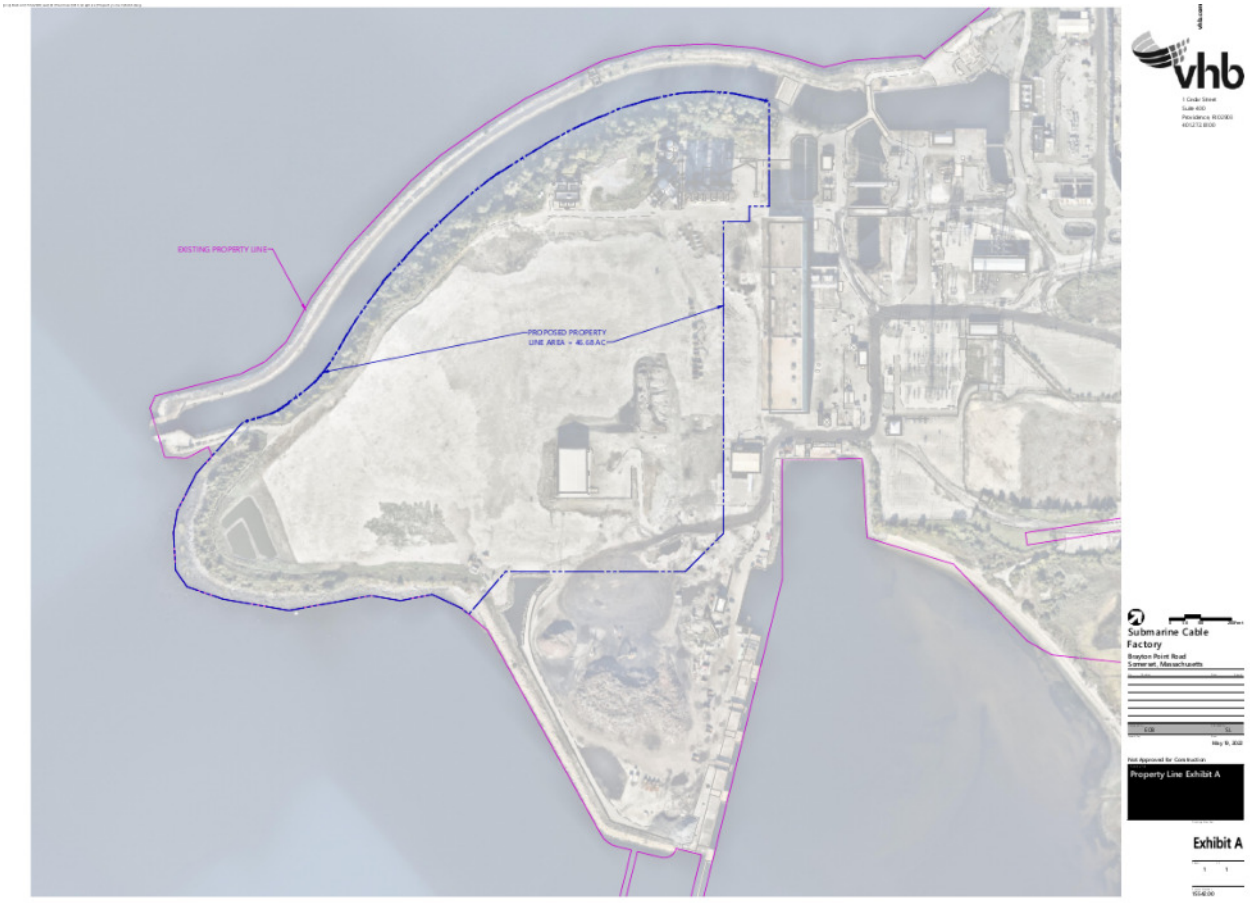
_____, ss

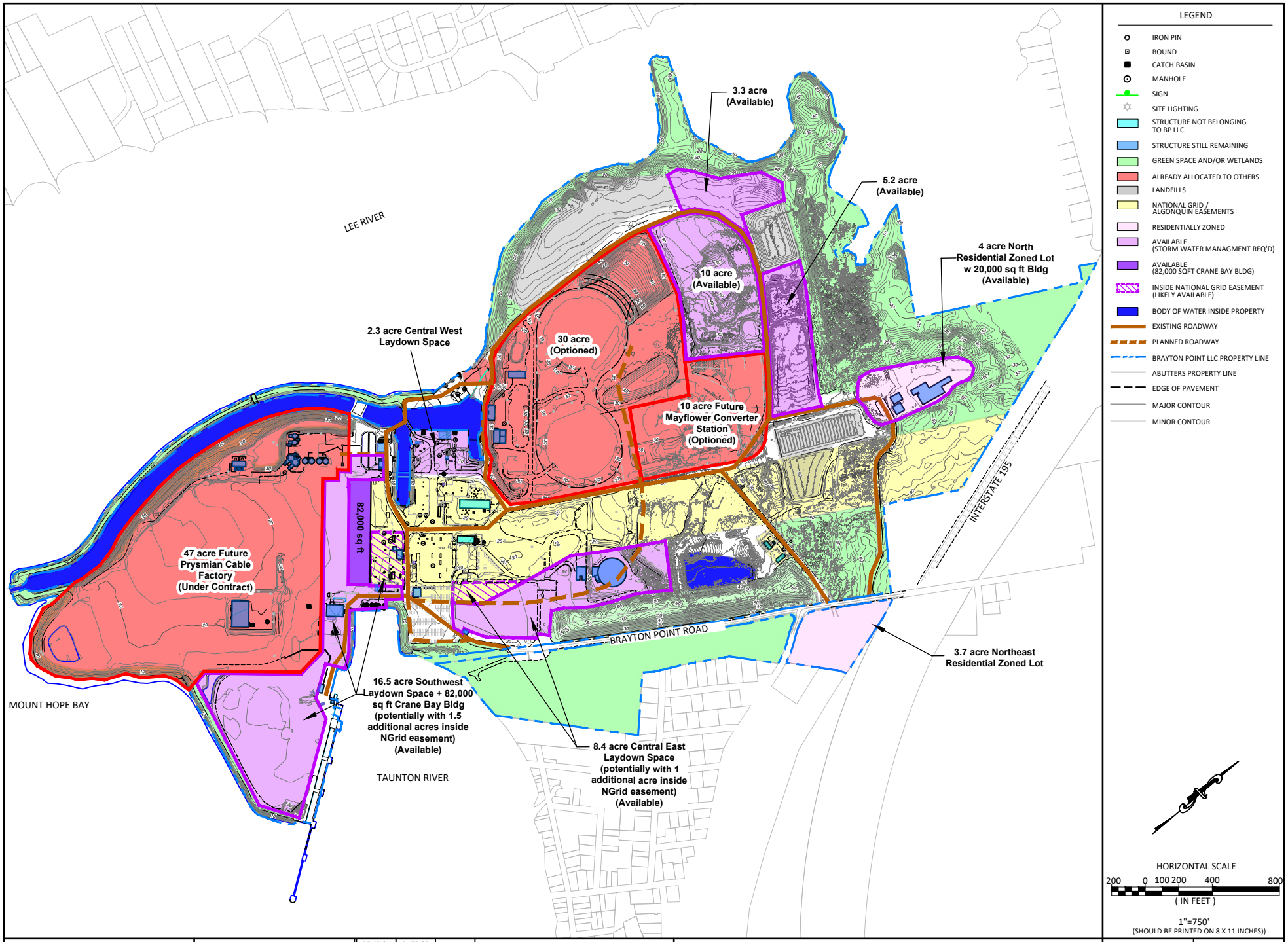
On this __ day of _____, 202__, before me, the undersigned Notary Public, personally appeared the above-named _____-, and proved to me by satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that s/he signed it voluntarily for its stated purpose as _____ of Prysmian Cables and systems USA LLC, LLC.

_____
Notary Public
My commission expires:

EXHIBIT A

[DRAFT SUBDIVISION PLAN]





EnviroAnalytics Group

DRAWN BY: MN	REVISION NUMBER:	DATE OF REVISION:	BY:	DESCRIPTION:
APPROVED BY: EBS	#1	NA	NA	NA
DATE: 01/09/2023	#2	NA	NA	NA
SCALE: AS SHOWN	#3	NA	NA	NA

BRAYTON POINT COMMERCE CENTER
AVAILABLE FOR LEASE SITE MAP
BRAYTON POINT, LLC
SOMERSET, MASSACHUSETTS

PROJECT NUMBER:	SHEET NUMBER:
NA	1 OF 1
DRAWING DATE:	FIGURE NUMBER:
01/09/2023	1

SUPPLEMENTAL STORMWATER SUMMARY

Submarine Cable Factory Primary Access Drive / Off-Site Improvements

Brayton Point
Somerset, Massachusetts

PREPARED FOR

Prysmian Group

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

PREPARED BY

1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

June 2, 2023

Purpose

The purpose of this memorandum is to supplement the October 2022 full Stormwater Report for the Submarine Cable Factory located on Brayton Point Road in Somerset, Massachusetts while also serving as an updated to the "Offsite" Supplemental Stormwater Summary dated February 16, 2023. Specifically, this summary is intended to provide additional clarification on how the "Offsite" portion of the project (the primary and emergency access drives) meets the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards after undergoing engineering revisions based on the Rules and Regulations Governing the Subdivision of Land for Somerset, Massachusetts.

Regulatory Compliance – Offsite (Primary and Emergency Access Drive)

As demonstrated below, the proposed Project fully complies with the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards.

Standard 1: No New Untreated Discharges or Erosion to Wetlands

The "Offsite" Project, consisting of the Primary and Emergency Access Drives, has been designed to comply with Standard 1.

This portion of the project has two distinct areas from a stormwater management perspective:

a. Subcatchments EX-3C, EX-3D, EX-3E, PR-3C, and PR-3D (new development):

   These subcatchments, in the vicinity of the main access gate to the Prysmian parcel, propose a more substantial departure from existing conditions compared to the rest of the access drive work with respect to regrading and reconfiguring the stormwater management system. As such, they were designed to comply with the stormwater standards as a new development. Stormwater treatment for this area is provided in a subsurface sand filter and is documented in the full Stormwater Report (with supplementary information provided in this memorandum).

b. Subcatchments EX-3A, EX-3B, EX-4A, EX-4B, EX-4C, EX-4D, PR-3A, PR-3B, PR-4A, PR-4B, PR-4C, PR-4D, PR-4D (redevelopment):

   The remainder of the offsite work is located generally along an existing roadway and within areas of existing pavement in varying levels of disrepair, and as such is being considered a redevelopment project with stormwater treatment proposed to the maximum extent practicable.

Overall, the offsite access drive work results in a decrease in impervious cover compared to existing conditions. Computations and supporting information are attached to this memorandum.

The Best Management Practices (BMPs) included in the proposed stormwater management system have been designed in accordance with the Massachusetts Stormwater Handbook. Supporting information and computations demonstrating that no new untreated discharges will result from the Project are presented through compliance with Standards 4 through 6.

All proposed Project stormwater outlets and conveyances have been designed to not cause erosion or scour to wetlands or receiving waters. Outlets from closed drainage systems have been designed with flared end sections and stone protection to dissipate discharge velocities. There are two existing outfalls being reused within the "Offsite" project, both of which discharge directly to the Taunton River, at an elevation close to the water's surface and onto an existing riprap slope. As demonstrated in this memorandum, the proposed development reduces impervious cover and peak discharge rates, so these existing outfalls will meet Standard 1.

Computations and supporting information for the sizing and selection of materials used to protect from scour and erosion are attached to this memorandum.

Standard 2: Peak Rate Attenuation

The "Offsite" Project's peak rate attenuation and volume control requirements are waived per the MA Stormwater Handbook Volume 1, Chapter 1 as the Project is located on land subject to coastal storm flowage.

Although the Project's compliance with Standard 2 is waived, an analysis of existing and proposed conditions was evaluated for storm events with recurrence intervals of 2, 10, and 100-years. Rainfall distributions used for this analysis were based on the Natural Resources Conservation Service (NRCS) Type III, 24-hour storm and NOAA Atlas 14 precipitation depths for the site: 3.4, 5.04, and 7.66 inches, respectively. As discussed in the full Stormwater Report narrative the project has considered climate change adaptation and resiliency strategies in the design of the site and stormwater infrastructure. Future increased precipitation depths for the 100-year 2070 storm event (10.4 inches) has been analyzed for the project.

Runoff coefficients for the pre- and post-development conditions were determined using NRCS Technical Release 55 (TR-55) methodology as provided in HydroCAD. Drainage areas used in the analyses were described in previous sections and shown on Figures 2 and 3. The HydroCAD model is based on the NRCS Technical Release 20 (TR-20) Model for Project Formulation Hydrology.

The results of the analysis, as summarized in Table 1 below, and indicate that there is no increase in peak discharge rates between the existing and proposed conditions for any of the design points in this analysis, save for a small increase to DP5: Mount Hope Bay for the 10-year storm only. Please note that because these are common design points with the "Onsite" development, some of the runoff rates shown below depend on detailed analysis that is included in the full Stormwater Report. However, only the design points which receive runoff from the "Offsite" portion of the development are included below.

Computations and supporting information regarding the hydrologic modeling of the "Offsite" portion of the project is attached to this memorandum.

Table 1 Peak Discharge Rates (cfs*)

Discharge Location	2-year	10-year	100-year	100-year (2070)
Design Point: DP3 (Lower Supply Basin)				
Existing	36.9	57.2	89.4	122.8
Proposed	7.5	11.8	18.8	25.9
Design Point: DP4 (Taunton River)				
Existing	19.7	30.5	47.8	66.0
Proposed	19.6	11.8	18.8	25.9
Design Point: DP5 (Mount Hope Bay)				
Existing	99.5	162.5	264.5	371.2
Proposed	57.6	169.3	234.1	298.4

Standard 3: Stormwater Recharge

The "Offsite" Project has been designed to comply with Standard 3 to the maximum extent practicable under the following conditions:

a. The majority of the "Offsite" work is considered a redevelopment.

b. As designed, the site represents an improvement in naturally infiltrating ground cover when compared to existing conditions.

c. The site is comprised of wholly Hydrologic Soil Group C and D soils and bedrock at or around the land surface. In situ infiltration rates are extremely low (0.27 in/hr).

The project provides opportunities for groundwater infiltration through the reduction of impervious surfaces and the naturalization and revegetation of landscape and riverfront restoration areas, as shown in the table below.

Impervious Cover Comparison

Ground Cover Type	Existing (ac)	Proposed (ac)	Net (ac)
Roof	0.23	0.11	-0.12
Compacted Gravel	3.48	4.54	1.06
Pavement	5.14	4.19	-0.95
Water (Sedimentation Basin)	0.40	0.00	-0.40
Total	**9.25**	**8.84**	**-0.41**

Overall, this Project proposes an improvement to existing conditions by decreasing impervious ground over and increasing naturally infiltrating ground cover. The primary access drive has been designed to be as compact as possible while meeting the subdivision standards of the Town of Somerset as well as the overall design goals for vehicular access.

Computations and supporting information are attached to this memorandum.

Standard 4: Water Quality

As discussed previously, this portion of the project has two distinct areas from a stormwater management perspective:

a. Subcatchments EX-3C, EX-3D, EX-3E, PR-3C, and PR-3D (new development):

   These subcatchments, in the vicinity of the main access gate to the Prysmian parcel, propose a more substantial departure from existing conditions compared to the rest of the access drive work with respect to regrading and reconfiguring the stormwater management system. As such, they were designed to comply with the stormwater standards as a new development. Stormwater treatment for this area is provided in a subsurface sand filter and is documented in the full Stormwater Report, with supplementary information attached to this memorandum.

b. Subcatchments EX-3A, EX-3B, EX-4A, EX-4B, EX-4C, EX-4D, PR-3A, PR-3B, PR-4A, PR-4B, PR-4C, PR-4D, PR-4E (redevelopment):

   The remainder of the offsite work is located generally along an existing roadway and within areas of existing pavement in varying levels of disrepair, and as such is being considered a redevelopment project with stormwater treatment proposed to the maximum extent practicable. This is achieved through the introduction of two proprietary water quality units. Documentation for these units is attached to this memorandum.

Overall, the offsite access drive work results in a decrease in impervious cover from existing conditions and has provided new water quality improvements for site. Pavement from areas of new development is treated to achieve 80% TSS removal for the full 1" water quality volume through a treatment train consisting of deep sump hooded catch basins, sediment forebay, and subsurface sand filter. Pavement from redevelopment area has been designed as a stormwater retrofit and will conservatively treat a minimum 63% TSS removal for the full 1" water quality volume through its treatment train. Existing catch basins will be retrofitted with sumps and oil/debris hoods and inline/offline water quality units will provide treatment to the maximum extent practicable. While official documentation for the proprietary water quality units estimates their TSS removal capabilities at least 80%, a conservative minimum removal rate of 50% was included in this analysis based on NJCAT guidance for all hydrodynamic separators regardless of manufacturer. The majority of the stormwater generated by the redevelopment areas is directed to discharge at an existing outfall.

Computations and supporting information, including the Long-Term Pollution Prevention Plan, are included in the full Stormwater report with supplementary information attached to this memorandum.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

The "Offsite" portions of the Project is considered to be a LUHPPL and therefore has been designed with suitable BMPs sized to treat the 1-inch Water Quality Volume.

Proposed source controls and pollution prevention measures have been identified in the Long-Term Pollution Prevention Plan are attached to this memorandum.

Computations and supporting information regarding the sizing of BMPs suitable for treatment of runoff from LUHPPLs are attached to this memorandum. The Project will be covered by the NPDES Multi-Sector General Permit. A SWPPP will be submitted prior to the discharge of stormwater to the post-construction stormwater BMPs. Discharge from this project will comply with the Massachusetts Clean Waters Act, 314 CMR 3.00, and 314 CMR 4.00, as applicable.

Standard 6: Critical Areas

The "Offsite" Project will discharge treated storm water near/to a critical area and therefore has been designed with suitable BMPs sized to treat the 1-inch Water Quality Volume and provide the pretreatment requirement of 44% TSS removal prior to infiltration. Proposed source controls and pollution prevention measures have been identified in the Long-Term Pollution Prevention Plan and are attached to this memorandum. Discharge from this project complies with the Massachusetts Clean Waters Act, 314 CMR 3.00, and 314 CMR 4.00, as applicable

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the Maximum Extent Practicable

According to the Massachusetts Stormwater Handbook, redevelopments are defined to include "maintenance and improvement of existing roadways, including widening less than a single lane, correcting substandard intersections, improving existing drainage systems, and repaving." With this in mind, the "Offsite" Project was designed as a partial new development and partial redevelopment project. As discussed previously, areas of the site that do not fit the above criteria due to the proposed departure from existing conditions are considered to be new development and are designed to comply with Stormwater Management Standards 1, 2, and 4-10, and Stormwater Management Standard 3 to the maximum extent practicable. Areas that fit the above criteria are considered to be redevelopment and are designed to meet the stormwater standards to the maximum extent practicable.

The Massachusetts Stormwater Handbook also recognizes that the following site constraints, which apply to the "Offsite" project, make it difficult to comply with all the Standards at a redevelopment site, thereby allowing compliance to the maximum extent practicable.

1. Lack of space: The primary access drive is required to carve through a densely developed industrial site and closely abuts existing structures, avoids existing surface water basins with steep armored slopes, intersects with existing roadways, and coexists alongside active National Grid electric infrastructure. Furthermore, the road must also interact with the existing Brayton Point Guard house in a way that does not impact site security. For these reasons, space is extremely limited to implement larger BMPs and there is little flexibility for realignment and regrading, thereby making full compliance with the stormwater standards extremely challenging.
2. Underground utilities: Brayton Point is an active industrial site with a large number of existing utilities that must be carefully avoided or incorporated into any redevelopment activity that takes place. The presence of these utilities further limits flexibility when designing for full stormwater compliance. Existing drainage infrastructure was required to tie into the proposed design, further limiting flexibility in stormwater design.

The "Offsite" project demonstrates compliance with the Handbook's definition of "maximum extent practicable" in the following ways:

1. Definition: Proponents of redevelopment projects have made all reasonable efforts to meet the requirements of Standards 2 and 3 and the pretreatment and structural stormwater best management practices requirements of Standards 4, 5, and 6 and to bring existing outfalls into compliance with Standard 1.

   Compliance: Proposed and existing outfalls are in compliance with Standard 1. Standard 2, though waived for this site, is largely met by reducing peak rates in proposed conditions. Standard 3 is met to the maximum extent practicable and represents an improvement in groundwater recharge over existing conditions. Standards 4-6 are fully met for areas of new development and met to the maximum extent practicable for redevelopment areas due to the confined and densely developed nature of the existing site.

2. Definition: They have made a complete evaluation of possible stormwater management measures, including environmentally sensitive site design that minimizes land disturbance and impervious surfaces, low impact development techniques and structural stormwater BMPs.

   Compliance: Due to the confined nature of the site both above and below ground, surface stormwater treatment practices would increase land disturbance and environmental impacts. There are no existing low impact development strategies on the existing site to expand or tie into.

3. Definition: If not in full compliance with Standard 1 for existing outfalls, Standards 2 and 3 and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6, they are implementing the highest practicable level of stormwater management.

   Compliance: Proposed and existing outfalls are in compliance with Standard 1. Standard 2, though waived for this site, is largely met by reducing peak rates in proposed conditions. Standard 3 is met to the maximum extent practicable and represents an improvement in groundwater recharge over existing conditions. Standards 4-6 are fully met for areas of new development and met to the maximum extent practicable for redevelopment areas due to the confined and densely developed nature of the existing site.

Compliance with the "Redevelopment Checklist" found in Volume 2, Chapter 3 of the Stormwater Handbook is documented within the respective section for each Stormwater Standard in this memorandum.

Refer directly to each Standard for applicable computations and supporting information demonstrating compliance with each.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Controls

The "Offsite" Project will disturb more than 1-acre of land and is therefore required to obtain coverage under the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit. As required under this permit, a Stormwater Pollution Prevention Plan (SWPPP) will be developed and submitted before land disturbance begins. Recommended construction period pollution prevention and erosion and sedimentation controls to be finalized in the SWPPP are included in the full Stormwater Report.

Standard 9: Operation and Maintenance Plan

For compliance with Standard 9, a Post Construction Stormwater Operation and Maintenance (O&M) Plan has been developed for the "Offsite" Project. The O&M Plan is attached to this memorandum as part of the Long-Term Pollution Prevention Plan.

Standard 10: Prohibition of Illicit Discharges

Sanitary sewer and storm drainage structures remaining from previous development which are part of the redevelopment area will be removed or will be incorporated into updated sanitary sewer and separate stormwater sewer systems. The "Offsite" Project will be designed so that the components included therein are in full compliance with current standards. No statement is made with regard to the drainage system in portions of the site not included in the redevelopment project area. The Long-Term Pollution Prevention Plan will include measures to prevent illicit discharges.

Attachment 1: Hydraulic Calculations

Stormcad Conduit Output Table - Hydraulic Analysis (25-Year Storm)

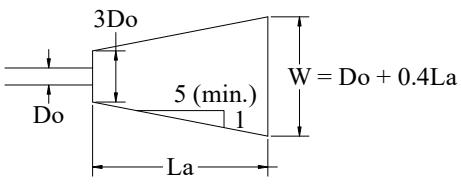
Project	Submarine Cable Factory Primary Access Drive	**Project #**	15542
Calculated by	EOB	**Date**	6/1/2023
Checked by		**Date**	6/1/2023

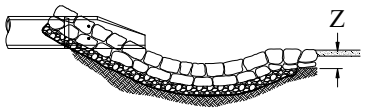
Upstream Structure	Downstream Structure	Upstream Inlet Area (acres)	Upstream Inlet C	System CA	Time of Conc. (min)	Intensity (in/hr)	Pipe Diameter (in)	Material	Manning's "n"	Invert - Upper (ft)	Invert - Lower (ft)	Pipe Length (ft)	Pipe Slope (ft/ft)	Capacity - Full Flow (cfs)	Capacity - Design (cfs)	Velocity (ft/s)	Rim -Upper (ft)	Hydraulic Grade Line In (ft)	Rim - Lower (ft	Hydraulic Grade Line Out (ft)
1	3	0.14	0.9	0.126	5	8.75	12	Concrete	0.012	17	16.6	27.4	0.015	4.67	1.11	4.88	20.5	17.44	20.65	17.21
2	3	0.12	0.89	0.107	5	8.75	12	Concrete	0.012	17	16.6	27.5	0.015	4.65	0.94	4.64	20.45	17.41	20.65	17.21
3	4	-	-	0.233	0	8.70	12	Concrete	0.012	16.6	14.8	187.4	0.01	3.78	2.04	4.91	20.65	17.21	22.45	15.32
4	5	-	-	0.233	0	8.39	12	Concrete	0.012	14.8	12.5	269.7	0.009	3.56	1.97	4.65	22.45	15.4	16.45	13.03
5	6	-	-	0.233	0	7.92	12	Concrete	0.012	12.5	11.5	81.2	0.012	4.28	1.86	5.26	16.45	13.08	15.35	11.96
6	7	-	-	0.233	0	7.79	12	Concrete	0.012	11.5	10.3	64.8	0.019	5.25	1.83	6.08	15.35	12.08	14.3	10.71
7	9	-	-	0.233	0	7.70	12	Concrete	0.012	10.3	8.75	72	0.022	5.66	1.81	6.4	14.3	10.87	13.75	9.14
8	9	0.89	0.76	0.676	5	8.75	15	Concrete	0.012	9	8.25	27.7	0.027	11.52	5.97	9.47	13.25	9.99	13.75	9.27
9	16	-	-	0.909	0	7.61	18	Concrete	0.012	8.25	7.2	37.9	0.028	18.94	6.97	9.9	13.75	9.27	14.05	7.88
10	11	0.3	0.85	0.255	5	8.75	12	Concrete	0.012	11.75	10.75	99.9	0.01	3.86	2.25	5.1	15.25	12.39	17.65	11.3
11	14	-	-	0.255	0	8.59	15	Concrete	0.012	10.75	9.1	172.8	0.01	6.84	2.21	4.97	17.65	11.34	13.55	10.5
12	14	0.375	0.84	0.315	5	8.75	12	Concrete	0.012	9.65	9.4	21.8	0.011	4.13	2.78	5.65	13.49	10.6	13.55	10.5
13	14	1.38	0.89	1.228	5	8.75	15	Concrete	0.012	10.8	9.1	32.7	0.052	15.96	10.83	13.98	15.07	12	13.55	10.5
14	15	-	-	1.798	0	8.31	24	Concrete	0.012	9.1	8.5	79.2	0.008	21.33	15.05	7.36	13.55	10.5	14.5	10.29
15	16	2.28	-	3.85	5	8.22	24	Concrete	0.012	8.4	6.2	124.9	0.018	32.53	31.89	11.8	14.5	10.29	14.05	8.13
16	17	-	-	4.759	0	7.58	24	Concrete	0.012	6.2	5.8	13	0.031	42.91	36.36	15.33	14.05	8.13	14.5	7.52
30	34	0.23	0.84	0.193	5	8.75	12	Concrete	0.012	10.5	9.3	115.8	0.01	3.93	1.7	4.83	15	11.06	15.6	9.76
31	34	0.93	0.83	0.772	5	8.75	30	Concrete	0.012	6	5.29	60.2	0.012	48.4	6.81	6.96	15.5	6.87	15.6	6.25
32.1	32.2	0.53	0.9	0.477	5	8.75	12	Concrete	0.012	11.35	11.25	8	0.012	4.31	4.21	6.26	15.1	12.21	15.1	12.07
32.2	214.2	-	-	0.5	0	8.55	15	Concrete	0.012	11.25	9.5	173.8	0.01	7.02	4.31	6.01	15.1	12.09	14	10.21
34	35	-	-	0.965	0	8.55	30	Concrete	0.012	5.29	5	18.8	0.015	54.77	8.32	8.06	15.6	6.25	13.7	5.74
35	LSB-3	-	-	0.965	0	8.54	30	Concrete	0.012	4.25	4	23.9	0.01	45.47	8.3	7.05	13.7	5.21	5.52	4.78
213	215	0.49	0.89	0.436	5	8.75	15	Concrete	0.012	9.5	9.15	71.3	0.005	4.9	3.85	4.42	13	10.35	18	10.18
214.1	214.2	0.08	0.79	0.063	5	8.75	12	Concrete	0.012	10	9.5	58.8	0.009	3.56	0.56	3.3	14	10.31	14	10.33
214.2	215	-	-	0.563	0	8.32	18	Concrete	0.012	9.5	9.15	41.7	0.008	10.43	4.72	5.75	14	10.33	18	10.18
215	216	-	-	0.999	0	8.26	24	Concrete	0.012	9.15	8.4	146.1	0.005	17.56	8.31	5.51	18	10.18	17	9.37
216	O-4	-	-	0.999	0	8.04	24	Concrete	0.012	8.4	8.35	6	0.008	22.43	8.1	6.56	17	9.41	16.8	9.27
TD	32.2	0.025	0.9	0.023	5	8.75	12	Concrete	0.012	11.9	11.25	63.1	0.01	3.92	0.2	2.61	15.25	12.08	15.1	12.09

Outfall Riprap Sizing and Velocity Calculations

Project	Submarine Cable Factory	**Project #**	15542.00
Calculated by	EOB	**Date**	2/10/2023
Checked by		**Date**	

Tw ≥ 0.5Do





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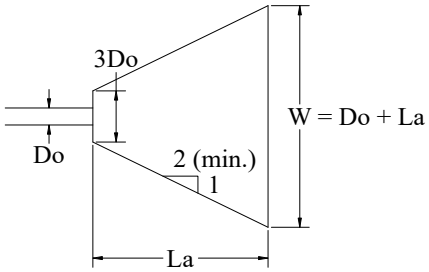


OUTLET DESCRIPTION:		**212** [1]	**LSB-3** [2]
Design Storm	(yr)	25	25
Flow / Discharge (Q)	(cfs)	13.6	44.4
Defined Channel ?	-	NO	NO
Defined Channel Width	(ft)	0	0
Outlet Pipe Diameter (D_O)	(in)	30	30
Tailwater Condition (T_W)	(ft)	TW < 0.5D	TW ≥ 0.5D
Apron Length (L_A)	(ft)	16 [3]	20 [3]
Apron Width at Outlet ($3D_O$)	(ft)	7.5	7.5
Apron Width at End (W)	(ft)	23.5	15.5
Median Stone Diameter (d_{50})	(in)	6	7
Largest Stone Diameter	(in)	9	10.5
Apron Depth (Z)	(in)	13.5	15.75

1. Based on full onsite stormwater report submitted with development plan review.

2. Calculations for outfall LSB-3 are based on the existing offsite upstream pipe flowing at theoretical full capacity. Discharge from the primary access drive is 8.3 cfs.

3. Both outlets discharge to slopes that are armored with rip rap down to the water's surface under existing condtions. Rip rap will be supplemented as needed to

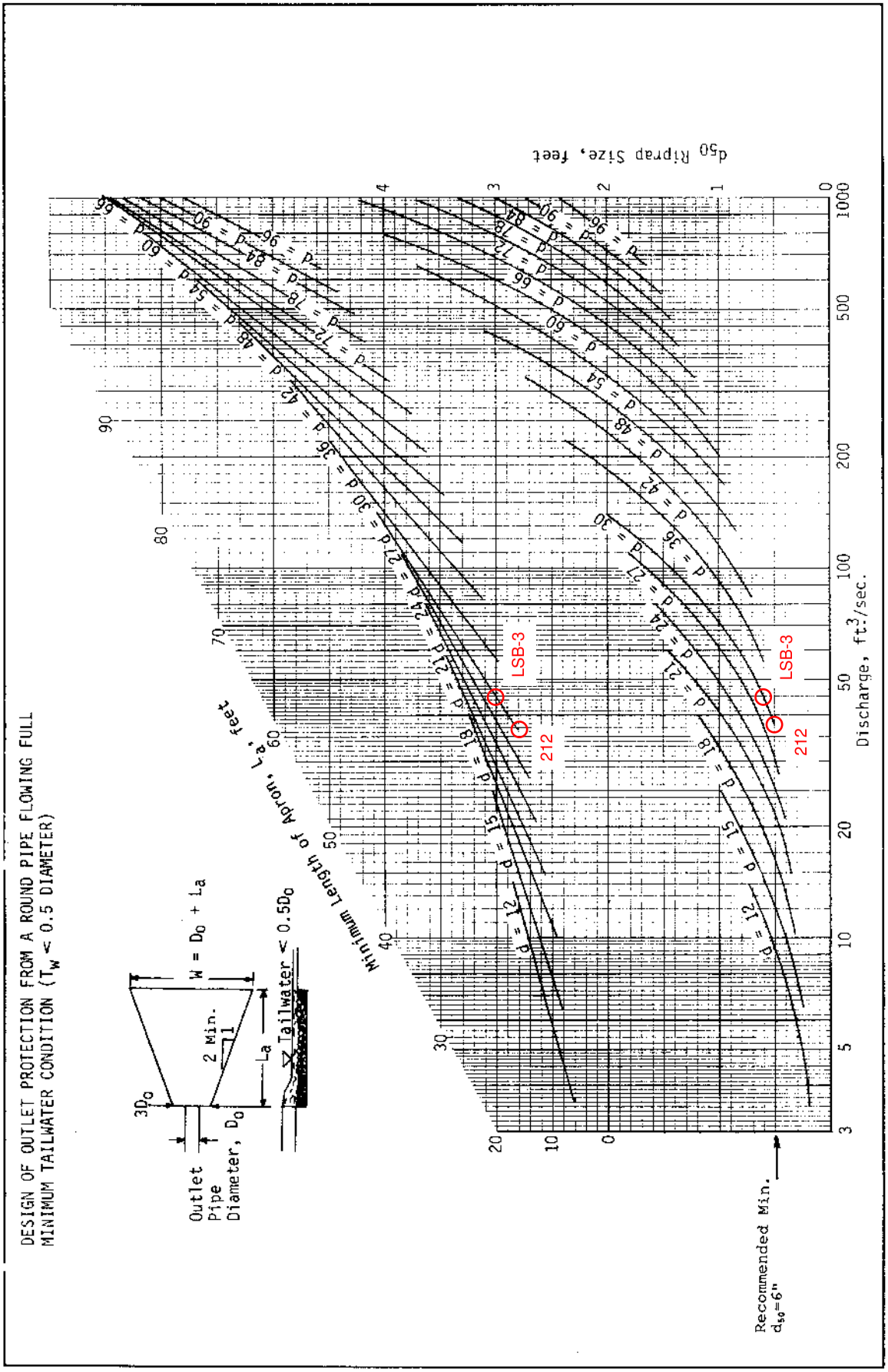
Apron Length (L_A):
Length = From Virginia DCR Handbook - Plate 3.18-3 *if T_W < 0.5D*
Length = From Virginia DCR Handbook - Plate 3.18-4 *if T_W ≥ 0.5D*

Apron Width at Outlet ($3D_O$):
Width = 3 x pipe dia. (or width of channel)

Apron Width at End (W):
Width = dia. + apron length *if T_W < 0.5D*
Width = dia. + 0.4 x apron length *if T_W ≥ 0.5D*
or apron width = channel width if a well defined channel exists

Rock Riprap:
Median Diameter (d_{50}) = From Virginia DCR Handbook - Plate 3.18-3 or 4
Largest stone dia = 1.5 x d_{50}

Apron Depth (Z):
6" or 1.5 x largest stone dia



Source: USDA-SCS Plate 3.18-3

Attachment 2: Drainage Figures

\\vhb\gbl\proj\Boston\15542.00\cad\ld\Eng\Stormwater\15542.00-ExistingConditionsDrainage.dwg



Legend

SYMBOLS

- X — **DESIGN POINT**
- X — **DRAINAGE AREA DESIGNATION**
- X — **POND**

LINETYPES

- **DRAINAGE AREA BOUNDARY**
- **TIME OF CONCENTRATION FLOW LINE**
- **SOIL TYPE BOUNDARY**

SCS SOIL CLASSIFICATIONS

61A	PAWCATUCK AND IPSWICH PEATS, 0 TO 2 PERCENT SLOPES, EXTREMELY FREQUENTLY FLOODED, HSG A
71A	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES, EXTREMLY STONY, HSG D
602	URBAN LAND
606	MISCELLANEOUS WATER
607	WATER, SALINE
608	WATER, OCEAN

vhb

Existing Drainage Conditions
Primary Access Drive
Prysmian Brayton Point
Somerset, MA

Figure 2

June 2023



Legend

SYMBOLS

- DESIGN POINT
- DRAINAGE AREA DESIGNATION
- POND

LINETYPES

- DRAINAGE AREA BOUNDARY
- TIME OF CONCENTRATION FLOW LINE
- SOIL TYPE BOUNDARY

SCS SOIL CLASSIFICATIONS

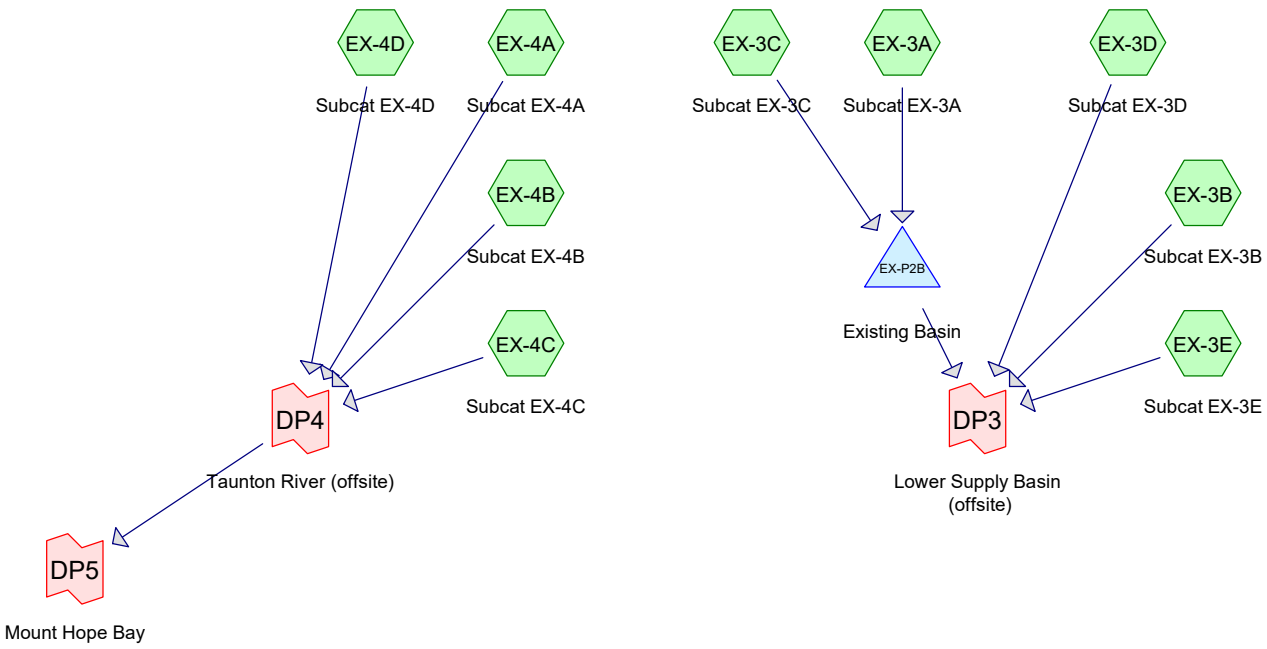
61A	PAWCATUCK AND IPSWICH PEATS, 0 TO 2 PERCENT SLOPES, PRTREMELY FREQUENTLY FLOODED, HSG A
71A	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES, PRTREMLY STONY, HSG D
602	URBAN LAND
606	MISCELLANEOUS WATER
607	WATER, SALINE
608	WATER, OCEAN

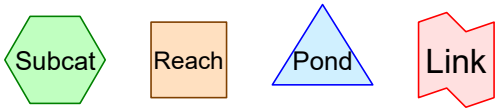
Proposed Drainage Conditions — **Figure 3**

Prysmian Brayton Point
Somerset, MA

June 2023

Attachment 3: Hydrologic Summary





Routing Diagram for 15542.00-EX
Prepared by VHB, Printed 5/31/2023
HydroCAD® 10.10-7c s/n 01038 © 2022 HydroCAD Software Solutions LLC

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-3A: Subcat EX-3A Runoff Area=1.11 ac 5.10% Impervious Runoff Depth=2.96"
Tc=6.0 min CN=96/98 Runoff=3.5 cfs 0.274 af

Subcatchment EX-3B: Subcat EX-3B Runoff Area=0.55 ac 52.69% Impervious Runoff Depth=3.06"
Tc=6.0 min CN=96/98 Runoff=1.8 cfs 0.142 af

Subcatchment EX-3C: Subcat EX-3C Runoff Area=0.75 ac 66.30% Impervious Runoff Depth=3.09"
Tc=6.0 min CN=96/98 Runoff=2.4 cfs 0.193 af

Subcatchment EX-3D: Subcat EX-3D Runoff Area=0.71 ac 56.22% Impervious Runoff Depth=2.98"
Tc=6.0 min CN=94/98 Runoff=2.2 cfs 0.175 af

Subcatchment EX-3E: Subcat EX-3E Runoff Area=0.80 ac 35.10% Impervious Runoff Depth=1.95"
Tc=6.0 min CN=76/98 Runoff=1.7 cfs 0.130 af

Subcatchment EX-4A: Subcat EX-4A Runoff Area=2.89 ac 96.00% Impervious Runoff Depth=3.13"
Tc=6.0 min CN=90/98 Runoff=9.3 cfs 0.754 af

Subcatchment EX-4B: Subcat EX-4B Runoff Area=1.61 ac 20.73% Impervious Runoff Depth=1.73"
Tc=6.0 min CN=77/98 Runoff=3.0 cfs 0.232 af

Subcatchment EX-4C: Subcat EX-4C Runoff Area=1.14 ac 72.98% Impervious Runoff Depth=3.11"
Tc=6.0 min CN=96/98 Runoff=3.6 cfs 0.294 af

Subcatchment EX-4D: Subcat EX-4D Runoff Area=1.19 ac 25.91% Impervious Runoff Depth=3.00"
Tc=6.0 min CN=96/98 Runoff=3.8 cfs 0.299 af

Pond EX-P2B: Existing Basin Inflow=32.8 cfs 3.300 af
Primary=32.8 cfs 3.300 af

Link DP3: Lower Supply Basin (offsite) Inflow=36.9 cfs 3.746 af
Primary=36.9 cfs 3.746 af

Link DP4: Taunton River (offsite) Inflow=19.7 cfs 1.579 af
Primary=19.7 cfs 1.579 af

Link DP5: Mount Hope Bay Inflow=99.5 cfs 7.946 af
Primary=99.5 cfs 7.946 af

Total Runoff Area = 10.74 ac Runoff Volume = 2.493 af Average Runoff Depth = 2.78"
46.32% Pervious = 4.98 ac 53.68% Impervious = 5.77 ac

Summary for Subcatchment EX-3A: Subcat EX-3A

Runoff = 3.5 cfs @ 12.09 hrs, Volume= 0.274 af, Depth= 2.96"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
1.05	96	Gravel surface, HSG C
0.06	98	Unconnected pavement, HSG C
1.11	96	Weighted Average
1.05	96	94.90% Pervious Area
0.06	98	5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3B: Subcat EX-3B

Runoff = 1.8 cfs @ 12.09 hrs, Volume= 0.142 af, Depth= 3.06"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.26	96	Gravel surface, HSG C
0.29	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.55	97	Weighted Average
0.26	96	47.31% Pervious Area
0.29	98	52.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3C: Subcat EX-3C

Runoff = 2.4 cfs @ 12.09 hrs, Volume= 0.193 af, Depth= 3.09"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.25	96	Gravel surface, HSG C
0.03	98	Roofs, HSG C
0.47	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.75	97	Weighted Average
0.25	96	33.70% Pervious Area
0.50	98	66.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3D: Subcat EX-3D

Runoff = 2.2 cfs @ 12.09 hrs, Volume= 0.175 af, Depth= 2.98"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.29	96	Gravel surface, HSG C
0.40	98	Water Surface, HSG C
0.02	72	Woods/grass comb., Good, HSG C
0.71	96	Weighted Average
0.31	94	43.78% Pervious Area
0.40	98	56.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3E: Subcat EX-3E

Runoff = 1.7 cfs @ 12.09 hrs, Volume= 0.130 af, Depth= 1.95"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.09	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.24	98	Unconnected pavement, HSG C
0.42	72	Woods/grass comb., Good, HSG C
0.80	84	Weighted Average
0.52	76	64.90% Pervious Area
0.28	98	35.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4A: Subcat EX-4A

Runoff = 9.3 cfs @ 12.09 hrs, Volume= 0.754 af, Depth= 3.13"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.08	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.72	98	Unconnected pavement, HSG C
2.89	98	Weighted Average
0.12	90	4.00% Pervious Area
2.77	98	96.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4B: Subcat EX-4B

Runoff = 3.0 cfs @ 12.09 hrs, Volume= 0.232 af, Depth= 1.73"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.40	74	>75% Grass cover, Good, HSG C
0.25	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.33	98	Unconnected pavement, HSG C
0.63	72	Woods/grass comb., Good, HSG C
1.61	82	Weighted Average
1.27	77	79.27% Pervious Area
0.33	98	20.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4C: Subcat EX-4C

Runoff = 3.6 cfs @ 12.09 hrs, Volume= 0.294 af, Depth= 3.11"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.31	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.79	98	Unconnected pavement, HSG C
1.14	97	Weighted Average
0.31	96	27.02% Pervious Area
0.83	98	72.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4D: Subcat EX-4D

Runoff = 3.8 cfs @ 12.09 hrs, Volume= 0.299 af, Depth= 3.00"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.88	96	Gravel surface, HSG C
0.06	98	Roofs, HSG C
0.25	98	Unconnected pavement, HSG C
1.19	97	Weighted Average
0.88	96	74.09% Pervious Area
0.31	98	25.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond EX-P2B: Existing Basin

Inflow Area = 14.32 ac, 18.78% Impervious, Inflow Depth = 2.77" for 2-year event
Inflow = 32.8 cfs @ 12.18 hrs, Volume= 3.300 af
Primary = 32.8 cfs @ 12.18 hrs, Volume= 3.300 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin (offsite)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP3: Lower Supply Basin (offsite)

Inflow Area = 16.37 ac, 22.34% Impervious, Inflow Depth = 2.75" for 2-year event
Inflow = 36.9 cfs @ 12.16 hrs, Volume= 3.746 af
Primary = 36.9 cfs @ 12.16 hrs, Volume= 3.746 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 6.82 ac, 62.19% Impervious, Inflow Depth = 2.78" for 2-year event
Inflow = 19.7 cfs @ 12.09 hrs, Volume= 1.579 af
Primary = 19.7 cfs @ 12.09 hrs, Volume= 1.579 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 41.02 ac, 13.98% Impervious, Inflow Depth = 2.32" for 2-year event
Inflow = 99.5 cfs @ 12.10 hrs, Volume= 7.946 af
Primary = 99.5 cfs @ 12.10 hrs, Volume= 7.946 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-3A: Subcat EX-3A Runoff Area=1.11 ac 5.10% Impervious Runoff Depth=4.58"
Tc=6.0 min CN=96/98 Runoff=5.3 cfs 0.425 af

Subcatchment EX-3B: Subcat EX-3B Runoff Area=0.55 ac 52.69% Impervious Runoff Depth=4.69"
Tc=6.0 min CN=96/98 Runoff=2.6 cfs 0.217 af

Subcatchment EX-3C: Subcat EX-3C Runoff Area=0.75 ac 66.30% Impervious Runoff Depth=4.73"
Tc=6.0 min CN=96/98 Runoff=3.6 cfs 0.296 af

Subcatchment EX-3D: Subcat EX-3D Runoff Area=0.71 ac 56.22% Impervious Runoff Depth=4.60"
Tc=6.0 min CN=94/98 Runoff=3.3 cfs 0.271 af

Subcatchment EX-3E: Subcat EX-3E Runoff Area=0.80 ac 35.10% Impervious Runoff Depth=3.35"
Tc=6.0 min CN=76/98 Runoff=2.9 cfs 0.223 af

Subcatchment EX-4A: Subcat EX-4A Runoff Area=2.89 ac 96.00% Impervious Runoff Depth=4.77"
Tc=6.0 min CN=90/98 Runoff=13.8 cfs 1.147 af

Subcatchment EX-4B: Subcat EX-4B Runoff Area=1.61 ac 20.73% Impervious Runoff Depth=3.10"
Tc=6.0 min CN=77/98 Runoff=5.5 cfs 0.415 af

Subcatchment EX-4C: Subcat EX-4C Runoff Area=1.14 ac 72.98% Impervious Runoff Depth=4.74"
Tc=6.0 min CN=96/98 Runoff=5.4 cfs 0.449 af

Subcatchment EX-4D: Subcat EX-4D Runoff Area=1.19 ac 25.91% Impervious Runoff Depth=4.63"
Tc=6.0 min CN=96/98 Runoff=5.7 cfs 0.461 af

Pond EX-P2B: Existing Basin Inflow=50.7 cfs 5.218 af
Primary=50.7 cfs 5.218 af

Link DP3: Lower Supply Basin (offsite) Inflow=57.2 cfs 5.929 af
Primary=57.2 cfs 5.929 af

Link DP4: Taunton River (offsite) Inflow=30.5 cfs 2.472 af
Primary=30.5 cfs 2.472 af

Link DP5: Mount Hope Bay Inflow=162.5 cfs 13.116 af
Primary=162.5 cfs 13.116 af

Total Runoff Area = 10.74 ac Runoff Volume = 3.903 af Average Runoff Depth = 4.36"
46.32% Pervious = 4.98 ac 53.68% Impervious = 5.77 ac

Summary for Subcatchment EX-3A: Subcat EX-3A

Runoff = 5.3 cfs @ 12.09 hrs, Volume= 0.425 af, Depth= 4.58"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
1.05	96	Gravel surface, HSG C
0.06	98	Unconnected pavement, HSG C
1.11	96	Weighted Average
1.05	96	94.90% Pervious Area
0.06	98	5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3B: Subcat EX-3B

Runoff = 2.6 cfs @ 12.09 hrs, Volume= 0.217 af, Depth= 4.69"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.26	96	Gravel surface, HSG C
0.29	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.55	97	Weighted Average
0.26	96	47.31% Pervious Area
0.29	98	52.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3C: Subcat EX-3C

Runoff = 3.6 cfs @ 12.09 hrs, Volume= 0.296 af, Depth= 4.73"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.25	96	Gravel surface, HSG C
0.03	98	Roofs, HSG C
0.47	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.75	97	Weighted Average
0.25	96	33.70% Pervious Area
0.50	98	66.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3D: Subcat EX-3D

Runoff = 3.3 cfs @ 12.09 hrs, Volume= 0.271 af, Depth= 4.60"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.29	96	Gravel surface, HSG C
0.40	98	Water Surface, HSG C
0.02	72	Woods/grass comb., Good, HSG C
0.71	96	Weighted Average
0.31	94	43.78% Pervious Area
0.40	98	56.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3E: Subcat EX-3E

Runoff = 2.9 cfs @ 12.09 hrs, Volume= 0.223 af, Depth= 3.35"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.09	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.24	98	Unconnected pavement, HSG C
0.42	72	Woods/grass comb., Good, HSG C
0.80	84	Weighted Average
0.52	76	64.90% Pervious Area
0.28	98	35.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4A: Subcat EX-4A

Runoff = 13.8 cfs @ 12.09 hrs, Volume= 1.147 af, Depth= 4.77"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.08	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.72	98	Unconnected pavement, HSG C
2.89	98	Weighted Average
0.12	90	4.00% Pervious Area
2.77	98	96.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4B: Subcat EX-4B

Runoff = 5.5 cfs @ 12.09 hrs, Volume= 0.415 af, Depth= 3.10"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.40	74	>75% Grass cover, Good, HSG C
0.25	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.33	98	Unconnected pavement, HSG C
0.63	72	Woods/grass comb., Good, HSG C
1.61	82	Weighted Average
1.27	77	79.27% Pervious Area
0.33	98	20.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4C: Subcat EX-4C

Runoff = 5.4 cfs @ 12.09 hrs, Volume= 0.449 af, Depth= 4.74"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.31	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.79	98	Unconnected pavement, HSG C
1.14	97	Weighted Average
0.31	96	27.02% Pervious Area
0.83	98	72.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4D: Subcat EX-4D

Runoff = 5.7 cfs @ 12.09 hrs, Volume= 0.461 af, Depth= 4.63"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.88	96	Gravel surface, HSG C
0.06	98	Roofs, HSG C
0.25	98	Unconnected pavement, HSG C
1.19	97	Weighted Average
0.88	96	74.09% Pervious Area
0.31	98	25.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond EX-P2B: Existing Basin

Inflow Area = 14.32 ac, 18.78% Impervious, Inflow Depth = 4.37" for 10-year event
Inflow = 50.7 cfs @ 12.18 hrs, Volume= 5.218 af
Primary = 50.7 cfs @ 12.18 hrs, Volume= 5.218 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin (offsite)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP3: Lower Supply Basin (offsite)

Inflow Area = 16.37 ac, 22.34% Impervious, Inflow Depth = 4.35" for 10-year event
Inflow = 57.2 cfs @ 12.16 hrs, Volume= 5.929 af
Primary = 57.2 cfs @ 12.16 hrs, Volume= 5.929 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 6.82 ac, 62.19% Impervious, Inflow Depth = 4.35" for 10-year event
Inflow = 30.5 cfs @ 12.09 hrs, Volume= 2.472 af
Primary = 30.5 cfs @ 12.09 hrs, Volume= 2.472 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 41.02 ac, 13.98% Impervious, Inflow Depth = 3.84" for 10-year event
Inflow = 162.5 cfs @ 12.10 hrs, Volume= 13.116 af
Primary = 162.5 cfs @ 12.10 hrs, Volume= 13.116 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-3A: Subcat EX-3A Runoff Area=1.11 ac 5.10% Impervious Runoff Depth=5.61"
Tc=6.0 min CN=96/98 Runoff=6.4 cfs 0.520 af

Subcatchment EX-3B: Subcat EX-3B Runoff Area=0.55 ac 52.69% Impervious Runoff Depth=5.72"
Tc=6.0 min CN=96/98 Runoff=3.2 cfs 0.264 af

Subcatchment EX-3C: Subcat EX-3C Runoff Area=0.75 ac 66.30% Impervious Runoff Depth=5.75"
Tc=6.0 min CN=96/98 Runoff=4.3 cfs 0.360 af

Subcatchment EX-3D: Subcat EX-3D Runoff Area=0.71 ac 56.22% Impervious Runoff Depth=5.63"
Tc=6.0 min CN=94/98 Runoff=4.1 cfs 0.331 af

Subcatchment EX-3E: Subcat EX-3E Runoff Area=0.80 ac 35.10% Impervious Runoff Depth=4.28"
Tc=6.0 min CN=76/98 Runoff=3.7 cfs 0.284 af

Subcatchment EX-4A: Subcat EX-4A Runoff Area=2.89 ac 96.00% Impervious Runoff Depth=5.80"
Tc=6.0 min CN=90/98 Runoff=16.7 cfs 1.395 af

Subcatchment EX-4B: Subcat EX-4B Runoff Area=1.61 ac 20.73% Impervious Runoff Depth=4.02"
Tc=6.0 min CN=77/98 Runoff=7.1 cfs 0.537 af

Subcatchment EX-4C: Subcat EX-4C Runoff Area=1.14 ac 72.98% Impervious Runoff Depth=5.77"
Tc=6.0 min CN=96/98 Runoff=6.6 cfs 0.546 af

Subcatchment EX-4D: Subcat EX-4D Runoff Area=1.19 ac 25.91% Impervious Runoff Depth=5.66"
Tc=6.0 min CN=96/98 Runoff=6.9 cfs 0.563 af

Pond EX-P2B: Existing Basin Inflow=62.0 cfs 6.433 af
Primary=62.0 cfs 6.433 af

Link DP3: Lower Supply Basin (offsite) Inflow=69.9 cfs 7.313 af
Primary=69.9 cfs 7.313 af

Link DP4: Taunton River (offsite) Inflow=37.3 cfs 3.041 af
Primary=37.3 cfs 3.041 af

Link DP5: Mount Hope Bay Inflow=202.6 cfs 16.454 af
Primary=202.6 cfs 16.454 af

Total Runoff Area = 10.74 ac Runoff Volume = 4.801 af Average Runoff Depth = 5.36"
46.32% Pervious = 4.98 ac 53.68% Impervious = 5.77 ac

Summary for Subcatchment EX-3A: Subcat EX-3A

Runoff = 6.4 cfs @ 12.09 hrs, Volume= 0.520 af, Depth= 5.61"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
1.05	96	Gravel surface, HSG C
0.06	98	Unconnected pavement, HSG C
1.11	96	Weighted Average
1.05	96	94.90% Pervious Area
0.06	98	5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3B: Subcat EX-3B

Runoff = 3.2 cfs @ 12.09 hrs, Volume= 0.264 af, Depth= 5.72"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.26	96	Gravel surface, HSG C
0.29	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.55	97	Weighted Average
0.26	96	47.31% Pervious Area
0.29	98	52.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3C: Subcat EX-3C

Runoff = 4.3 cfs @ 12.09 hrs, Volume= 0.360 af, Depth= 5.75"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.25	96	Gravel surface, HSG C
0.03	98	Roofs, HSG C
0.47	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.75	97	Weighted Average
0.25	96	33.70% Pervious Area
0.50	98	66.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3D: Subcat EX-3D

Runoff = 4.1 cfs @ 12.09 hrs, Volume= 0.331 af, Depth= 5.63"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.29	96	Gravel surface, HSG C
0.40	98	Water Surface, HSG C
0.02	72	Woods/grass comb., Good, HSG C
0.71	96	Weighted Average
0.31	94	43.78% Pervious Area
0.40	98	56.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3E: Subcat EX-3E

Runoff = 3.7 cfs @ 12.09 hrs, Volume= 0.284 af, Depth= 4.28"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.09	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.24	98	Unconnected pavement, HSG C
0.42	72	Woods/grass comb., Good, HSG C
0.80	84	Weighted Average
0.52	76	64.90% Pervious Area
0.28	98	35.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4A: Subcat EX-4A

Runoff = 16.7 cfs @ 12.09 hrs, Volume= 1.395 af, Depth= 5.80"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.08	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.72	98	Unconnected pavement, HSG C
2.89	98	Weighted Average
0.12	90	4.00% Pervious Area
2.77	98	96.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4B: Subcat EX-4B

Runoff = 7.1 cfs @ 12.09 hrs, Volume= 0.537 af, Depth= 4.02"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.40	74	>75% Grass cover, Good, HSG C
0.25	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.33	98	Unconnected pavement, HSG C
0.63	72	Woods/grass comb., Good, HSG C
1.61	82	Weighted Average
1.27	77	79.27% Pervious Area
0.33	98	20.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4C: Subcat EX-4C

Runoff = 6.6 cfs @ 12.09 hrs, Volume= 0.546 af, Depth= 5.77"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.31	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.79	98	Unconnected pavement, HSG C
1.14	97	Weighted Average
0.31	96	27.02% Pervious Area
0.83	98	72.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4D: Subcat EX-4D

Runoff = 6.9 cfs @ 12.09 hrs, Volume= 0.563 af, Depth= 5.66"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.88	96	Gravel surface, HSG C
0.06	98	Roofs, HSG C
0.25	98	Unconnected pavement, HSG C
1.19	97	Weighted Average
0.88	96	74.09% Pervious Area
0.31	98	25.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond EX-P2B: Existing Basin

Inflow Area = 14.32 ac, 18.78% Impervious, Inflow Depth = 5.39" for 25-year event
Inflow = 62.0 cfs @ 12.17 hrs, Volume= 6.433 af
Primary = 62.0 cfs @ 12.17 hrs, Volume= 6.433 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin (offsite)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP3: Lower Supply Basin (offsite)

Inflow Area = 16.37 ac, 22.34% Impervious, Inflow Depth = 5.36" for 25-year event
Inflow = 69.9 cfs @ 12.16 hrs, Volume= 7.313 af
Primary = 69.9 cfs @ 12.16 hrs, Volume= 7.313 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 6.82 ac, 62.19% Impervious, Inflow Depth = 5.35" for 25-year event
Inflow = 37.3 cfs @ 12.09 hrs, Volume= 3.041 af
Primary = 37.3 cfs @ 12.09 hrs, Volume= 3.041 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 41.02 ac, 13.98% Impervious, Inflow Depth = 4.81" for 25-year event
Inflow = 202.6 cfs @ 12.10 hrs, Volume= 16.454 af
Primary = 202.6 cfs @ 12.10 hrs, Volume= 16.454 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-3A: Subcat EX-3A Runoff Area=1.11 ac 5.10% Impervious Runoff Depth=7.19"
Tc=6.0 min CN=96/98 Runoff=8.1 cfs 0.666 af

Subcatchment EX-3B: Subcat EX-3B Runoff Area=0.55 ac 52.69% Impervious Runoff Depth=7.31"
Tc=6.0 min CN=96/98 Runoff=4.1 cfs 0.338 af

Subcatchment EX-3C: Subcat EX-3C Runoff Area=0.75 ac 66.30% Impervious Runoff Depth=7.34"
Tc=6.0 min CN=96/98 Runoff=5.5 cfs 0.459 af

Subcatchment EX-3D: Subcat EX-3D Runoff Area=0.71 ac 56.22% Impervious Runoff Depth=7.21"
Tc=6.0 min CN=94/98 Runoff=5.1 cfs 0.425 af

Subcatchment EX-3E: Subcat EX-3E Runoff Area=0.80 ac 35.10% Impervious Runoff Depth=5.75"
Tc=6.0 min CN=76/98 Runoff=4.9 cfs 0.382 af

Subcatchment EX-4A: Subcat EX-4A Runoff Area=2.89 ac 96.00% Impervious Runoff Depth=7.38"
Tc=6.0 min CN=90/98 Runoff=21.2 cfs 1.777 af

Subcatchment EX-4B: Subcat EX-4B Runoff Area=1.61 ac 20.73% Impervious Runoff Depth=5.47"
Tc=6.0 min CN=77/98 Runoff=9.6 cfs 0.732 af

Subcatchment EX-4C: Subcat EX-4C Runoff Area=1.14 ac 72.98% Impervious Runoff Depth=7.36"
Tc=6.0 min CN=96/98 Runoff=8.3 cfs 0.697 af

Subcatchment EX-4D: Subcat EX-4D Runoff Area=1.19 ac 25.91% Impervious Runoff Depth=7.24"
Tc=6.0 min CN=96/98 Runoff=8.7 cfs 0.721 af

Pond EX-P2B: Existing Basin Inflow=79.2 cfs 8.315 af
Primary=79.2 cfs 8.315 af

Link DP3: Lower Supply Basin (offsite) Inflow=89.4 cfs 9.459 af
Primary=89.4 cfs 9.459 af

Link DP4: Taunton River (offsite) Inflow=47.8 cfs 3.926 af
Primary=47.8 cfs 3.926 af

Link DP5: Mount Hope Bay Inflow=264.5 cfs 21.683 af
Primary=264.5 cfs 21.683 af

Total Runoff Area = 10.74 ac Runoff Volume = 6.196 af Average Runoff Depth = 6.92"
46.32% Pervious = 4.98 ac 53.68% Impervious = 5.77 ac

Summary for Subcatchment EX-3A: Subcat EX-3A

Runoff = 8.1 cfs @ 12.09 hrs, Volume= 0.666 af, Depth= 7.19"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
1.05	96	Gravel surface, HSG C
0.06	98	Unconnected pavement, HSG C
1.11	96	Weighted Average
1.05	96	94.90% Pervious Area
0.06	98	5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3B: Subcat EX-3B

Runoff = 4.1 cfs @ 12.09 hrs, Volume= 0.338 af, Depth= 7.31"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.26	96	Gravel surface, HSG C
0.29	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.55	97	Weighted Average
0.26	96	47.31% Pervious Area
0.29	98	52.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3C: Subcat EX-3C

Runoff = 5.5 cfs @ 12.09 hrs, Volume= 0.459 af, Depth= 7.34"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.25	96	Gravel surface, HSG C
0.03	98	Roofs, HSG C
0.47	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.75	97	Weighted Average
0.25	96	33.70% Pervious Area
0.50	98	66.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3D: Subcat EX-3D

Runoff = 5.1 cfs @ 12.09 hrs, Volume= 0.425 af, Depth= 7.21"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.29	96	Gravel surface, HSG C
0.40	98	Water Surface, HSG C
0.02	72	Woods/grass comb., Good, HSG C
0.71	96	Weighted Average
0.31	94	43.78% Pervious Area
0.40	98	56.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3E: Subcat EX-3E

Runoff = 4.9 cfs @ 12.09 hrs, Volume= 0.382 af, Depth= 5.75"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.09	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.24	98	Unconnected pavement, HSG C
0.42	72	Woods/grass comb., Good, HSG C
0.80	84	Weighted Average
0.52	76	64.90% Pervious Area
0.28	98	35.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4A: Subcat EX-4A

Runoff = 21.2 cfs @ 12.09 hrs, Volume= 1.777 af, Depth= 7.38"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.08	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.72	98	Unconnected pavement, HSG C
2.89	98	Weighted Average
0.12	90	4.00% Pervious Area
2.77	98	96.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4B: Subcat EX-4B

Runoff = 9.6 cfs @ 12.09 hrs, Volume= 0.732 af, Depth= 5.47"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.40	74	>75% Grass cover, Good, HSG C
0.25	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.33	98	Unconnected pavement, HSG C
0.63	72	Woods/grass comb., Good, HSG C
1.61	82	Weighted Average
1.27	77	79.27% Pervious Area
0.33	98	20.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4C: Subcat EX-4C

Runoff = 8.3 cfs @ 12.09 hrs, Volume= 0.697 af, Depth= 7.36"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.31	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.79	98	Unconnected pavement, HSG C
1.14	97	Weighted Average
0.31	96	27.02% Pervious Area
0.83	98	72.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4D: Subcat EX-4D

Runoff = 8.7 cfs @ 12.09 hrs, Volume= 0.721 af, Depth= 7.24"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.88	96	Gravel surface, HSG C
0.06	98	Roofs, HSG C
0.25	98	Unconnected pavement, HSG C
1.19	97	Weighted Average
0.88	96	74.09% Pervious Area
0.31	98	25.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond EX-P2B: Existing Basin

Inflow Area = 14.32 ac, 18.78% Impervious, Inflow Depth = 6.97" for 100-year event
Inflow = 79.2 cfs @ 12.17 hrs, Volume= 8.315 af
Primary = 79.2 cfs @ 12.17 hrs, Volume= 8.315 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin (offsite)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP3: Lower Supply Basin (offsite)

Inflow Area = 16.37 ac, 22.34% Impervious, Inflow Depth = 6.93" for 100-year event
Inflow = 89.4 cfs @ 12.16 hrs, Volume= 9.459 af
Primary = 89.4 cfs @ 12.16 hrs, Volume= 9.459 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 6.82 ac, 62.19% Impervious, Inflow Depth = 6.90" for 100-year event
Inflow = 47.8 cfs @ 12.09 hrs, Volume= 3.926 af
Primary = 47.8 cfs @ 12.09 hrs, Volume= 3.926 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 41.02 ac, 13.98% Impervious, Inflow Depth = 6.34" for 100-year event
Inflow = 264.5 cfs @ 12.10 hrs, Volume= 21.683 af
Primary = 264.5 cfs @ 12.10 hrs, Volume= 21.683 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-3A: Subcat EX-3A Runoff Area=1.11 ac 5.10% Impervious Runoff Depth=9.93"
Tc=6.0 min CN=96/98 Runoff=11.0 cfs 0.920 af

Subcatchment EX-3B: Subcat EX-3B Runoff Area=0.55 ac 52.69% Impervious Runoff Depth=10.04"
Tc=6.0 min CN=96/98 Runoff=5.5 cfs 0.464 af

Subcatchment EX-3C: Subcat EX-3C Runoff Area=0.75 ac 66.30% Impervious Runoff Depth=10.08"
Tc=6.0 min CN=96/98 Runoff=7.5 cfs 0.630 af

Subcatchment EX-3D: Subcat EX-3D Runoff Area=0.71 ac 56.22% Impervious Runoff Depth=9.95"
Tc=6.0 min CN=94/98 Runoff=7.0 cfs 0.585 af

Subcatchment EX-3E: Subcat EX-3E Runoff Area=0.80 ac 35.10% Impervious Runoff Depth=8.36"
Tc=6.0 min CN=76/98 Runoff=7.1 cfs 0.555 af

Subcatchment EX-4A: Subcat EX-4A Runoff Area=2.89 ac 96.00% Impervious Runoff Depth=10.12"
Tc=6.0 min CN=90/98 Runoff=28.8 cfs 2.435 af

Subcatchment EX-4B: Subcat EX-4B Runoff Area=1.61 ac 20.73% Impervious Runoff Depth=8.06"
Tc=6.0 min CN=77/98 Runoff=14.1 cfs 1.078 af

Subcatchment EX-4C: Subcat EX-4C Runoff Area=1.14 ac 72.98% Impervious Runoff Depth=10.09"
Tc=6.0 min CN=96/98 Runoff=11.3 cfs 0.956 af

Subcatchment EX-4D: Subcat EX-4D Runoff Area=1.19 ac 25.91% Impervious Runoff Depth=9.98"
Tc=6.0 min CN=96/98 Runoff=11.9 cfs 0.993 af

Pond EX-P2B: Existing Basin Inflow=108.7 cfs 11.568 af
Primary=108.7 cfs 11.568 af

Link DP3: Lower Supply Basin (offsite) Inflow=122.8 cfs 13.173 af
Primary=122.8 cfs 13.173 af

Link DP4: Taunton River (offsite) Inflow=66.0 cfs 5.463 af
Primary=66.0 cfs 5.463 af

Link DP5: Mount Hope Bay Inflow=371.2 cfs 30.818 af
Primary=371.2 cfs 30.818 af

Total Runoff Area = 10.74 ac Runoff Volume = 8.618 af Average Runoff Depth = 9.62"
46.32% Pervious = 4.98 ac 53.68% Impervious = 5.77 ac

Summary for Subcatchment EX-3A: Subcat EX-3A

Runoff = 11.0 cfs @ 12.09 hrs, Volume= 0.920 af, Depth= 9.93"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
1.05	96	Gravel surface, HSG C
0.06	98	Unconnected pavement, HSG C
1.11	96	Weighted Average
1.05	96	94.90% Pervious Area
0.06	98	5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3B: Subcat EX-3B

Runoff = 5.5 cfs @ 12.09 hrs, Volume= 0.464 af, Depth=10.04"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.26	96	Gravel surface, HSG C
0.29	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.55	97	Weighted Average
0.26	96	47.31% Pervious Area
0.29	98	52.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3C: Subcat EX-3C

Runoff = 7.5 cfs @ 12.09 hrs, Volume= 0.630 af, Depth=10.08"
Routed to Pond EX-P2B : Existing Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.25	96	Gravel surface, HSG C
0.03	98	Roofs, HSG C
0.47	98	Unconnected pavement, HSG C
0.00	98	Water Surface, HSG C
0.75	97	Weighted Average
0.25	96	33.70% Pervious Area
0.50	98	66.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3D: Subcat EX-3D

Runoff = 7.0 cfs @ 12.09 hrs, Volume= 0.585 af, Depth= 9.95"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.29	96	Gravel surface, HSG C
0.40	98	Water Surface, HSG C
0.02	72	Woods/grass comb., Good, HSG C
0.71	96	Weighted Average
0.31	94	43.78% Pervious Area
0.40	98	56.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-3E: Subcat EX-3E

Runoff = 7.1 cfs @ 12.09 hrs, Volume= 0.555 af, Depth= 8.36"
Routed to Link DP3 : Lower Supply Basin (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.09	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.24	98	Unconnected pavement, HSG C
0.42	72	Woods/grass comb., Good, HSG C
0.80	84	Weighted Average
0.52	76	64.90% Pervious Area
0.28	98	35.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4A: Subcat EX-4A

Runoff = 28.8 cfs @ 12.09 hrs, Volume= 2.435 af, Depth=10.12"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.08	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.72	98	Unconnected pavement, HSG C
2.89	98	Weighted Average
0.12	90	4.00% Pervious Area
2.77	98	96.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4B: Subcat EX-4B

Runoff = 14.1 cfs @ 12.09 hrs, Volume= 1.078 af, Depth= 8.06"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.40	74	>75% Grass cover, Good, HSG C
0.25	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.33	98	Unconnected pavement, HSG C
0.63	72	Woods/grass comb., Good, HSG C
1.61	82	Weighted Average
1.27	77	79.27% Pervious Area
0.33	98	20.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4C: Subcat EX-4C

Runoff = 11.3 cfs @ 12.09 hrs, Volume= 0.956 af, Depth=10.09"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.31	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.79	98	Unconnected pavement, HSG C
1.14	97	Weighted Average
0.31	96	27.02% Pervious Area
0.83	98	72.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-4D: Subcat EX-4D

Runoff = 11.9 cfs @ 12.09 hrs, Volume= 0.993 af, Depth= 9.98"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-Year Rainfall=10.40"

Area (ac)	CN	Description
0.88	96	Gravel surface, HSG C
0.06	98	Roofs, HSG C
0.25	98	Unconnected pavement, HSG C
1.19	97	Weighted Average
0.88	96	74.09% Pervious Area
0.31	98	25.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond EX-P2B: Existing Basin

Inflow Area = 14.32 ac, 18.78% Impervious, Inflow Depth = 9.70" for 2070 100-Year event
Inflow = 108.7 cfs @ 12.17 hrs, Volume= 11.568 af
Primary = 108.7 cfs @ 12.17 hrs, Volume= 11.568 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin (offsite)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP3: Lower Supply Basin (offsite)

Inflow Area = 16.37 ac, 22.34% Impervious, Inflow Depth = 9.65" for 2070 100-Year event
Inflow = 122.8 cfs @ 12.16 hrs, Volume= 13.173 af
Primary = 122.8 cfs @ 12.16 hrs, Volume= 13.173 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

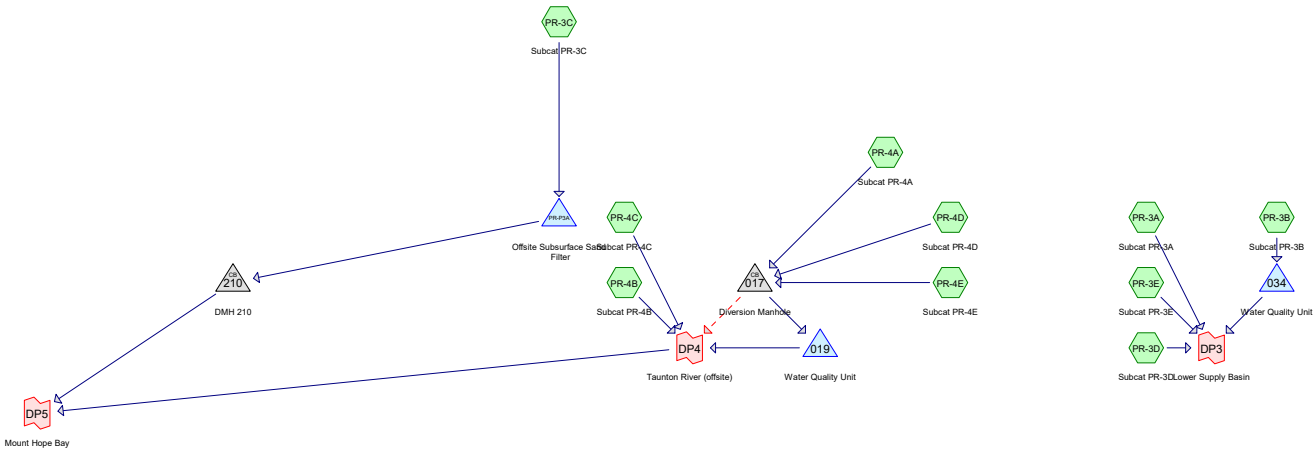
Inflow Area = 6.82 ac, 62.19% Impervious, Inflow Depth = 9.61" for 2070 100-Year event
Inflow = 66.0 cfs @ 12.09 hrs, Volume= 5.463 af
Primary = 66.0 cfs @ 12.09 hrs, Volume= 5.463 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 41.02 ac, 13.98% Impervious, Inflow Depth = 9.02" for 2070 100-Year event
Inflow = 371.2 cfs @ 12.10 hrs, Volume= 30.818 af
Primary = 371.2 cfs @ 12.10 hrs, Volume= 30.818 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



Subcat Reach Pond Link

Routing Diagram for 15542.00-PR
Prepared by VHB, Printed 5/31/2023
HydroCAD® 10.10-7c s/n 01038 © 2022 HydroCAD Software Solutions LLC

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PR-3A: Subcat PR-3A Runoff Area=0.93 ac 0.00% Impervious Runoff Depth=2.95"
Tc=6.0 min CN=96/0 Runoff=2.9 cfs 0.229 af

Subcatchment PR-3B: Subcat PR-3B Runoff Area=0.23 ac 78.09% Impervious Runoff Depth=2.83"
Tc=6.0 min CN=81/98 Runoff=0.7 cfs 0.055 af

Subcatchment PR-3C: Subcat PR-3C Runoff Area=1.13 ac 46.01% Impervious Runoff Depth=2.78"
Tc=6.0 min CN=91/98 Runoff=3.4 cfs 0.261 af

Subcatchment PR-3D: Subcat PR-3D Runoff Area=1.28 ac 0.35% Impervious Runoff Depth=2.18"
Tc=6.0 min CN=88/98 Runoff=3.2 cfs 0.232 af

Subcatchment PR-3E: Subcat PR-3E Runoff Area=0.23 ac 0.68% Impervious Runoff Depth=2.95"
Tc=6.0 min CN=96/98 Runoff=0.7 cfs 0.056 af

Subcatchment PR-4A: Subcat PR-4A Runoff Area=2.52 ac 88.12% Impervious Runoff Depth=2.94"
Tc=6.0 min CN=76/98 Runoff=7.6 cfs 0.618 af

Subcatchment PR-4B: Subcat PR-4B Runoff Area=1.53 ac 8.92% Impervious Runoff Depth=1.64"
Tc=6.0 min CN=79/98 Runoff=2.8 cfs 0.209 af

Subcatchment PR-4C: Subcat PR-4C Runoff Area=1.12 ac 62.59% Impervious Runoff Depth=3.08"
Tc=6.0 min CN=96/98 Runoff=3.6 cfs 0.289 af

Subcatchment PR-4D: Subcat PR-4D Runoff Area=1.16 ac 2.97% Impervious Runoff Depth=2.95"
Tc=6.0 min CN=96/98 Runoff=3.6 cfs 0.284 af

Subcatchment PR-4E: Subcat PR-4E Runoff Area=0.68 ac 73.41% Impervious Runoff Depth=2.88"
Tc=6.0 min CN=87/98 Runoff=2.0 cfs 0.162 af

Pond 017: Diversion Manhole Peak Elev=8.28' Inflow=13.2 cfs 1.064 af
Primary=8.1 cfs 0.999 af Secondary=5.2 cfs 0.065 af Outflow=13.2 cfs 1.064 af

Pond 019: Water Quality Unit Inflow=8.1 cfs 0.999 af
Primary=8.1 cfs 0.999 af

Pond 034: Water Quality Unit Inflow=0.7 cfs 0.055 af
Primary=0.7 cfs 0.055 af

Pond 210: DMH 210 Peak Elev=6.05' Inflow=9.3 cfs 1.165 af
30.0" Round Culvert n=0.012 L=175.0' S=0.0160 '/' Outflow=9.3 cfs 1.165 af

Pond PR-P3A: Offsite Subsurface Sand Filter Peak Elev=8.80' Storage=1,747 cf Inflow=3.4 cfs 0.261 af
Outflow=3.3 cfs 0.261 af

Link DP3: Lower Supply Basin Inflow=7.5 cfs 0.571 af
Primary=7.5 cfs 0.571 af

Link DP4: Taunton River (offsite)
Inflow=19.6 cfs 1.562 af
Primary=19.6 cfs 1.562 af

Link DP5: Mount Hope Bay
Inflow=57.6 cfs 11.271 af
Primary=57.6 cfs 11.271 af

Total Runoff Area = 10.80 ac Runoff Volume = 2.394 af Average Runoff Depth = 2.66"
60.20% Pervious = 6.50 ac 39.80% Impervious = 4.30 ac

Summary for Subcatchment PR-3A: Subcat PR-3A

Runoff = 2.9 cfs @ 12.09 hrs, Volume= 0.229 af, Depth= 2.95"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.93	96	Gravel surface, HSG C
0.93	96	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3B: Subcat PR-3B

Runoff = 0.7 cfs @ 12.09 hrs, Volume= 0.055 af, Depth= 2.83"
Routed to Pond 034 : Water Quality Unit

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.02	96	Gravel surface, HSG C
0.18	98	Unconnected pavement, HSG C
0.23	94	Weighted Average
0.05	81	21.91% Pervious Area
0.18	98	78.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3C: Subcat PR-3C

Runoff = 3.4 cfs @ 12.09 hrs, Volume= 0.261 af, Depth= 2.78"
Routed to Pond PR-P3A : Offsite Subsurface Sand Filter

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.13	74	>75% Grass cover, Good, HSG C
0.48	96	Gravel surface, HSG C
0.52	98	Unconnected pavement, HSG C
1.13	94	Weighted Average
0.61	91	53.99% Pervious Area
0.52	98	46.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3D: Subcat PR-3D

Runoff = 3.2 cfs @ 12.09 hrs, Volume= 0.232 af, Depth= 2.18"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.83	96	Gravel surface, HSG C
0.00	98	Unconnected pavement, HSG C
0.44	72	Woods/grass comb., Good, HSG C
1.28	88	Weighted Average
1.27	88	99.65% Pervious Area
0.00	98	0.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3E: Subcat PR-3E

Runoff = 0.7 cfs @ 12.09 hrs, Volume= 0.056 af, Depth= 2.95"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.23	96	Gravel surface, HSG C
0.00	98	Water Surface, HSG C
0.23	96	Weighted Average
0.23	96	99.32% Pervious Area
0.00	98	0.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4A: Subcat PR-4A

Runoff = 7.6 cfs @ 12.09 hrs, Volume= 0.618 af, Depth= 2.94"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.27	74	>75% Grass cover, Good, HSG C
0.03	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.17	98	Unconnected pavement, HSG C
2.52	95	Weighted Average
0.30	76	11.88% Pervious Area
2.22	98	88.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4B: Subcat PR-4B

Runoff = 2.8 cfs @ 12.09 hrs, Volume= 0.209 af, Depth= 1.64"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.42	74	>75% Grass cover, Good, HSG C
0.38	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.13	98	Unconnected pavement, HSG C
0.59	72	Woods/grass comb., Good, HSG C
1.53	81	Weighted Average
1.39	79	91.08% Pervious Area
0.14	98	8.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4C: Subcat PR-4C

Runoff = 3.6 cfs @ 12.09 hrs, Volume= 0.289 af, Depth= 3.08"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.42	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.67	98	Unconnected pavement, HSG C
1.12	97	Weighted Average
0.42	96	37.41% Pervious Area
0.70	98	62.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4D: Subcat PR-4D

Runoff = 3.6 cfs @ 12.09 hrs, Volume= 0.284 af, Depth= 2.95"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
1.12	96	Gravel surface, HSG C
0.01	98	Roofs, HSG C
0.02	98	Unconnected pavement, HSG C
1.16	96	Weighted Average
1.12	96	97.03% Pervious Area
0.03	98	2.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4E: Subcat PR-4E

Runoff = 2.0 cfs @ 12.09 hrs, Volume= 0.162 af, Depth= 2.88"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.40"

Area (ac)	CN	Description
0.07	74	>75% Grass cover, Good, HSG C
0.11	96	Gravel surface, HSG C
0.50	98	Unconnected pavement, HSG C
0.68	95	Weighted Average
0.18	87	26.59% Pervious Area
0.50	98	73.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond 017: Diversion Manhole

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 2.94" for 2-year event
Inflow = 13.2 cfs @ 12.09 hrs, Volume= 1.064 af
Outflow = 13.2 cfs @ 12.09 hrs, Volume= 1.064 af, Atten= 0%, Lag= 0.0 min
Primary = 8.1 cfs @ 12.09 hrs, Volume= 0.999 af
Routed to Pond 019 : Water Quality Unit
Secondary = 5.2 cfs @ 12.09 hrs, Volume= 0.065 af
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 8.28' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	7.30'	**24.0" Round Overflow** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 7.30' / 6.80' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Primary	5.80'	**15.0" Round Water Quality** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 5.80' / 5.70' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=8.0 cfs @ 12.09 hrs HW=8.25' TW=0.00' (Dynamic Tailwater)
↑—**2=Water Quality** (Inlet Controls 8.0 cfs @ 6.51 fps)

Secondary OutFlow Max=4.9 cfs @ 12.09 hrs HW=8.25' TW=0.00' (Dynamic Tailwater)
↑—**1=Overflow** (Inlet Controls 4.9 cfs @ 3.32 fps)

Stage-Area-Storage for Pond 017: Diversion Manhole

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
5.80	**0.000**	8.35	0.000
5.85	0.000	8.40	0.000
5.90	0.000	8.45	0.000
5.95	0.000	8.50	0.000
6.00	0.000	8.55	0.000
6.05	0.000	8.60	0.000
6.10	0.000	8.65	0.000
6.15	0.000	8.70	0.000
6.20	0.000	8.75	0.000
6.25	0.000	8.80	0.000
6.30	0.000	8.85	0.000
6.35	0.000	8.90	0.000
6.40	0.000	8.95	0.000
6.45	0.000	9.00	0.000
6.50	0.000	9.05	0.000
6.55	0.000	9.10	0.000
6.60	0.000	9.15	0.000
6.65	0.000	9.20	0.000
6.70	0.000	9.25	0.000
6.75	0.000	9.30	0.000
6.80	0.000		
6.85	0.000		
6.90	0.000		
6.95	0.000		
7.00	0.000		
7.05	0.000		
7.10	0.000		
7.15	0.000		
7.20	0.000		
7.25	0.000		
7.30	0.000		
7.35	0.000		
7.40	0.000		
7.45	0.000		
7.50	0.000		
7.55	0.000		
7.60	0.000		
7.65	0.000		
7.70	0.000		
7.75	0.000		
7.80	0.000		
7.85	0.000		
7.90	0.000		
7.95	0.000		
8.00	0.000		
8.05	0.000		
8.10	0.000		
8.15	0.000		
8.20	0.000		
8.25	0.000		
8.30	0.000		

Summary for Pond 019: Water Quality Unit

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 2.76" for 2-year event
Inflow = 8.1 cfs @ 12.09 hrs, Volume= 0.999 af
Primary = 8.1 cfs @ 12.09 hrs, Volume= 0.999 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 034: Water Quality Unit

Inflow Area = 0.23 ac, 78.09% Impervious, Inflow Depth = 2.83" for 2-year event
Inflow = 0.7 cfs @ 12.09 hrs, Volume= 0.055 af
Primary = 0.7 cfs @ 12.09 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 210: DMH 210

Inflow Area = 6.05 ac, 45.52% Impervious, Inflow Depth = 2.31" for 2-year event
Inflow = 9.3 cfs @ 12.21 hrs, Volume= 1.165 af
Outflow = 9.3 cfs @ 12.21 hrs, Volume= 1.165 af, Atten= 0%, Lag= 0.0 min
Primary = 9.3 cfs @ 12.21 hrs, Volume= 1.165 af
Routed to Link DP5 : Mount Hope Bay

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 6.05' @ 12.21 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	4.80'	**30.0" Round Culvert** L= 175.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.80' / 2.00' S= 0.0160 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=9.1 cfs @ 12.21 hrs HW=6.03' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 9.1 cfs @ 3.78 fps)

Stage-Area-Storage for Pond 210: DMH 210

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
4.80	**0.000**	5.82	0.000	6.84	0.000
4.82	0.000	5.84	0.000	6.86	0.000
4.84	0.000	5.86	0.000	6.88	0.000
4.86	0.000	5.88	0.000	6.90	0.000
4.88	0.000	5.90	0.000	6.92	0.000
4.90	0.000	5.92	0.000	6.94	0.000
4.92	0.000	5.94	0.000	6.96	0.000
4.94	0.000	5.96	0.000	6.98	0.000
4.96	0.000	5.98	0.000	7.00	0.000
4.98	0.000	6.00	0.000	7.02	0.000
5.00	0.000	6.02	0.000	7.04	0.000
5.02	0.000	6.04	0.000	7.06	0.000
5.04	0.000	6.06	0.000	7.08	0.000
5.06	0.000	6.08	0.000	7.10	0.000
5.08	0.000	6.10	0.000	7.12	0.000
5.10	0.000	6.12	0.000	7.14	0.000
5.12	0.000	6.14	0.000	7.16	0.000
5.14	0.000	6.16	0.000	7.18	0.000
5.16	0.000	6.18	0.000	7.20	0.000
5.18	0.000	6.20	0.000	7.22	0.000
5.20	0.000	6.22	0.000	7.24	0.000
5.22	0.000	6.24	0.000	7.26	0.000
5.24	0.000	6.26	0.000	7.28	0.000
5.26	0.000	6.28	0.000	7.30	0.000
5.28	0.000	6.30	0.000		
5.30	0.000	6.32	0.000		
5.32	0.000	6.34	0.000		
5.34	0.000	6.36	0.000		
5.36	0.000	6.38	0.000		
5.38	0.000	6.40	0.000		
5.40	0.000	6.42	0.000		
5.42	0.000	6.44	0.000		
5.44	0.000	6.46	0.000		
5.46	0.000	6.48	0.000		
5.48	0.000	6.50	0.000		
5.50	0.000	6.52	0.000		
5.52	0.000	6.54	0.000		
5.54	0.000	6.56	0.000		
5.56	0.000	6.58	0.000		
5.58	0.000	6.60	0.000		
5.60	0.000	6.62	0.000		
5.62	0.000	6.64	0.000		
5.64	0.000	6.66	0.000		
5.66	0.000	6.68	0.000		
5.68	0.000	6.70	0.000		
5.70	0.000	6.72	0.000		
5.72	0.000	6.74	0.000		
5.74	0.000	6.76	0.000		
5.76	0.000	6.78	0.000		
5.78	0.000	6.80	0.000		
5.80	0.000	6.82	0.000		

Summary for Pond PR-P3A: Offsite Subsurface Sand Filter

Inflow Area = 1.13 ac, 46.01% Impervious, Inflow Depth = 2.78" for 2-year event
Inflow = 3.4 cfs @ 12.09 hrs, Volume= 0.261 af
Outflow = 3.3 cfs @ 12.10 hrs, Volume= 0.261 af, Atten= 1%, Lag= 1.0 min
Primary = 3.3 cfs @ 12.10 hrs, Volume= 0.261 af
Routed to Pond 210 : DMH 210

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 8.80' @ 12.10 hrs Surf.Area= 790 sf Storage= 1,747 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 151.4 min (928.0 - 776.6)

Volume	Invert	Avail.Storage	Storage Description
#1	11.40'	19 cf	**2.00'D x 3.00'H Vertical Cone/Cylinder** x 2
#2A	5.40'	474 cf	**13.79'W x 57.25'L x 6.17'H Field A** 4,869 cf Overall - 3,685 cf Embedded = 1,184 cf x 40.0% Voids
#3A	6.90'	2,676 cf	**StormTrap ST1 SingleTrap 4-0** x 8 Inside #2 Inside= 82.7"W x 48.0"H => 23.79 sf x 14.06'L = 334.5 cf Outside= 82.7"W x 56.0"H => 32.18 sf x 14.06'L = 452.5 cf 8 Chambers in 2 Rows 13.79' x 56.25' Core + 0.00' x 0.50' Border = 13.79' x 57.25' System
		3,169 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Device 2	5.40'	**2.000 in/hr Exfiltration over Surface area**
#2	Primary	4.90'	**30.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.90' / 4.80' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf
#3	Device 2	8.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=3.3 cfs @ 12.10 hrs HW=8.80' TW=5.85' (Dynamic Tailwater)
└─**2=Culvert** (Passes 3.3 cfs of 38.3 cfs potential flow)
  ├─**1=Exfiltration** (Exfiltration Controls 0.0 cfs)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 3.2 cfs @ 2.07 fps)

Stage-Area-Storage for Pond PR-P3A: Offsite Subsurface Sand Filter

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
5.40	790	0
5.50	790	32
5.60	790	63
5.70	790	95
5.80	790	126
5.90	790	158
6.00	790	189
6.10	790	221
6.20	790	253
6.30	790	284
6.40	790	316
6.50	790	347
6.60	790	379
6.70	790	411
6.80	790	442
6.90	790	474
7.00	790	541
7.10	790	608
7.20	790	674
7.30	790	741
7.40	790	808
7.50	790	875
7.60	790	942
7.70	790	1,009
7.80	790	1,076
7.90	790	1,143
8.00	790	1,210
8.10	790	1,277
8.20	790	1,343
8.30	790	1,410
8.40	790	1,477
8.50	790	1,544
8.60	790	1,611
8.70	790	1,678
8.80	790	1,745
8.90	790	1,812
9.00	790	1,879
9.10	790	1,946
9.20	790	2,012
9.30	790	2,079
9.40	790	2,146
9.50	790	2,213
9.60	790	2,280
9.70	790	2,347
9.80	790	2,414
9.90	790	2,481
10.00	790	2,548
10.10	790	2,615
10.20	790	2,681
10.30	790	2,748
10.40	790	2,815
10.50	790	2,882
10.60	790	2,949
10.70	790	3,016
10.80	790	3,083
10.90	790	3,150
11.00	790	3,150
11.10	790	3,150
11.20	790	3,150
11.30	790	3,150
11.40	**796**	3,150
11.50	796	3,150
11.60	796	3,151
11.70	796	3,152
11.80	796	3,152
11.90	796	3,153
12.00	796	3,154
12.10	796	3,154
12.20	796	3,155
12.30	796	3,155
12.40	796	3,156
12.50	796	3,157
12.60	796	3,157
12.70	796	3,158
12.80	796	3,159
12.90	796	3,159
13.00	796	3,160
13.10	796	3,160
13.20	796	3,161
13.30	796	3,162
13.40	796	3,162
13.50	796	3,163
13.60	796	3,164
13.70	796	3,164
13.80	796	3,165
13.90	796	3,165
14.00	796	3,166
14.10	796	3,167
14.20	796	3,167
14.30	796	3,168
14.40	796	**3,169**

Summary for Link DP3: Lower Supply Basin

Inflow Area = 2.67 ac, 7.06% Impervious, Inflow Depth = 2.57" for 2-year event
Inflow = 7.5 cfs @ 12.09 hrs, Volume= 0.571 af
Primary = 7.5 cfs @ 12.09 hrs, Volume= 0.571 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 7.00 ac, 51.27% Impervious, Inflow Depth = 2.68" for 2-year event
Inflow = 19.6 cfs @ 12.09 hrs, Volume= 1.562 af
Primary = 19.6 cfs @ 12.09 hrs, Volume= 1.562 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 54.73 ac, 60.12% Impervious, Inflow Depth = 2.47" for 2-year event
Inflow = 57.6 cfs @ 12.28 hrs, Volume= 11.271 af
Primary = 57.6 cfs @ 12.28 hrs, Volume= 11.271 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PR-3A: Subcat PR-3A Runoff Area=0.93 ac 0.00% Impervious Runoff Depth=4.57"
Tc=6.0 min CN=96/0 Runoff=4.4 cfs 0.355 af

Subcatchment PR-3B: Subcat PR-3B Runoff Area=0.23 ac 78.09% Impervious Runoff Depth=4.41"
Tc=6.0 min CN=81/98 Runoff=1.1 cfs 0.086 af

Subcatchment PR-3C: Subcat PR-3C Runoff Area=1.13 ac 46.01% Impervious Runoff Depth=4.38"
Tc=6.0 min CN=91/98 Runoff=5.2 cfs 0.412 af

Subcatchment PR-3D: Subcat PR-3D Runoff Area=1.28 ac 0.35% Impervious Runoff Depth=3.71"
Tc=6.0 min CN=88/98 Runoff=5.3 cfs 0.394 af

Subcatchment PR-3E: Subcat PR-3E Runoff Area=0.23 ac 0.68% Impervious Runoff Depth=4.57"
Tc=6.0 min CN=96/98 Runoff=1.1 cfs 0.086 af

Subcatchment PR-4A: Subcat PR-4A Runoff Area=2.52 ac 88.12% Impervious Runoff Depth=4.54"
Tc=6.0 min CN=76/98 Runoff=11.6 cfs 0.953 af

Subcatchment PR-4B: Subcat PR-4B Runoff Area=1.53 ac 8.92% Impervious Runoff Depth=3.01"
Tc=6.0 min CN=79/98 Runoff=5.2 cfs 0.383 af

Subcatchment PR-4C: Subcat PR-4C Runoff Area=1.12 ac 62.59% Impervious Runoff Depth=4.72"
Tc=6.0 min CN=96/98 Runoff=5.4 cfs 0.442 af

Subcatchment PR-4D: Subcat PR-4D Runoff Area=1.16 ac 2.97% Impervious Runoff Depth=4.58"
Tc=6.0 min CN=96/98 Runoff=5.5 cfs 0.441 af

Subcatchment PR-4E: Subcat PR-4E Runoff Area=0.68 ac 73.41% Impervious Runoff Depth=4.48"
Tc=6.0 min CN=87/98 Runoff=3.1 cfs 0.252 af

Pond 017: Diversion Manhole Peak Elev=8.84' Inflow=20.2 cfs 1.646 af
Primary=9.2 cfs 1.455 af Secondary=11.0 cfs 0.191 af Outflow=20.2 cfs 1.646 af

Pond 019: Water Quality Unit Inflow=9.2 cfs 1.455 af
Primary=9.2 cfs 1.455 af

Pond 034: Water Quality Unit Inflow=1.1 cfs 0.086 af
Primary=1.1 cfs 0.086 af

Pond 210: DMH 210 Peak Elev=7.05' Inflow=23.7 cfs 1.913 af
30.0" Round Culvert n=0.012 L=175.0' S=0.0160 '/' Outflow=23.7 cfs 1.913 af

Pond PR-P3A: Offsite Subsurface Sand Filter Peak Elev=8.94' Storage=1,841 cf Inflow=5.2 cfs 0.412 af
Outflow=5.1 cfs 0.412 af

Link DP3: Lower Supply Basin Inflow=11.8 cfs 0.921 af
Primary=11.8 cfs 0.921 af

Link DP4: Taunton River (offsite) Inflow=30.7 cfs 2.471 af
Primary=30.7 cfs 2.471 af

Link DP5: Mount Hope Bay Inflow=169.3 cfs 18.115 af
Primary=169.3 cfs 18.115 af

Total Runoff Area = 10.80 ac Runoff Volume = 3.804 af Average Runoff Depth = 4.23"
60.20% Pervious = 6.50 ac 39.80% Impervious = 4.30 ac

Summary for Subcatchment PR-3A: Subcat PR-3A

Runoff = 4.4 cfs @ 12.09 hrs, Volume= 0.355 af, Depth= 4.57"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.93	96	Gravel surface, HSG C
0.93	96	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3B: Subcat PR-3B

Runoff = 1.1 cfs @ 12.09 hrs, Volume= 0.086 af, Depth= 4.41"
Routed to Pond 034 : Water Quality Unit

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.02	96	Gravel surface, HSG C
0.18	98	Unconnected pavement, HSG C
0.23	94	Weighted Average
0.05	81	21.91% Pervious Area
0.18	98	78.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3C: Subcat PR-3C

Runoff = 5.2 cfs @ 12.09 hrs, Volume= 0.412 af, Depth= 4.38"
Routed to Pond PR-P3A : Offsite Subsurface Sand Filter

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.13	74	>75% Grass cover, Good, HSG C
0.48	96	Gravel surface, HSG C
0.52	98	Unconnected pavement, HSG C
1.13	94	Weighted Average
0.61	91	53.99% Pervious Area
0.52	98	46.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3D: Subcat PR-3D

Runoff = 5.3 cfs @ 12.09 hrs, Volume= 0.394 af, Depth= 3.71"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.83	96	Gravel surface, HSG C
0.00	98	Unconnected pavement, HSG C
0.44	72	Woods/grass comb., Good, HSG C
1.28	88	Weighted Average
1.27	88	99.65% Pervious Area
0.00	98	0.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3E: Subcat PR-3E

Runoff = 1.1 cfs @ 12.09 hrs, Volume= 0.086 af, Depth= 4.57"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.23	96	Gravel surface, HSG C
0.00	98	Water Surface, HSG C
0.23	96	Weighted Average
0.23	96	99.32% Pervious Area
0.00	98	0.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4A: Subcat PR-4A

Runoff = 11.6 cfs @ 12.09 hrs, Volume= 0.953 af, Depth= 4.54"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.27	74	>75% Grass cover, Good, HSG C
0.03	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.17	98	Unconnected pavement, HSG C
2.52	95	Weighted Average
0.30	76	11.88% Pervious Area
2.22	98	88.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4B: Subcat PR-4B

Runoff = 5.2 cfs @ 12.09 hrs, Volume= 0.383 af, Depth= 3.01"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.42	74	>75% Grass cover, Good, HSG C
0.38	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.13	98	Unconnected pavement, HSG C
0.59	72	Woods/grass comb., Good, HSG C
1.53	81	Weighted Average
1.39	79	91.08% Pervious Area
0.14	98	8.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4C: Subcat PR-4C

Runoff = 5.4 cfs @ 12.09 hrs, Volume= 0.442 af, Depth= 4.72"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.42	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.67	98	Unconnected pavement, HSG C
1.12	97	Weighted Average
0.42	96	37.41% Pervious Area
0.70	98	62.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4D: Subcat PR-4D

Runoff = 5.5 cfs @ 12.09 hrs, Volume= 0.441 af, Depth= 4.58"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
1.12	96	Gravel surface, HSG C
0.01	98	Roofs, HSG C
0.02	98	Unconnected pavement, HSG C
1.16	96	Weighted Average
1.12	96	97.03% Pervious Area
0.03	98	2.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4E: Subcat PR-4E

Runoff = 3.1 cfs @ 12.09 hrs, Volume= 0.252 af, Depth= 4.48"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.04"

Area (ac)	CN	Description
0.07	74	>75% Grass cover, Good, HSG C
0.11	96	Gravel surface, HSG C
0.50	98	Unconnected pavement, HSG C
0.68	95	Weighted Average
0.18	87	26.59% Pervious Area
0.50	98	73.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond 017: Diversion Manhole

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 4.54" for 10-year event
Inflow = 20.2 cfs @ 12.09 hrs, Volume= 1.646 af
Outflow = 20.2 cfs @ 12.09 hrs, Volume= 1.646 af, Atten= 0%, Lag= 0.0 min
Primary = 9.2 cfs @ 12.09 hrs, Volume= 1.455 af
Routed to Pond 019 : Water Quality Unit
Secondary = 11.0 cfs @ 12.09 hrs, Volume= 0.191 af
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 8.84' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	7.30'	**24.0" Round Overflow** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 7.30' / 6.80' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Primary	5.80'	**15.0" Round Water Quality** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 5.80' / 5.70' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=9.1 cfs @ 12.09 hrs HW=8.80' TW=0.00' (Dynamic Tailwater)
↑—**2=Water Quality** (Inlet Controls 9.1 cfs @ 7.42 fps)

Secondary OutFlow Max=10.5 cfs @ 12.09 hrs HW=8.80' TW=0.00' (Dynamic Tailwater)
↑—**1=Overflow** (Inlet Controls 10.5 cfs @ 4.17 fps)

Stage-Area-Storage for Pond 017: Diversion Manhole

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
5.80	**0.000**	8.35	0.000
5.85	0.000	8.40	0.000
5.90	0.000	8.45	0.000
5.95	0.000	8.50	0.000
6.00	0.000	8.55	0.000
6.05	0.000	8.60	0.000
6.10	0.000	8.65	0.000
6.15	0.000	8.70	0.000
6.20	0.000	8.75	0.000
6.25	0.000	8.80	0.000
6.30	0.000	8.85	0.000
6.35	0.000	8.90	0.000
6.40	0.000	8.95	0.000
6.45	0.000	9.00	0.000
6.50	0.000	9.05	0.000
6.55	0.000	9.10	0.000
6.60	0.000	9.15	0.000
6.65	0.000	9.20	0.000
6.70	0.000	9.25	0.000
6.75	0.000	9.30	0.000
6.80	0.000		
6.85	0.000		
6.90	0.000		
6.95	0.000		
7.00	0.000		
7.05	0.000		
7.10	0.000		
7.15	0.000		
7.20	0.000		
7.25	0.000		
7.30	0.000		
7.35	0.000		
7.40	0.000		
7.45	0.000		
7.50	0.000		
7.55	0.000		
7.60	0.000		
7.65	0.000		
7.70	0.000		
7.75	0.000		
7.80	0.000		
7.85	0.000		
7.90	0.000		
7.95	0.000		
8.00	0.000		
8.05	0.000		
8.10	0.000		
8.15	0.000		
8.20	0.000		
8.25	0.000		
8.30	0.000		

Summary for Pond 019: Water Quality Unit

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 4.01" for 10-year event
Inflow = 9.2 cfs @ 12.09 hrs, Volume= 1.455 af
Primary = 9.2 cfs @ 12.09 hrs, Volume= 1.455 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 034: Water Quality Unit

Inflow Area = 0.23 ac, 78.09% Impervious, Inflow Depth = 4.41" for 10-year event
Inflow = 1.1 cfs @ 12.09 hrs, Volume= 0.086 af
Primary = 1.1 cfs @ 12.09 hrs, Volume= 0.086 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 210: DMH 210

Inflow Area = 6.05 ac, 45.52% Impervious, Inflow Depth = 3.80" for 10-year event
Inflow = 23.7 cfs @ 12.11 hrs, Volume= 1.913 af
Outflow = 23.7 cfs @ 12.11 hrs, Volume= 1.913 af, Atten= 0%, Lag= 0.0 min
Primary = 23.7 cfs @ 12.11 hrs, Volume= 1.913 af
Routed to Link DP5 : Mount Hope Bay

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 7.05' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	4.80'	**30.0" Round Culvert** L= 175.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.80' / 2.00' S= 0.0160 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=23.3 cfs @ 12.11 hrs HW=7.02' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 23.3 cfs @ 5.07 fps)

Stage-Area-Storage for Pond 210: DMH 210

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
4.80	**0.000**	5.82	0.000	6.84	0.000
4.82	0.000	5.84	0.000	6.86	0.000
4.84	0.000	5.86	0.000	6.88	0.000
4.86	0.000	5.88	0.000	6.90	0.000
4.88	0.000	5.90	0.000	6.92	0.000
4.90	0.000	5.92	0.000	6.94	0.000
4.92	0.000	5.94	0.000	6.96	0.000
4.94	0.000	5.96	0.000	6.98	0.000
4.96	0.000	5.98	0.000	7.00	0.000
4.98	0.000	6.00	0.000	7.02	0.000
5.00	0.000	6.02	0.000	7.04	0.000
5.02	0.000	6.04	0.000	7.06	0.000
5.04	0.000	6.06	0.000	7.08	0.000
5.06	0.000	6.08	0.000	7.10	0.000
5.08	0.000	6.10	0.000	7.12	0.000
5.10	0.000	6.12	0.000	7.14	0.000
5.12	0.000	6.14	0.000	7.16	0.000
5.14	0.000	6.16	0.000	7.18	0.000
5.16	0.000	6.18	0.000	7.20	0.000
5.18	0.000	6.20	0.000	7.22	0.000
5.20	0.000	6.22	0.000	7.24	0.000
5.22	0.000	6.24	0.000	7.26	0.000
5.24	0.000	6.26	0.000	7.28	0.000
5.26	0.000	6.28	0.000	7.30	0.000
5.28	0.000	6.30	0.000		
5.30	0.000	6.32	0.000		
5.32	0.000	6.34	0.000		
5.34	0.000	6.36	0.000		
5.36	0.000	6.38	0.000		
5.38	0.000	6.40	0.000		
5.40	0.000	6.42	0.000		
5.42	0.000	6.44	0.000		
5.44	0.000	6.46	0.000		
5.46	0.000	6.48	0.000		
5.48	0.000	6.50	0.000		
5.50	0.000	6.52	0.000		
5.52	0.000	6.54	0.000		
5.54	0.000	6.56	0.000		
5.56	0.000	6.58	0.000		
5.58	0.000	6.60	0.000		
5.60	0.000	6.62	0.000		
5.62	0.000	6.64	0.000		
5.64	0.000	6.66	0.000		
5.66	0.000	6.68	0.000		
5.68	0.000	6.70	0.000		
5.70	0.000	6.72	0.000		
5.72	0.000	6.74	0.000		
5.74	0.000	6.76	0.000		
5.76	0.000	6.78	0.000		
5.78	0.000	6.80	0.000		
5.80	0.000	6.82	0.000		

Summary for Pond PR-P3A: Offsite Subsurface Sand Filter

Inflow Area = 1.13 ac, 46.01% Impervious, Inflow Depth = 4.38" for 10-year event
Inflow = 5.2 cfs @ 12.09 hrs, Volume= 0.412 af
Outflow = 5.1 cfs @ 12.10 hrs, Volume= 0.412 af, Atten= 1%, Lag= 0.9 min
Primary = 5.1 cfs @ 12.10 hrs, Volume= 0.412 af
Routed to Pond 210 : DMH 210

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 8.94' @ 12.10 hrs Surf.Area= 790 sf Storage= 1,841 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 104.2 min (871.3 - 767.1)

Volume	Invert	Avail.Storage	Storage Description
#1	11.40'	19 cf	**2.00'D x 3.00'H Vertical Cone/Cylinder** x 2
#2A	5.40'	474 cf	**13.79'W x 57.25'L x 6.17'H Field A** 4,869 cf Overall - 3,685 cf Embedded = 1,184 cf x 40.0% Voids
#3A	6.90'	2,676 cf	**StormTrap ST1 SingleTrap 4-0** x 8 Inside #2 Inside= 82.7"W x 48.0"H => 23.79 sf x 14.06'L = 334.5 cf Outside= 82.7"W x 56.0"H => 32.18 sf x 14.06'L = 452.5 cf 8 Chambers in 2 Rows 13.79' x 56.25' Core + 0.00' x 0.50' Border = 13.79' x 57.25' System
		3,169 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Device 2	5.40'	**2.000 in/hr Exfiltration over Surface area**
#2	Primary	4.90'	**30.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.90' / 4.80' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf
#3	Device 2	8.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=5.1 cfs @ 12.10 hrs HW=8.94' TW=7.04' (Dynamic Tailwater)
└─**2=Culvert** (Passes 5.1 cfs of 32.6 cfs potential flow)
  ├─**1=Exfiltration** (Exfiltration Controls 0.0 cfs)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 5.1 cfs @ 2.41 fps)

Stage-Area-Storage for Pond PR-P3A: Offsite Subsurface Sand Filter

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
5.40	790	0
5.50	790	32
5.60	790	63
5.70	790	95
5.80	790	126
5.90	790	158
6.00	790	189
6.10	790	221
6.20	790	253
6.30	790	284
6.40	790	316
6.50	790	347
6.60	790	379
6.70	790	411
6.80	790	442
6.90	790	474
7.00	790	541
7.10	790	608
7.20	790	674
7.30	790	741
7.40	790	808
7.50	790	875
7.60	790	942
7.70	790	1,009
7.80	790	1,076
7.90	790	1,143
8.00	790	1,210
8.10	790	1,277
8.20	790	1,343
8.30	790	1,410
8.40	790	1,477
8.50	790	1,544
8.60	790	1,611
8.70	790	1,678
8.80	790	1,745
8.90	790	1,812
9.00	790	1,879
9.10	790	1,946
9.20	790	2,012
9.30	790	2,079
9.40	790	2,146
9.50	790	2,213
9.60	790	2,280
9.70	790	2,347
9.80	790	2,414
9.90	790	2,481
10.00	790	2,548
10.10	790	2,615
10.20	790	2,681
10.30	790	2,748
10.40	790	2,815
10.50	790	2,882
10.60	790	2,949
10.70	790	3,016
10.80	790	3,083
10.90	790	3,150
11.00	790	3,150
11.10	790	3,150
11.20	790	3,150
11.30	790	3,150
11.40	**796**	3,150
11.50	796	3,150
11.60	796	3,151
11.70	796	3,152
11.80	796	3,152
11.90	796	3,153
12.00	796	3,154
12.10	796	3,154
12.20	796	3,155
12.30	796	3,155
12.40	796	3,156
12.50	796	3,157
12.60	796	3,157
12.70	796	3,158
12.80	796	3,159
12.90	796	3,159
13.00	796	3,160
13.10	796	3,160
13.20	796	3,161
13.30	796	3,162
13.40	796	3,162
13.50	796	3,163
13.60	796	3,164
13.70	796	3,164
13.80	796	3,165
13.90	796	3,165
14.00	796	3,166
14.10	796	3,167
14.20	796	3,167
14.30	796	3,168
14.40	796	**3,169**

Summary for Link DP3: Lower Supply Basin

Inflow Area = 2.67 ac, 7.06% Impervious, Inflow Depth = 4.15" for 10-year event
Inflow = 11.8 cfs @ 12.09 hrs, Volume= 0.921 af
Primary = 11.8 cfs @ 12.09 hrs, Volume= 0.921 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 7.00 ac, 51.27% Impervious, Inflow Depth = 4.24" for 10-year event
Inflow = 30.7 cfs @ 12.09 hrs, Volume= 2.471 af
Primary = 30.7 cfs @ 12.09 hrs, Volume= 2.471 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 54.73 ac, 60.12% Impervious, Inflow Depth = 3.97" for 10-year event
Inflow = 169.3 cfs @ 12.11 hrs, Volume= 18.115 af
Primary = 169.3 cfs @ 12.11 hrs, Volume= 18.115 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PR-3A: Subcat PR-3A Runoff Area=0.93 ac 0.00% Impervious Runoff Depth=5.60"
Tc=6.0 min CN=96/0 Runoff=5.3 cfs 0.434 af

Subcatchment PR-3B: Subcat PR-3B Runoff Area=0.23 ac 78.09% Impervious Runoff Depth=5.42"
Tc=6.0 min CN=81/98 Runoff=1.3 cfs 0.105 af

Subcatchment PR-3C: Subcat PR-3C Runoff Area=1.13 ac 46.01% Impervious Runoff Depth=5.40"
Tc=6.0 min CN=91/98 Runoff=6.3 cfs 0.507 af

Subcatchment PR-3D: Subcat PR-3D Runoff Area=1.28 ac 0.35% Impervious Runoff Depth=4.70"
Tc=6.0 min CN=88/98 Runoff=6.6 cfs 0.499 af

Subcatchment PR-3E: Subcat PR-3E Runoff Area=0.23 ac 0.68% Impervious Runoff Depth=5.60"
Tc=6.0 min CN=96/98 Runoff=1.3 cfs 0.106 af

Subcatchment PR-4A: Subcat PR-4A Runoff Area=2.52 ac 88.12% Impervious Runoff Depth=5.55"
Tc=6.0 min CN=76/98 Runoff=14.1 cfs 1.165 af

Subcatchment PR-4B: Subcat PR-4B Runoff Area=1.53 ac 8.92% Impervious Runoff Depth=3.93"
Tc=6.0 min CN=79/98 Runoff=6.8 cfs 0.500 af

Subcatchment PR-4C: Subcat PR-4C Runoff Area=1.12 ac 62.59% Impervious Runoff Depth=5.74"
Tc=6.0 min CN=96/98 Runoff=6.5 cfs 0.538 af

Subcatchment PR-4D: Subcat PR-4D Runoff Area=1.16 ac 2.97% Impervious Runoff Depth=5.60"
Tc=6.0 min CN=96/98 Runoff=6.6 cfs 0.539 af

Subcatchment PR-4E: Subcat PR-4E Runoff Area=0.68 ac 73.41% Impervious Runoff Depth=5.50"
Tc=6.0 min CN=87/98 Runoff=3.8 cfs 0.309 af

Pond 017: Diversion Manhole Peak Elev=9.21' Inflow=24.5 cfs 2.014 af
Primary=9.9 cfs 1.725 af Secondary=14.6 cfs 0.289 af Outflow=24.5 cfs 2.014 af

Pond 019: Water Quality Unit Inflow=9.9 cfs 1.725 af
Primary=9.9 cfs 1.725 af

Pond 034: Water Quality Unit Inflow=1.3 cfs 0.105 af
Primary=1.3 cfs 0.105 af

Pond 210: DMH 210 Peak Elev=7.64' Inflow=29.8 cfs 2.399 af
30.0" Round Culvert n=0.012 L=175.0' S=0.0160 '/' Outflow=29.8 cfs 2.399 af

Pond PR-P3A: Offsite Subsurface Sand Filter Peak Elev=9.02' Storage=1,895 cf Inflow=6.3 cfs 0.507 af
Outflow=6.3 cfs 0.507 af

Link DP3: Lower Supply Basin Inflow=14.6 cfs 1.145 af
Primary=14.6 cfs 1.145 af

Link DP4: Taunton River (offsite)

Inflow=37.8 cfs 3.052 af
Primary=37.8 cfs 3.052 af

Link DP5: Mount Hope Bay

Inflow=194.7 cfs 22.537 af
Primary=194.7 cfs 22.537 af

Total Runoff Area = 10.80 ac Runoff Volume = 4.704 af Average Runoff Depth = 5.23"
60.20% Pervious = 6.50 ac 39.80% Impervious = 4.30 ac

Summary for Subcatchment PR-3A: Subcat PR-3A

Runoff = 5.3 cfs @ 12.09 hrs, Volume= 0.434 af, Depth= 5.60"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.93	96	Gravel surface, HSG C
0.93	96	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3B: Subcat PR-3B

Runoff = 1.3 cfs @ 12.09 hrs, Volume= 0.105 af, Depth= 5.42"
Routed to Pond 034 : Water Quality Unit

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.02	96	Gravel surface, HSG C
0.18	98	Unconnected pavement, HSG C
0.23	94	Weighted Average
0.05	81	21.91% Pervious Area
0.18	98	78.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3C: Subcat PR-3C

Runoff = 6.3 cfs @ 12.09 hrs, Volume= 0.507 af, Depth= 5.40"
Routed to Pond PR-P3A : Offsite Subsurface Sand Filter

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.13	74	>75% Grass cover, Good, HSG C
0.48	96	Gravel surface, HSG C
0.52	98	Unconnected pavement, HSG C
1.13	94	Weighted Average
0.61	91	53.99% Pervious Area
0.52	98	46.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3D: Subcat PR-3D

Runoff = 6.6 cfs @ 12.09 hrs, Volume= 0.499 af, Depth= 4.70"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.83	96	Gravel surface, HSG C
0.00	98	Unconnected pavement, HSG C
0.44	72	Woods/grass comb., Good, HSG C
1.28	88	Weighted Average
1.27	88	99.65% Pervious Area
0.00	98	0.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3E: Subcat PR-3E

Runoff = 1.3 cfs @ 12.09 hrs, Volume= 0.106 af, Depth= 5.60"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.23	96	Gravel surface, HSG C
0.00	98	Water Surface, HSG C
0.23	96	Weighted Average
0.23	96	99.32% Pervious Area
0.00	98	0.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4A: Subcat PR-4A

Runoff = 14.1 cfs @ 12.09 hrs, Volume= 1.165 af, Depth= 5.55"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.27	74	>75% Grass cover, Good, HSG C
0.03	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.17	98	Unconnected pavement, HSG C
2.52	95	Weighted Average
0.30	76	11.88% Pervious Area
2.22	98	88.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4B: Subcat PR-4B

Runoff = 6.8 cfs @ 12.09 hrs, Volume= 0.500 af, Depth= 3.93"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.42	74	>75% Grass cover, Good, HSG C
0.38	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.13	98	Unconnected pavement, HSG C
0.59	72	Woods/grass comb., Good, HSG C
1.53	81	Weighted Average
1.39	79	91.08% Pervious Area
0.14	98	8.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4C: Subcat PR-4C

Runoff = 6.5 cfs @ 12.09 hrs, Volume= 0.538 af, Depth= 5.74"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.42	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.67	98	Unconnected pavement, HSG C
1.12	97	Weighted Average
0.42	96	37.41% Pervious Area
0.70	98	62.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4D: Subcat PR-4D

Runoff = 6.6 cfs @ 12.09 hrs, Volume= 0.539 af, Depth= 5.60"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
1.12	96	Gravel surface, HSG C
0.01	98	Roofs, HSG C
0.02	98	Unconnected pavement, HSG C
1.16	96	Weighted Average
1.12	96	97.03% Pervious Area
0.03	98	2.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4E: Subcat PR-4E

Runoff = 3.8 cfs @ 12.09 hrs, Volume= 0.309 af, Depth= 5.50"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=6.07"

Area (ac)	CN	Description
0.07	74	>75% Grass cover, Good, HSG C
0.11	96	Gravel surface, HSG C
0.50	98	Unconnected pavement, HSG C
0.68	95	Weighted Average
0.18	87	26.59% Pervious Area
0.50	98	73.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond 017: Diversion Manhole

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 5.56" for 25-year event
Inflow = 24.5 cfs @ 12.09 hrs, Volume= 2.014 af
Outflow = 24.5 cfs @ 12.09 hrs, Volume= 2.014 af, Atten= 0%, Lag= 0.0 min
Primary = 9.9 cfs @ 12.09 hrs, Volume= 1.725 af
Routed to Pond 019 : Water Quality Unit
Secondary = 14.6 cfs @ 12.09 hrs, Volume= 0.289 af
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 9.21' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	7.30'	**24.0" Round Overflow** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 7.30' / 6.80' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Primary	5.80'	**15.0" Round Water Quality** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 5.80' / 5.70' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=9.8 cfs @ 12.09 hrs HW=9.16' TW=0.00' (Dynamic Tailwater)
↑—**2=Water Quality** (Inlet Controls 9.8 cfs @ 7.96 fps)

Secondary OutFlow Max=14.1 cfs @ 12.09 hrs HW=9.16' TW=0.00' (Dynamic Tailwater)
↑—**1=Overflow** (Inlet Controls 14.1 cfs @ 4.64 fps)

Stage-Area-Storage for Pond 017: Diversion Manhole

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
5.80	**0.000**	8.35	0.000
5.85	0.000	8.40	0.000
5.90	0.000	8.45	0.000
5.95	0.000	8.50	0.000
6.00	0.000	8.55	0.000
6.05	0.000	8.60	0.000
6.10	0.000	8.65	0.000
6.15	0.000	8.70	0.000
6.20	0.000	8.75	0.000
6.25	0.000	8.80	0.000
6.30	0.000	8.85	0.000
6.35	0.000	8.90	0.000
6.40	0.000	8.95	0.000
6.45	0.000	9.00	0.000
6.50	0.000	9.05	0.000
6.55	0.000	9.10	0.000
6.60	0.000	9.15	0.000
6.65	0.000	9.20	0.000
6.70	0.000	9.25	0.000
6.75	0.000	9.30	0.000
6.80	0.000		
6.85	0.000		
6.90	0.000		
6.95	0.000		
7.00	0.000		
7.05	0.000		
7.10	0.000		
7.15	0.000		
7.20	0.000		
7.25	0.000		
7.30	0.000		
7.35	0.000		
7.40	0.000		
7.45	0.000		
7.50	0.000		
7.55	0.000		
7.60	0.000		
7.65	0.000		
7.70	0.000		
7.75	0.000		
7.80	0.000		
7.85	0.000		
7.90	0.000		
7.95	0.000		
8.00	0.000		
8.05	0.000		
8.10	0.000		
8.15	0.000		
8.20	0.000		
8.25	0.000		
8.30	0.000		

Summary for Pond 019: Water Quality Unit

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 4.76" for 25-year event
Inflow = 9.9 cfs @ 12.09 hrs, Volume= 1.725 af
Primary = 9.9 cfs @ 12.09 hrs, Volume= 1.725 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 034: Water Quality Unit

Inflow Area = 0.23 ac, 78.09% Impervious, Inflow Depth = 5.42" for 25-year event
Inflow = 1.3 cfs @ 12.09 hrs, Volume= 0.105 af
Primary = 1.3 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 210: DMH 210

Inflow Area = 6.05 ac, 45.52% Impervious, Inflow Depth = 4.76" for 25-year event
Inflow = 29.8 cfs @ 12.11 hrs, Volume= 2.399 af
Outflow = 29.8 cfs @ 12.11 hrs, Volume= 2.399 af, Atten= 0%, Lag= 0.0 min
Primary = 29.8 cfs @ 12.11 hrs, Volume= 2.399 af
Routed to Link DP5 : Mount Hope Bay

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 7.64' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	4.80'	**30.0" Round Culvert** L= 175.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.80' / 2.00' S= 0.0160 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=29.4 cfs @ 12.11 hrs HW=7.59' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 29.4 cfs @ 5.98 fps)

Stage-Area-Storage for Pond 210: DMH 210

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
4.80	**0.000**	5.82	0.000	6.84	0.000
4.82	0.000	5.84	0.000	6.86	0.000
4.84	0.000	5.86	0.000	6.88	0.000
4.86	0.000	5.88	0.000	6.90	0.000
4.88	0.000	5.90	0.000	6.92	0.000
4.90	0.000	5.92	0.000	6.94	0.000
4.92	0.000	5.94	0.000	6.96	0.000
4.94	0.000	5.96	0.000	6.98	0.000
4.96	0.000	5.98	0.000	7.00	0.000
4.98	0.000	6.00	0.000	7.02	0.000
5.00	0.000	6.02	0.000	7.04	0.000
5.02	0.000	6.04	0.000	7.06	0.000
5.04	0.000	6.06	0.000	7.08	0.000
5.06	0.000	6.08	0.000	7.10	0.000
5.08	0.000	6.10	0.000	7.12	0.000
5.10	0.000	6.12	0.000	7.14	0.000
5.12	0.000	6.14	0.000	7.16	0.000
5.14	0.000	6.16	0.000	7.18	0.000
5.16	0.000	6.18	0.000	7.20	0.000
5.18	0.000	6.20	0.000	7.22	0.000
5.20	0.000	6.22	0.000	7.24	0.000
5.22	0.000	6.24	0.000	7.26	0.000
5.24	0.000	6.26	0.000	7.28	0.000
5.26	0.000	6.28	0.000	7.30	0.000
5.28	0.000	6.30	0.000	7.32	0.000
5.30	0.000	6.32	0.000	7.34	0.000
5.32	0.000	6.34	0.000	7.36	0.000
5.34	0.000	6.36	0.000	7.38	0.000
5.36	0.000	6.38	0.000	7.40	0.000
5.38	0.000	6.40	0.000	7.42	0.000
5.40	0.000	6.42	0.000	7.44	0.000
5.42	0.000	6.44	0.000	7.46	0.000
5.44	0.000	6.46	0.000	7.48	0.000
5.46	0.000	6.48	0.000	7.50	0.000
5.48	0.000	6.50	0.000	7.52	0.000
5.50	0.000	6.52	0.000	7.54	0.000
5.52	0.000	6.54	0.000	7.56	0.000
5.54	0.000	6.56	0.000	7.58	0.000
5.56	0.000	6.58	0.000	7.60	0.000
5.58	0.000	6.60	0.000	7.62	0.000
5.60	0.000	6.62	0.000	7.64	0.000
5.62	0.000	6.64	0.000		
5.64	0.000	6.66	0.000		
5.66	0.000	6.68	0.000		
5.68	0.000	6.70	0.000		
5.70	0.000	6.72	0.000		
5.72	0.000	6.74	0.000		
5.74	0.000	6.76	0.000		
5.76	0.000	6.78	0.000		
5.78	0.000	6.80	0.000		
5.80	0.000	6.82	0.000		

Summary for Pond PR-P3A: Offsite Subsurface Sand Filter

Inflow Area = 1.13 ac, 46.01% Impervious, Inflow Depth = 5.40" for 25-year event
Inflow = 6.3 cfs @ 12.09 hrs, Volume= 0.507 af
Outflow = 6.3 cfs @ 12.10 hrs, Volume= 0.507 af, Atten= 1%, Lag= 0.8 min
Primary = 6.3 cfs @ 12.10 hrs, Volume= 0.507 af
Routed to Pond 210 : DMH 210

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 9.02' @ 12.10 hrs Surf.Area= 790 sf Storage= 1,895 cf

Plug-Flow detention time= 87.9 min calculated for 0.507 af (100% of inflow)
Center-of-Mass det. time= 88.3 min (851.3 - 762.9)

Volume	Invert	Avail.Storage	Storage Description
#1	11.40'	19 cf	**2.00'D x 3.00'H Vertical Cone/Cylinder** x 2
#2A	5.40'	474 cf	**13.79'W x 57.25'L x 6.17'H Field A** 4,869 cf Overall - 3,685 cf Embedded = 1,184 cf x 40.0% Voids
#3A	6.90'	2,676 cf	**StormTrap ST1 SingleTrap 4-0** x 8 Inside #2 Inside= 82.7"W x 48.0"H => 23.79 sf x 14.06'L = 334.5 cf Outside= 82.7"W x 56.0"H => 32.18 sf x 14.06'L = 452.5 cf 8 Chambers in 2 Rows 13.79' x 56.25' Core + 0.00' x 0.50' Border = 13.79' x 57.25' System
		3,169 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Device 2	5.40'	**2.000 in/hr Exfiltration over Surface area**
#2	Primary	4.90'	**30.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.90' / 4.80' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf
#3	Device 2	8.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=6.3 cfs @ 12.10 hrs HW=9.02' TW=7.63' (Dynamic Tailwater)
└─**2=Culvert** (Passes 6.3 cfs of 27.9 cfs potential flow)
  ├─**1=Exfiltration** (Exfiltration Controls 0.0 cfs)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 6.2 cfs @ 2.58 fps)

Stage-Area-Storage for Pond PR-P3A: Offsite Subsurface Sand Filter

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
5.40	790	0
5.50	790	32
5.60	790	63
5.70	790	95
5.80	790	126
5.90	790	158
6.00	790	189
6.10	790	221
6.20	790	253
6.30	790	284
6.40	790	316
6.50	790	347
6.60	790	379
6.70	790	411
6.80	790	442
6.90	790	474
7.00	790	541
7.10	790	608
7.20	790	674
7.30	790	741
7.40	790	808
7.50	790	875
7.60	790	942
7.70	790	1,009
7.80	790	1,076
7.90	790	1,143
8.00	790	1,210
8.10	790	1,277
8.20	790	1,343
8.30	790	1,410
8.40	790	1,477
8.50	790	1,544
8.60	790	1,611
8.70	790	1,678
8.80	790	1,745
8.90	790	1,812
9.00	790	1,879
9.10	790	1,946
9.20	790	2,012
9.30	790	2,079
9.40	790	2,146
9.50	790	2,213
9.60	790	2,280
9.70	790	2,347
9.80	790	2,414
9.90	790	2,481
10.00	790	2,548
10.10	790	2,615
10.20	790	2,681
10.30	790	2,748
10.40	790	2,815
10.50	790	2,882
10.60	790	2,949
10.70	790	3,016
10.80	790	3,083
10.90	790	3,150
11.00	790	3,150
11.10	790	3,150
11.20	790	3,150
11.30	790	3,150
11.40	**796**	3,150
11.50	796	3,150
11.60	796	3,151
11.70	796	3,152
11.80	796	3,152
11.90	796	3,153
12.00	796	3,154
12.10	796	3,154
12.20	796	3,155
12.30	796	3,155
12.40	796	3,156
12.50	796	3,157
12.60	796	3,157
12.70	796	3,158
12.80	796	3,159
12.90	796	3,159
13.00	796	3,160
13.10	796	3,160
13.20	796	3,161
13.30	796	3,162
13.40	796	3,162
13.50	796	3,163
13.60	796	3,164
13.70	796	3,164
13.80	796	3,165
13.90	796	3,165
14.00	796	3,166
14.10	796	3,167
14.20	796	3,167
14.30	796	3,168
14.40	796	**3,169**

Summary for Link DP3: Lower Supply Basin

Inflow Area = 2.67 ac, 7.06% Impervious, Inflow Depth = 5.15" for 25-year event
Inflow = 14.6 cfs @ 12.09 hrs, Volume= 1.145 af
Primary = 14.6 cfs @ 12.09 hrs, Volume= 1.145 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 7.00 ac, 51.27% Impervious, Inflow Depth = 5.23" for 25-year event
Inflow = 37.8 cfs @ 12.09 hrs, Volume= 3.052 af
Primary = 37.8 cfs @ 12.09 hrs, Volume= 3.052 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 54.73 ac, 60.12% Impervious, Inflow Depth = 4.94" for 25-year event
Inflow = 194.7 cfs @ 12.10 hrs, Volume= 22.537 af
Primary = 194.7 cfs @ 12.10 hrs, Volume= 22.537 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PR-3A: Subcat PR-3A Runoff Area=0.93 ac 0.00% Impervious Runoff Depth=7.18"
Tc=6.0 min CN=96/0 Runoff=6.8 cfs 0.557 af

Subcatchment PR-3B: Subcat PR-3B Runoff Area=0.23 ac 78.09% Impervious Runoff Depth=6.98"
Tc=6.0 min CN=81/98 Runoff=1.7 cfs 0.136 af

Subcatchment PR-3C: Subcat PR-3C Runoff Area=1.13 ac 46.01% Impervious Runoff Depth=6.97"
Tc=6.0 min CN=91/98 Runoff=8.1 cfs 0.655 af

Subcatchment PR-3D: Subcat PR-3D Runoff Area=1.28 ac 0.35% Impervious Runoff Depth=6.24"
Tc=6.0 min CN=88/98 Runoff=8.7 cfs 0.663 af

Subcatchment PR-3E: Subcat PR-3E Runoff Area=0.23 ac 0.68% Impervious Runoff Depth=7.18"
Tc=6.0 min CN=96/98 Runoff=1.7 cfs 0.136 af

Subcatchment PR-4A: Subcat PR-4A Runoff Area=2.52 ac 88.12% Impervious Runoff Depth=7.11"
Tc=6.0 min CN=76/98 Runoff=18.0 cfs 1.494 af

Subcatchment PR-4B: Subcat PR-4B Runoff Area=1.53 ac 8.92% Impervious Runoff Depth=5.39"
Tc=6.0 min CN=79/98 Runoff=9.2 cfs 0.686 af

Subcatchment PR-4C: Subcat PR-4C Runoff Area=1.12 ac 62.59% Impervious Runoff Depth=7.33"
Tc=6.0 min CN=96/98 Runoff=8.2 cfs 0.687 af

Subcatchment PR-4D: Subcat PR-4D Runoff Area=1.16 ac 2.97% Impervious Runoff Depth=7.19"
Tc=6.0 min CN=96/98 Runoff=8.4 cfs 0.692 af

Subcatchment PR-4E: Subcat PR-4E Runoff Area=0.68 ac 73.41% Impervious Runoff Depth=7.07"
Tc=6.0 min CN=87/98 Runoff=4.8 cfs 0.398 af

Pond 017: Diversion Manhole Peak Elev=10.04' Inflow=31.2 cfs 2.584 af
Primary=11.2 cfs 2.128 af Secondary=20.0 cfs 0.456 af Outflow=31.2 cfs 2.584 af

Pond 019: Water Quality Unit Inflow=11.2 cfs 2.128 af
Primary=11.2 cfs 2.128 af

Pond 034: Water Quality Unit Inflow=1.7 cfs 0.136 af
Primary=1.7 cfs 0.136 af

Pond 210: DMH 210 Peak Elev=8.79' Inflow=39.2 cfs 3.162 af
30.0" Round Culvert n=0.012 L=175.0' S=0.0160 '/' Outflow=39.2 cfs 3.162 af

Pond PR-P3A: Offsite Subsurface Sand Filter Peak Elev=9.14' Storage=1,975 cf Inflow=8.1 cfs 0.655 af
Outflow=8.1 cfs 0.655 af

Link DP3: Lower Supply Basin Inflow=18.8 cfs 1.492 af
Primary=18.8 cfs 1.492 af

Link DP4: Taunton River (offsite)

Inflow=48.6 cfs 3.957 af
Primary=48.6 cfs 3.957 af

Link DP5: Mount Hope Bay

Inflow=234.1 cfs 29.472 af
Primary=234.1 cfs 29.472 af

Total Runoff Area = 10.80 ac Runoff Volume = 6.104 af Average Runoff Depth = 6.78"
60.20% Pervious = 6.50 ac 39.80% Impervious = 4.30 ac

Summary for Subcatchment PR-3A: Subcat PR-3A

Runoff = 6.8 cfs @ 12.09 hrs, Volume= 0.557 af, Depth= 7.18"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.93	96	Gravel surface, HSG C
0.93	96	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3B: Subcat PR-3B

Runoff = 1.7 cfs @ 12.09 hrs, Volume= 0.136 af, Depth= 6.98"
Routed to Pond 034 : Water Quality Unit

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.02	96	Gravel surface, HSG C
0.18	98	Unconnected pavement, HSG C
0.23	94	Weighted Average
0.05	81	21.91% Pervious Area
0.18	98	78.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3C: Subcat PR-3C

Runoff = 8.1 cfs @ 12.09 hrs, Volume= 0.655 af, Depth= 6.97"
Routed to Pond PR-P3A : Offsite Subsurface Sand Filter

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.13	74	>75% Grass cover, Good, HSG C
0.48	96	Gravel surface, HSG C
0.52	98	Unconnected pavement, HSG C
1.13	94	Weighted Average
0.61	91	53.99% Pervious Area
0.52	98	46.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3D: Subcat PR-3D

Runoff = 8.7 cfs @ 12.09 hrs, Volume= 0.663 af, Depth= 6.24"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.83	96	Gravel surface, HSG C
0.00	98	Unconnected pavement, HSG C
0.44	72	Woods/grass comb., Good, HSG C
1.28	88	Weighted Average
1.27	88	99.65% Pervious Area
0.00	98	0.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3E: Subcat PR-3E

Runoff = 1.7 cfs @ 12.09 hrs, Volume= 0.136 af, Depth= 7.18"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.23	96	Gravel surface, HSG C
0.00	98	Water Surface, HSG C
0.23	96	Weighted Average
0.23	96	99.32% Pervious Area
0.00	98	0.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4A: Subcat PR-4A

Runoff = 18.0 cfs @ 12.09 hrs, Volume= 1.494 af, Depth= 7.11"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.27	74	>75% Grass cover, Good, HSG C
0.03	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.17	98	Unconnected pavement, HSG C
2.52	95	Weighted Average
0.30	76	11.88% Pervious Area
2.22	98	88.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4B: Subcat PR-4B

Runoff = 9.2 cfs @ 12.09 hrs, Volume= 0.686 af, Depth= 5.39"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.42	74	>75% Grass cover, Good, HSG C
0.38	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.13	98	Unconnected pavement, HSG C
0.59	72	Woods/grass comb., Good, HSG C
1.53	81	Weighted Average
1.39	79	91.08% Pervious Area
0.14	98	8.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4C: Subcat PR-4C

Runoff = 8.2 cfs @ 12.09 hrs, Volume= 0.687 af, Depth= 7.33"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.42	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.67	98	Unconnected pavement, HSG C
1.12	97	Weighted Average
0.42	96	37.41% Pervious Area
0.70	98	62.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4D: Subcat PR-4D

Runoff = 8.4 cfs @ 12.09 hrs, Volume= 0.692 af, Depth= 7.19"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
1.12	96	Gravel surface, HSG C
0.01	98	Roofs, HSG C
0.02	98	Unconnected pavement, HSG C
1.16	96	Weighted Average
1.12	96	97.03% Pervious Area
0.03	98	2.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4E: Subcat PR-4E

Runoff = 4.8 cfs @ 12.09 hrs, Volume= 0.398 af, Depth= 7.07"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.66"

Area (ac)	CN	Description
0.07	74	>75% Grass cover, Good, HSG C
0.11	96	Gravel surface, HSG C
0.50	98	Unconnected pavement, HSG C
0.68	95	Weighted Average
0.18	87	26.59% Pervious Area
0.50	98	73.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond 017: Diversion Manhole

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 7.13" for 100-year event
Inflow = 31.2 cfs @ 12.09 hrs, Volume= 2.584 af
Outflow = 31.2 cfs @ 12.09 hrs, Volume= 2.584 af, Atten= 0%, Lag= 0.0 min
Primary = 11.2 cfs @ 12.09 hrs, Volume= 2.128 af
Routed to Pond 019 : Water Quality Unit
Secondary = 20.0 cfs @ 12.09 hrs, Volume= 0.456 af
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 10.04' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	7.30'	**24.0" Round Overflow** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 7.30' / 6.80' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Primary	5.80'	**15.0" Round Water Quality** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 5.80' / 5.70' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=11.1 cfs @ 12.09 hrs HW=9.93' TW=0.00' (Dynamic Tailwater)
↑—**2=Water Quality** (Inlet Controls 11.1 cfs @ 9.02 fps)

Secondary OutFlow Max=19.3 cfs @ 12.09 hrs HW=9.93' TW=0.00' (Dynamic Tailwater)
↑—**1=Overflow** (Inlet Controls 19.3 cfs @ 6.15 fps)

Stage-Area-Storage for Pond 017: Diversion Manhole

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
5.80	**0.000**	8.35	0.000
5.85	0.000	8.40	0.000
5.90	0.000	8.45	0.000
5.95	0.000	8.50	0.000
6.00	0.000	8.55	0.000
6.05	0.000	8.60	0.000
6.10	0.000	8.65	0.000
6.15	0.000	8.70	0.000
6.20	0.000	8.75	0.000
6.25	0.000	8.80	0.000
6.30	0.000	8.85	0.000
6.35	0.000	8.90	0.000
6.40	0.000	8.95	0.000
6.45	0.000	9.00	0.000
6.50	0.000	9.05	0.000
6.55	0.000	9.10	0.000
6.60	0.000	9.15	0.000
6.65	0.000	9.20	0.000
6.70	0.000	9.25	0.000
6.75	0.000	9.30	0.000
6.80	0.000	9.35	0.000
6.85	0.000	9.40	0.000
6.90	0.000	9.45	0.000
6.95	0.000	9.50	0.000
7.00	0.000	9.55	0.000
7.05	0.000	9.60	0.000
7.10	0.000	9.65	0.000
7.15	0.000	9.70	0.000
7.20	0.000	9.75	0.000
7.25	0.000	9.80	0.000
7.30	0.000	9.85	0.000
7.35	0.000	9.90	0.000
7.40	0.000	9.95	0.000
7.45	0.000	10.00	0.000
7.50	0.000		
7.55	0.000		
7.60	0.000		
7.65	0.000		
7.70	0.000		
7.75	0.000		
7.80	0.000		
7.85	0.000		
7.90	0.000		
7.95	0.000		
8.00	0.000		
8.05	0.000		
8.10	0.000		
8.15	0.000		
8.20	0.000		
8.25	0.000		
8.30	0.000		

Summary for Pond 019: Water Quality Unit

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 5.87" for 100-year event
Inflow = 11.2 cfs @ 12.09 hrs, Volume= 2.128 af
Primary = 11.2 cfs @ 12.09 hrs, Volume= 2.128 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 034: Water Quality Unit

Inflow Area = 0.23 ac, 78.09% Impervious, Inflow Depth = 6.98" for 100-year event
Inflow = 1.7 cfs @ 12.09 hrs, Volume= 0.136 af
Primary = 1.7 cfs @ 12.09 hrs, Volume= 0.136 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 210: DMH 210

Inflow Area = 6.05 ac, 45.52% Impervious, Inflow Depth = 6.28" for 100-year event
Inflow = 39.2 cfs @ 12.10 hrs, Volume= 3.162 af
Outflow = 39.2 cfs @ 12.10 hrs, Volume= 3.162 af, Atten= 0%, Lag= 0.0 min
Primary = 39.2 cfs @ 12.10 hrs, Volume= 3.162 af
Routed to Link DP5 : Mount Hope Bay

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 8.79' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	4.80'	**30.0" Round Culvert** L= 175.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.80' / 2.00' S= 0.0160 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=38.8 cfs @ 12.10 hrs HW=8.75' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 38.8 cfs @ 7.91 fps)

Stage-Area-Storage for Pond 210: DMH 210

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
4.80	**0.000**	7.35	0.000
4.85	0.000	7.40	0.000
4.90	0.000	7.45	0.000
4.95	0.000	7.50	0.000
5.00	0.000	7.55	0.000
5.05	0.000	7.60	0.000
5.10	0.000	7.65	0.000
5.15	0.000	7.70	0.000
5.20	0.000	7.75	0.000
5.25	0.000	7.80	0.000
5.30	0.000	7.85	0.000
5.35	0.000	7.90	0.000
5.40	0.000	7.95	0.000
5.45	0.000	8.00	0.000
5.50	0.000	8.05	0.000
5.55	0.000	8.10	0.000
5.60	0.000	8.15	0.000
5.65	0.000	8.20	0.000
5.70	0.000	8.25	0.000
5.75	0.000	8.30	0.000
5.80	0.000	8.35	0.000
5.85	0.000	8.40	0.000
5.90	0.000	8.45	0.000
5.95	0.000	8.50	0.000
6.00	0.000	8.55	0.000
6.05	0.000	8.60	0.000
6.10	0.000	8.65	0.000
6.15	0.000	8.70	0.000
6.20	0.000	8.75	0.000
6.25	0.000	8.80	0.000
6.30	0.000		
6.35	0.000		
6.40	0.000		
6.45	0.000		
6.50	0.000		
6.55	0.000		
6.60	0.000		
6.65	0.000		
6.70	0.000		
6.75	0.000		
6.80	0.000		
6.85	0.000		
6.90	0.000		
6.95	0.000		
7.00	0.000		
7.05	0.000		
7.10	0.000		
7.15	0.000		
7.20	0.000		
7.25	0.000		
7.30	0.000		

Summary for Pond PR-P3A: Offsite Subsurface Sand Filter

Inflow Area = 1.13 ac, 46.01% Impervious, Inflow Depth = 6.97" for 100-year event
Inflow = 8.1 cfs @ 12.09 hrs, Volume= 0.655 af
Outflow = 8.1 cfs @ 12.10 hrs, Volume= 0.655 af, Atten= 0%, Lag= 0.5 min
Primary = 8.1 cfs @ 12.10 hrs, Volume= 0.655 af
Routed to Pond 210 : DMH 210

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 9.14' @ 12.12 hrs Surf.Area= 790 sf Storage= 1,975 cf

Plug-Flow detention time= 71.8 min calculated for 0.655 af (100% of inflow)
Center-of-Mass det. time= 72.2 min (830.4 - 758.1)

Volume	Invert	Avail.Storage	Storage Description
#1	11.40'	19 cf	**2.00'D x 3.00'H Vertical Cone/Cylinder** x 2
#2A	5.40'	474 cf	**13.79'W x 57.25'L x 6.17'H Field A** 4,869 cf Overall - 3,685 cf Embedded = 1,184 cf x 40.0% Voids
#3A	6.90'	2,676 cf	**StormTrap ST1 SingleTrap 4-0** x 8 Inside #2 Inside= 82.7"W x 48.0"H => 23.79 sf x 14.06'L = 334.5 cf Outside= 82.7"W x 56.0"H => 32.18 sf x 14.06'L = 452.5 cf 8 Chambers in 2 Rows 13.79' x 56.25' Core + 0.00' x 0.50' Border = 13.79' x 57.25' System
		3,169 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Device 2	5.40'	**2.000 in/hr Exfiltration over Surface area**
#2	Primary	4.90'	**30.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.90' / 4.80' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf
#3	Device 2	8.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=7.0 cfs @ 12.10 hrs HW=9.13' TW=8.72' (Dynamic Tailwater)
└─**2=Culvert** (Passes 7.0 cfs of 15.2 cfs potential flow)
  ├─**1=Exfiltration** (Exfiltration Controls 0.0 cfs)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 6.9 cfs @ 2.46 fps)

Stage-Area-Storage for Pond PR-P3A: Offsite Subsurface Sand Filter

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
5.40	790	0
5.50	790	32
5.60	790	63
5.70	790	95
5.80	790	126
5.90	790	158
6.00	790	189
6.10	790	221
6.20	790	253
6.30	790	284
6.40	790	316
6.50	790	347
6.60	790	379
6.70	790	411
6.80	790	442
6.90	790	474
7.00	790	541
7.10	790	608
7.20	790	674
7.30	790	741
7.40	790	808
7.50	790	875
7.60	790	942
7.70	790	1,009
7.80	790	1,076
7.90	790	1,143
8.00	790	1,210
8.10	790	1,277
8.20	790	1,343
8.30	790	1,410
8.40	790	1,477
8.50	790	1,544
8.60	790	1,611
8.70	790	1,678
8.80	790	1,745
8.90	790	1,812
9.00	790	1,879
9.10	790	1,946
9.20	790	2,012
9.30	790	2,079
9.40	790	2,146
9.50	790	2,213
9.60	790	2,280
9.70	790	2,347
9.80	790	2,414
9.90	790	2,481
10.00	790	2,548
10.10	790	2,615
10.20	790	2,681
10.30	790	2,748
10.40	790	2,815
10.50	790	2,882
10.60	790	2,949
10.70	790	3,016
10.80	790	3,083
10.90	790	3,150
11.00	790	3,150
11.10	790	3,150
11.20	790	3,150
11.30	790	3,150
11.40	**796**	3,150
11.50	796	3,150
11.60	796	3,151
11.70	796	3,152
11.80	796	3,152
11.90	796	3,153
12.00	796	3,154
12.10	796	3,154
12.20	796	3,155
12.30	796	3,155
12.40	796	3,156
12.50	796	3,157
12.60	796	3,157
12.70	796	3,158
12.80	796	3,159
12.90	796	3,159
13.00	796	3,160
13.10	796	3,160
13.20	796	3,161
13.30	796	3,162
13.40	796	3,162
13.50	796	3,163
13.60	796	3,164
13.70	796	3,164
13.80	796	3,165
13.90	796	3,165
14.00	796	3,166
14.10	796	3,167
14.20	796	3,167
14.30	796	3,168
14.40	796	**3,169**

Summary for Link DP3: Lower Supply Basin

Inflow Area = 2.67 ac, 7.06% Impervious, Inflow Depth = 6.71" for 100-year event
Inflow = 18.8 cfs @ 12.09 hrs, Volume= 1.492 af
Primary = 18.8 cfs @ 12.09 hrs, Volume= 1.492 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 7.00 ac, 51.27% Impervious, Inflow Depth = 6.78" for 100-year event
Inflow = 48.6 cfs @ 12.09 hrs, Volume= 3.957 af
Primary = 48.6 cfs @ 12.09 hrs, Volume= 3.957 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 54.73 ac, 60.12% Impervious, Inflow Depth = 6.46" for 100-year event
Inflow = 234.1 cfs @ 12.10 hrs, Volume= 29.472 af
Primary = 234.1 cfs @ 12.10 hrs, Volume= 29.472 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PR-3A: Subcat PR-3A Runoff Area=0.93 ac 0.00% Impervious Runoff Depth=9.92"
Tc=6.0 min CN=96/0 Runoff=9.3 cfs 0.770 af

Subcatchment PR-3B: Subcat PR-3B Runoff Area=0.23 ac 78.09% Impervious Runoff Depth=9.69"
Tc=6.0 min CN=81/98 Runoff=2.3 cfs 0.189 af

Subcatchment PR-3C: Subcat PR-3C Runoff Area=1.13 ac 46.01% Impervious Runoff Depth=9.70"
Tc=6.0 min CN=91/98 Runoff=11.1 cfs 0.912 af

Subcatchment PR-3D: Subcat PR-3D Runoff Area=1.28 ac 0.35% Impervious Runoff Depth=8.93"
Tc=6.0 min CN=88/98 Runoff=12.1 cfs 0.949 af

Subcatchment PR-3E: Subcat PR-3E Runoff Area=0.23 ac 0.68% Impervious Runoff Depth=9.92"
Tc=6.0 min CN=96/98 Runoff=2.3 cfs 0.187 af

Subcatchment PR-4A: Subcat PR-4A Runoff Area=2.52 ac 88.12% Impervious Runoff Depth=9.83"
Tc=6.0 min CN=76/98 Runoff=24.6 cfs 2.064 af

Subcatchment PR-4B: Subcat PR-4B Runoff Area=1.53 ac 8.92% Impervious Runoff Depth=7.99"
Tc=6.0 min CN=79/98 Runoff=13.4 cfs 1.017 af

Subcatchment PR-4C: Subcat PR-4C Runoff Area=1.12 ac 62.59% Impervious Runoff Depth=10.07"
Tc=6.0 min CN=96/98 Runoff=11.2 cfs 0.943 af

Subcatchment PR-4D: Subcat PR-4D Runoff Area=1.16 ac 2.97% Impervious Runoff Depth=9.92"
Tc=6.0 min CN=96/98 Runoff=11.5 cfs 0.955 af

Subcatchment PR-4E: Subcat PR-4E Runoff Area=0.68 ac 73.41% Impervious Runoff Depth=9.80"
Tc=6.0 min CN=87/98 Runoff=6.6 cfs 0.551 af

Pond 017: Diversion Manhole Peak Elev=11.93' Inflow=42.8 cfs 3.570 af
Primary=13.9 cfs 2.805 af Secondary=28.9 cfs 0.765 af Outflow=42.8 cfs 3.570 af

Pond 019: Water Quality Unit Inflow=13.9 cfs 2.805 af
Primary=13.9 cfs 2.805 af

Pond 034: Water Quality Unit Inflow=2.3 cfs 0.189 af
Primary=2.3 cfs 0.189 af

Pond 210: DMH 210 Peak Elev=10.61' Inflow=50.5 cfs 4.499 af
30.0" Round Culvert n=0.012 L=175.0' S=0.0160 '/' Outflow=50.5 cfs 4.499 af

Pond PR-P3A: Offsite Subsurface Sand Filter Peak Elev=10.73' Storage=3,037 cf Inflow=11.1 cfs 0.912 af
Outflow=10.8 cfs 0.912 af

Link DP3: Lower Supply Basin Inflow=25.9 cfs 2.094 af
Primary=25.9 cfs 2.094 af

Link DP4: Taunton River (offsite) Inflow=67.4 cfs 5.530 af
Primary=67.4 cfs 5.530 af

Link DP5: Mount Hope Bay Inflow=298.4 cfs 41.603 af
Primary=298.4 cfs 41.603 af

Total Runoff Area = 10.80 ac Runoff Volume = 8.536 af Average Runoff Depth = 9.49"
60.20% Pervious = 6.50 ac 39.80% Impervious = 4.30 ac

Summary for Subcatchment PR-3A: Subcat PR-3A

Runoff = 9.3 cfs @ 12.09 hrs, Volume= 0.770 af, Depth= 9.92"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.93	96	Gravel surface, HSG C
0.93	96	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3B: Subcat PR-3B

Runoff = 2.3 cfs @ 12.09 hrs, Volume= 0.189 af, Depth= 9.69"
Routed to Pond 034 : Water Quality Unit

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.03	74	>75% Grass cover, Good, HSG C
0.02	96	Gravel surface, HSG C
0.18	98	Unconnected pavement, HSG C
0.23	94	Weighted Average
0.05	81	21.91% Pervious Area
0.18	98	78.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3C: Subcat PR-3C

Runoff = 11.1 cfs @ 12.09 hrs, Volume= 0.912 af, Depth= 9.70"
Routed to Pond PR-P3A : Offsite Subsurface Sand Filter

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.13	74	>75% Grass cover, Good, HSG C
0.48	96	Gravel surface, HSG C
0.52	98	Unconnected pavement, HSG C
1.13	94	Weighted Average
0.61	91	53.99% Pervious Area
0.52	98	46.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3D: Subcat PR-3D

Runoff = 12.1 cfs @ 12.09 hrs, Volume= 0.949 af, Depth= 8.93"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.83	96	Gravel surface, HSG C
0.00	98	Unconnected pavement, HSG C
0.44	72	Woods/grass comb., Good, HSG C
1.28	88	Weighted Average
1.27	88	99.65% Pervious Area
0.00	98	0.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-3E: Subcat PR-3E

Runoff = 2.3 cfs @ 12.09 hrs, Volume= 0.187 af, Depth= 9.92"
Routed to Link DP3 : Lower Supply Basin

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.23	96	Gravel surface, HSG C
0.00	98	Water Surface, HSG C
0.23	96	Weighted Average
0.23	96	99.32% Pervious Area
0.00	98	0.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4A: Subcat PR-4A

Runoff = 24.6 cfs @ 12.09 hrs, Volume= 2.064 af, Depth= 9.83"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.27	74	>75% Grass cover, Good, HSG C
0.03	96	Gravel surface, HSG C
0.05	98	Roofs, HSG C
2.17	98	Unconnected pavement, HSG C
2.52	95	Weighted Average
0.30	76	11.88% Pervious Area
2.22	98	88.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4B: Subcat PR-4B

Runoff = 13.4 cfs @ 12.09 hrs, Volume= 1.017 af, Depth= 7.99"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.42	74	>75% Grass cover, Good, HSG C
0.38	96	Gravel surface, HSG C
0.00	98	Roofs, HSG C
0.13	98	Unconnected pavement, HSG C
0.59	72	Woods/grass comb., Good, HSG C
1.53	81	Weighted Average
1.39	79	91.08% Pervious Area
0.14	98	8.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4C: Subcat PR-4C

Runoff = 11.2 cfs @ 12.09 hrs, Volume= 0.943 af, Depth=10.07"
Routed to Link DP4 : Taunton River (offsite)

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.42	96	Gravel surface, HSG C
0.04	98	Roofs, HSG C
0.67	98	Unconnected pavement, HSG C
1.12	97	Weighted Average
0.42	96	37.41% Pervious Area
0.70	98	62.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4D: Subcat PR-4D

Runoff = 11.5 cfs @ 12.09 hrs, Volume= 0.955 af, Depth= 9.92"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
1.12	96	Gravel surface, HSG C
0.01	98	Roofs, HSG C
0.02	98	Unconnected pavement, HSG C
1.16	96	Weighted Average
1.12	96	97.03% Pervious Area
0.03	98	2.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment PR-4E: Subcat PR-4E

Runoff = 6.6 cfs @ 12.09 hrs, Volume= 0.551 af, Depth= 9.80"
Routed to Pond 017 : Diversion Manhole

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2070 100-year Rainfall=10.40"

Area (ac)	CN	Description
0.07	74	>75% Grass cover, Good, HSG C
0.11	96	Gravel surface, HSG C
0.50	98	Unconnected pavement, HSG C
0.68	95	Weighted Average
0.18	87	26.59% Pervious Area
0.50	98	73.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond 017: Diversion Manhole

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 9.85" for 2070 100-year event
Inflow = 42.8 cfs @ 12.09 hrs, Volume= 3.570 af
Outflow = 42.8 cfs @ 12.09 hrs, Volume= 3.570 af, Atten= 0%, Lag= 0.0 min
Primary = 13.9 cfs @ 12.09 hrs, Volume= 2.805 af
Routed to Pond 019 : Water Quality Unit
Secondary = 28.9 cfs @ 12.09 hrs, Volume= 0.765 af
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 11.93' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	7.30'	**24.0" Round Overflow** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 7.30' / 6.80' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Primary	5.80'	**15.0" Round Water Quality** L= 10.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 5.80' / 5.70' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=13.6 cfs @ 12.09 hrs HW=11.73' TW=0.00' (Dynamic Tailwater)
↑—**2=Water Quality** (Inlet Controls 13.6 cfs @ 11.09 fps)

Secondary OutFlow Max=28.0 cfs @ 12.09 hrs HW=11.73' TW=0.00' (Dynamic Tailwater)
↑—**1=Overflow** (Inlet Controls 28.0 cfs @ 8.92 fps)

Stage-Area-Storage for Pond 017: Diversion Manhole

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
5.80	**0.000**	8.35	0.000	10.90	0.000
5.85	0.000	8.40	0.000	10.95	0.000
5.90	0.000	8.45	0.000	11.00	0.000
5.95	0.000	8.50	0.000	11.05	0.000
6.00	0.000	8.55	0.000	11.10	0.000
6.05	0.000	8.60	0.000	11.15	0.000
6.10	0.000	8.65	0.000	11.20	0.000
6.15	0.000	8.70	0.000	11.25	0.000
6.20	0.000	8.75	0.000	11.30	0.000
6.25	0.000	8.80	0.000	11.35	0.000
6.30	0.000	8.85	0.000	11.40	0.000
6.35	0.000	8.90	0.000	11.45	0.000
6.40	0.000	8.95	0.000	11.50	0.000
6.45	0.000	9.00	0.000	11.55	0.000
6.50	0.000	9.05	0.000	11.60	0.000
6.55	0.000	9.10	0.000	11.65	0.000
6.60	0.000	9.15	0.000	11.70	0.000
6.65	0.000	9.20	0.000	11.75	0.000
6.70	0.000	9.25	0.000	11.80	0.000
6.75	0.000	9.30	0.000	11.85	0.000
6.80	0.000	9.35	0.000		
6.85	0.000	9.40	0.000		
6.90	0.000	9.45	0.000		
6.95	0.000	9.50	0.000		
7.00	0.000	9.55	0.000		
7.05	0.000	9.60	0.000		
7.10	0.000	9.65	0.000		
7.15	0.000	9.70	0.000		
7.20	0.000	9.75	0.000		
7.25	0.000	9.80	0.000		
7.30	0.000	9.85	0.000		
7.35	0.000	9.90	0.000		
7.40	0.000	9.95	0.000		
7.45	0.000	10.00	0.000		
7.50	0.000	10.05	0.000		
7.55	0.000	10.10	0.000		
7.60	0.000	10.15	0.000		
7.65	0.000	10.20	0.000		
7.70	0.000	10.25	0.000		
7.75	0.000	10.30	0.000		
7.80	0.000	10.35	0.000		
7.85	0.000	10.40	0.000		
7.90	0.000	10.45	0.000		
7.95	0.000	10.50	0.000		
8.00	0.000	10.55	0.000		
8.05	0.000	10.60	0.000		
8.10	0.000	10.65	0.000		
8.15	0.000	10.70	0.000		
8.20	0.000	10.75	0.000		
8.25	0.000	10.80	0.000		
8.30	0.000	10.85	0.000		

Summary for Pond 019: Water Quality Unit

Inflow Area = 4.35 ac, 63.22% Impervious, Inflow Depth = 7.74" for 2070 100-year event
Inflow = 13.9 cfs @ 12.09 hrs, Volume= 2.805 af
Primary = 13.9 cfs @ 12.09 hrs, Volume= 2.805 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP4 : Taunton River (offsite)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 034: Water Quality Unit

Inflow Area = 0.23 ac, 78.09% Impervious, Inflow Depth = 9.69" for 2070 100-year event
Inflow = 2.3 cfs @ 12.09 hrs, Volume= 0.189 af
Primary = 2.3 cfs @ 12.09 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP3 : Lower Supply Basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Pond 210: DMH 210

Inflow Area = 6.05 ac, 45.52% Impervious, Inflow Depth = 8.93" for 2070 100-year event
Inflow = 50.5 cfs @ 12.10 hrs, Volume= 4.499 af
Outflow = 50.5 cfs @ 12.10 hrs, Volume= 4.499 af, Atten= 0%, Lag= 0.0 min
Primary = 50.5 cfs @ 12.10 hrs, Volume= 4.499 af
Routed to Link DP5 : Mount Hope Bay

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 10.61' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	4.80'	**30.0" Round Culvert** L= 175.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.80' / 2.00' S= 0.0160 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=50.4 cfs @ 12.10 hrs HW=10.59' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 50.4 cfs @ 10.26 fps)

Stage-Area-Storage for Pond 210: DMH 210

Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)	Elevation (feet)	Storage (acre-feet)
4.80	**0.000**	7.35	0.000	9.90	0.000
4.85	0.000	7.40	0.000	9.95	0.000
4.90	0.000	7.45	0.000	10.00	0.000
4.95	0.000	7.50	0.000	10.05	0.000
5.00	0.000	7.55	0.000	10.10	0.000
5.05	0.000	7.60	0.000	10.15	0.000
5.10	0.000	7.65	0.000	10.20	0.000
5.15	0.000	7.70	0.000	10.25	0.000
5.20	0.000	7.75	0.000	10.30	0.000
5.25	0.000	7.80	0.000	10.35	0.000
5.30	0.000	7.85	0.000	10.40	0.000
5.35	0.000	7.90	0.000	10.45	0.000
5.40	0.000	7.95	0.000	10.50	0.000
5.45	0.000	8.00	0.000	10.55	0.000
5.50	0.000	8.05	0.000	10.60	0.000
5.55	0.000	8.10	0.000	10.65	0.000
5.60	0.000	8.15	0.000		
5.65	0.000	8.20	0.000		
5.70	0.000	8.25	0.000		
5.75	0.000	8.30	0.000		
5.80	0.000	8.35	0.000		
5.85	0.000	8.40	0.000		
5.90	0.000	8.45	0.000		
5.95	0.000	8.50	0.000		
6.00	0.000	8.55	0.000		
6.05	0.000	8.60	0.000		
6.10	0.000	8.65	0.000		
6.15	0.000	8.70	0.000		
6.20	0.000	8.75	0.000		
6.25	0.000	8.80	0.000		
6.30	0.000	8.85	0.000		
6.35	0.000	8.90	0.000		
6.40	0.000	8.95	0.000		
6.45	0.000	9.00	0.000		
6.50	0.000	9.05	0.000		
6.55	0.000	9.10	0.000		
6.60	0.000	9.15	0.000		
6.65	0.000	9.20	0.000		
6.70	0.000	9.25	0.000		
6.75	0.000	9.30	0.000		
6.80	0.000	9.35	0.000		
6.85	0.000	9.40	0.000		
6.90	0.000	9.45	0.000		
6.95	0.000	9.50	0.000		
7.00	0.000	9.55	0.000		
7.05	0.000	9.60	0.000		
7.10	0.000	9.65	0.000		
7.15	0.000	9.70	0.000		
7.20	0.000	9.75	0.000		
7.25	0.000	9.80	0.000		
7.30	0.000	9.85	0.000		

Summary for Pond PR-P3A: Offsite Subsurface Sand Filter

Inflow Area = 1.13 ac, 46.01% Impervious, Inflow Depth = 9.70" for 2070 100-year event
Inflow = 11.1 cfs @ 12.09 hrs, Volume= 0.912 af
Outflow = 10.8 cfs @ 12.20 hrs, Volume= 0.912 af, Atten= 3%, Lag= 6.8 min
Primary = 10.8 cfs @ 12.20 hrs, Volume= 0.912 af
Routed to Pond 210 : DMH 210

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 10.73' @ 12.15 hrs Surf.Area= 790 sf Storage= 3,037 cf

Plug-Flow detention time= 55.5 min calculated for 0.911 af (100% of inflow)
Center-of-Mass det. time= 55.9 min (808.3 - 752.4)

Volume	Invert	Avail.Storage	Storage Description
#1	11.40'	19 cf	**2.00'D x 3.00'H Vertical Cone/Cylinder** x 2
#2A	5.40'	474 cf	**13.79'W x 57.25'L x 6.17'H Field A** 4,869 cf Overall - 3,685 cf Embedded = 1,184 cf x 40.0% Voids
#3A	6.90'	2,676 cf	**StormTrap ST1 SingleTrap 4-0** x 8 Inside #2 Inside= 82.7"W x 48.0"H => 23.79 sf x 14.06'L = 334.5 cf Outside= 82.7"W x 56.0"H => 32.18 sf x 14.06'L = 452.5 cf 8 Chambers in 2 Rows 13.79' x 56.25' Core + 0.00' x 0.50' Border = 13.79' x 57.25' System
		3,169 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Device 2	5.40'	**2.000 in/hr Exfiltration over Surface area**
#2	Primary	4.90'	**30.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 4.90' / 4.80' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf
#3	Device 2	8.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=26.9 cfs @ 12.20 hrs HW=10.22' TW=8.92' (Dynamic Tailwater)
└─**2=Culvert** (Inlet Controls 26.9 cfs @ 5.49 fps)
  ├─**1=Exfiltration** (Passes < 0.0 cfs potential flow)
  └─**3=Sharp-Crested Rectangular Weir** (Passes < 27.4 cfs potential flow)

Stage-Area-Storage for Pond PR-P3A: Offsite Subsurface Sand Filter

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
5.40	790	0
5.50	790	32
5.60	790	63
5.70	790	95
5.80	790	126
5.90	790	158
6.00	790	189
6.10	790	221
6.20	790	253
6.30	790	284
6.40	790	316
6.50	790	347
6.60	790	379
6.70	790	411
6.80	790	442
6.90	790	474
7.00	790	541
7.10	790	608
7.20	790	674
7.30	790	741
7.40	790	808
7.50	790	875
7.60	790	942
7.70	790	1,009
7.80	790	1,076
7.90	790	1,143
8.00	790	1,210
8.10	790	1,277
8.20	790	1,343
8.30	790	1,410
8.40	790	1,477
8.50	790	1,544
8.60	790	1,611
8.70	790	1,678
8.80	790	1,745
8.90	790	1,812
9.00	790	1,879
9.10	790	1,946
9.20	790	2,012
9.30	790	2,079
9.40	790	2,146
9.50	790	2,213
9.60	790	2,280
9.70	790	2,347
9.80	790	2,414
9.90	790	2,481
10.00	790	2,548
10.10	790	2,615
10.20	790	2,681
10.30	790	2,748
10.40	790	2,815
10.50	790	2,882
10.60	790	2,949
10.70	790	3,016
10.80	790	3,083
10.90	790	3,150
11.00	790	3,150
11.10	790	3,150
11.20	790	3,150
11.30	790	3,150
11.40	**796**	3,150
11.50	796	3,150
11.60	796	3,151
11.70	796	3,152
11.80	796	3,152
11.90	796	3,153
12.00	796	3,154
12.10	796	3,154
12.20	796	3,155
12.30	796	3,155
12.40	796	3,156
12.50	796	3,157
12.60	796	3,157
12.70	796	3,158
12.80	796	3,159
12.90	796	3,159
13.00	796	3,160
13.10	796	3,160
13.20	796	3,161
13.30	796	3,162
13.40	796	3,162
13.50	796	3,163
13.60	796	3,164
13.70	796	3,164
13.80	796	3,165
13.90	796	3,165
14.00	796	3,166
14.10	796	3,167
14.20	796	3,167
14.30	796	3,168
14.40	796	**3,169**

Summary for Link DP3: Lower Supply Basin

Inflow Area = 2.67 ac, 7.06% Impervious, Inflow Depth = 9.43" for 2070 100-year event
Inflow = 25.9 cfs @ 12.09 hrs, Volume= 2.094 af
Primary = 25.9 cfs @ 12.09 hrs, Volume= 2.094 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP4: Taunton River (offsite)

Inflow Area = 7.00 ac, 51.27% Impervious, Inflow Depth = 9.48" for 2070 100-year event
Inflow = 67.4 cfs @ 12.09 hrs, Volume= 5.530 af
Primary = 67.4 cfs @ 12.09 hrs, Volume= 5.530 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP5 : Mount Hope Bay

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP5: Mount Hope Bay

Inflow Area = 54.73 ac, 60.12% Impervious, Inflow Depth = 9.12" for 2070 100-year event
Inflow = 298.4 cfs @ 12.10 hrs, Volume= 41.603 af
Primary = 298.4 cfs @ 12.10 hrs, Volume= 41.603 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Attachment 4: Water Quality Calculations

TSS Removal Calculation Worksheet

VHB, Inc..
101 Walnut Street
Post Office Box 9151
Watertown, MA 02471
P 617.924.1770

Project Name:	**Submarine Cable Factory**	Sheet:	**1 of 2**
Project Number:	**15542.00**	Date:	**1-Jun-2023**
Location:	**Somerset, MA**	Computed by:	**EOB**
Discharge Point:	**DP5**	Checked by:	
Drainage Area(s):	**All**		

A	B	C	D	E
BMP*	TSS Removal Rate*	Starting TSS Load**	Amount Removed (C*D)	Remaining Load (D E)
Deep Sump and Hooded Catch Basin	**25%**	**1.00**	**0.25**	**0.75**
Sediment Forebay	**25%**	**0.75**	**0.19**	**0.56**
Sand Filter	**80%**	**0.56**	**0.45**	**0.11**
	0%	**0.11**	**0.00**	**0.11**
	0%	**0.11**	**0.00**	**0.11**

* BMP and TSS Removal Rate Values from the MassDEP Stormwater Handbook Vol. 1.
Removal rates for proprietary devices are from approved studies and/or manufacturer data (attach study or data source, or remove this sentence if not applicable).
** Equals remaining load from previous BMP (E)
*** Stormceptor sizing calculation gives a TSS removal rate of 87%. To be conservative, 80% removal is used for this calculation (Change name of device and the claimed removal rate shown on the calc. sheet. Remove this sentence if not applicable.

Treatment Train TSS Removal = **89%**

TSS Removal Calculation Worksheet

VHB, Inc..
101 Walnut Street
Post Office Box 9151
Watertown, MA 02471
P 617.924.1770

Project Name:	**Submarine Cable Factory**	Sheet:	**2of 2**
Project Number:	**15542.00**	Date:	**1-Jun-2023**
Location:	**Somerset, MA**	Computed by:	**EOB**
Discharge Point:	**DP3, DP4**	Checked by:	
Drainage Area(s):	**All**		

A	B	C	D	E
BMP*	TSS Removal Rate*	Starting TSS Load**	Amount Removed (C*D)	Remaining Load (D E)
Deep Sump and Hooded Catch Basin	**25%**	**1.00**	**0.25**	**0.75**
WQU	**50%**	**0.75**	**0.38**	**0.38**
	0%	**0.38**	**0.00**	**0.38**
	0%	**0.38**	**0.00**	**0.38**
	0%	**0.38**	**0.00**	**0.38**

* BMP and TSS Removal Rate Values from the MassDEP Stormwater Handbook Vol. 1. Removal rates for proprietary devices are from approved studies and/or manufacturer data (attach study or data source, or remove this sentence if not applicable).

** Equals remaining load from previous BMP (E)

*** Stormceptor sizing calculation gives a TSS removal rate of 87%. To be conservative, 80% removal is used for this calculation (Change name of device and the claimed removal rate shown on the calc. sheet. Remove this sentence if not applicable.

Treatment Train TSS Removal = **63%**

Water Quality Volume Calculations

Project	Submarine Cable Factory	**Project #**	15542
Calculated by	EOB	**Date**	June 2023
Checked by	KC	**Date**	June 2023

BASIN #PR-P3A - Offsite Subsurface Sand Filter

Runoff from subcatchment areas PR-3C

Water Quality Storm Runoff Depth	(in)	1.0
Total Roof Area	(ac)	0.00
Total Pavement Area	(ac)	0.52

SEDIMENT FOREBAY WQV:

Required Volume*:

Runoff Depth to be Treated (in)	Required Volume (ft^3)
0.1	**189**

Provided Volume:

Elevation	Area (ft^2)	Cumulative Volume (ft^3)
5.75	104	0
6.95	104	100
7.95	104	**184**

BASIN WQV:

Required Volume:

Runoff Depth to be Treated (in)		Required Volume (ft^3)
1.0		1,888
	75% WQV:	**1,416**

Provided Volume:

Elevation	Area (ft^2)	Cumulative Volume (ft^3)
5.75	790	0
7.95	790	608
9.25	790	**1,477**

FREEBOARD CHECK:

100-YR Peak Elevation:	9.2
Maximum Basin Elevation:	13.5
Basin Freeboard:	**4.3**

** Per MassDEP Treatment Requirement*

** Per Massachusetts Stormwater Handbook Volume 2 Chapter 2, design of Sand Filter references Georgia Stormwater Management Manual. As described the Georgia Stormwater Management Manual, "the entire treatment system … must temporarily hold at least 75% of the (water quality volume)". The total volume below the outfall weir must be equal to at least 75% of the required WQV.*

Computations

Project:	Submarine Cable Factory	Project #	15542.00
Location:	Somerset, MA	Sheet	1 of 1
Calculated by:	EOB	Date:	June 2023
Checked by:	KC	Date:	June 2023
Title	Sand Filter Area Sizing Calculations		
	BASIN #PR-P3A - Subsurface Sand Filter		

Sedimentation Basin Sizing

A_s = -Q/W ln (1-E)

A_s = sedimentation surface area (ft^2)
Q = discharge rate from drainage area (ft^3/s) = WQV/24hr
W = particle settling velocity (0.0004 ft/s recommended for silt)
E = sediment removal efficiency (assume 0.9 or 90%)

WQV =	189	ft^3
Q =	0.002	ft^3/s
W=	0.0004	ft/s
E=	0.9	
A_s=	**12.6**	**ft^2**

A_s Provided = 104 **ft^2**

Filter Bed Sizing (Sand Filter)

A_f =(WQV x d)/kt(h+d)

A_f = filter bed surface area (ft^2)
WQV = water quality volume (ft^3)
d = filter bed depth (ft)
k = hydraulic conductivity of filter media (ft/day) Typically 4 ft/day
t = time of water quality volume to drain from system (24 hours)
h = average height of water above filter bed during water quality design storm

WQV =	189	ft^3
d =	2	ft
k =	4	ft/day
t =	1	day
h =	2.00	ft
A_f =	**24**	**ft^2**
A_f Provided =	**790**	**ft^2**

Project: Brayton Point
Location: Somerset, MA
Prepared For: VHB

Purpose: To calculate the water quality flow rate (WQF) over a given site area. In this situation the WQF is derived from the first 1" of runoff from the contributing impervious surface.

Reference: Massachusetts Dept. of Environmental Protection Wetlands Program / United States Department of Agriculture Natural Resources Conservation Service TR-55 Manual

Procedure: Determine unit peak discharge using Figure 1 or 2. Figure 2 is in tabular form so is preferred. Using the tc, read the unit peak discharge (qu) from Figure 1 or Table in Figure 2. qu is expressed in the following units: cfs/mi^2/watershed inches (csm/in).

Compute Q Rate using the following equation:

Q = (qu) (A) (WQV)

where:

Q = flow rate associated with first 1" of runoff
qu = the unit peak discharge, in csm/in.
A = impervious surface drainage area (in square miles)
WQV = water quality volume in watershed inches (1" in this case)

Structure Name	Impv. (acres)	A (miles^2)	t_c (min)	t_c (hr)	WQV (in)	qu (csm/in.)	Q (cfs)
WQU 017	2.75	0.0042969	5.0	0.083	1.00	795.00	3.42
WQU 030	0.18	0.0002813	5.0	0.083	1.00	795.00	0.22

The WQf sizing calculation selects the minimum size CDS/Cascade/StormCeptor model capable of operating at the computed WQf peak flowrate prior to bypassing. It assumes free discharge of the WQf through the unit and ignores the routing effect of any upstream storm drain piping. As with all hydrodynamic separators, there will be some impact to the Hydraulic Gradient of the corresponding drainage system, and evaluation of this impact should be considered in the design.

CONTECH ENGINEERED SOLUTIONS

CDS TECHNOLOGIES

CDS ESTIMATED NET ANNUAL SOLIDS LOAD REDUCTION
BASED ON THE RATIONAL RAINFALL METHOD

BRAYTON POINT
SOMERSET, MA

Area	2.75 ac	Unit Site Designation	WQU 017
Weighted C	0.9	Rainfall Station #	68
t_c	5 min		
CDS Model	3020-6	CDS Treatment Capacity	**3.9 cfs**

Rainfall Intensity[1] (in/hr)	Percent Rainfall Volume[1]	Cumulative Rainfall Volume	Total Flowrate (cfs)	Treated Flowrate (cfs)	Incremental Removal (%)
0.02	9.3%	9.3%	0.05	0.05	9.0
0.04	9.5%	18.8%	0.10	0.10	9.0
0.06	8.7%	27.5%	0.15	0.15	8.3
0.08	10.1%	37.6%	0.20	0.20	9.5
0.10	7.2%	44.8%	0.25	0.25	6.7
0.12	6.0%	50.8%	0.30	0.30	5.5
0.14	6.3%	57.1%	0.35	0.35	5.8
0.16	5.6%	62.7%	0.40	0.40	5.1
0.18	4.7%	67.4%	0.45	0.45	4.2
0.20	3.6%	71.0%	0.50	0.50	3.2
0.25	8.2%	79.1%	0.62	0.62	7.1
0.50	14.9%	94.0%	1.24	1.24	11.4
0.75	3.2%	97.3%	1.86	1.86	2.1
1.00	1.2%	98.5%	2.48	2.48	0.7
1.50	0.7%	99.2%	3.71	3.71	0.2
2.00	0.8%	100.0%	4.95	3.90	0.2
					87.8
				Removal Efficiency Adjustment[2] =	6.5%
				Predicted % Annual Rainfall Treated =	93.4%
				Predicted Net Annual Load Removal Efficiency =	**81.4%**

1 - Based on 10 years of rainfall data from NCDC station 736, Blue Hill, Norfolk County, MA

2 - Reduction due to use of 60-minute data for a site that has a time of concentration less than 30-minutes.

CONTECH ENGINEERED SOLUTIONS

CDS TECHNOLOGIES

CDS ESTIMATED NET ANNUAL SOLIDS LOAD REDUCTION
BASED ON THE RATIONAL RAINFALL METHOD

BRAYTON POINT
SOMERSET, MA

Area	0.18 ac	Unit Site Designation	WQU 030
Weighted C	0.9	Rainfall Station #	68
t_c	5 min		
CDS Model	1515-3	CDS Treatment Capacity	**1.0 cfs**

Rainfall Intensity[1] (in/hr)	Percent Rainfall Volume[1]	Cumulative Rainfall Volume	Total Flowrate (cfs)	Treated Flowrate (cfs)	Incremental Removal (%)
0.02	9.3%	9.3%	0.00	0.00	9.1
0.04	9.5%	18.8%	0.01	0.01	9.2
0.06	8.7%	27.5%	0.01	0.01	8.4
0.08	10.1%	37.6%	0.01	0.01	9.7
0.10	7.2%	44.8%	0.02	0.02	6.9
0.12	6.0%	50.8%	0.02	0.02	5.8
0.14	6.3%	57.1%	0.02	0.02	6.0
0.16	5.6%	62.7%	0.03	0.03	5.3
0.18	4.7%	67.4%	0.03	0.03	4.5
0.20	3.6%	71.0%	0.03	0.03	3.4
0.25	8.2%	79.1%	0.04	0.04	7.7
0.50	14.9%	94.0%	0.08	0.08	13.7
0.75	3.2%	97.3%	0.12	0.12	2.9
1.00	1.2%	98.5%	0.16	0.16	1.1
1.50	0.7%	99.2%	0.24	0.24	0.6
2.00	0.8%	100.0%	0.32	0.32	0.6
					94.7
				Removal Efficiency Adjustment[2] =	6.5%
				Predicted % Annual Rainfall Treated =	93.5%
				Predicted Net Annual Load Removal Efficiency =	**88.3%**

1 - Based on 10 years of rainfall data from NCDC station 736, Blue Hill, Norfolk County, MA

2 - Reduction due to use of 60-minute data for a site that has a time of concentration less than 30-minutes.

Attachment 5: Operations and Maintenance Manual

OPERATIONS AND MAINTENANCE MANUAL

Submarine Cable Factory Primary Access Drive / Off-Site Improvements

Brayton Point Road
Somerset, Massachusetts

PREPARED FOR

Brayton Point LLC
1515 Des Peres Road – Suite 300
Saint Louis, Missouri 63131

PREPARED BY

1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

June 2023

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Project Information

Site

Submarine Cable Factory Off-Site Improvements
One Brayton Point Road
Somerset, MA

Owner

Brayton Point LLC
1515 Des Peres Road – Suite 300
Saint Louis, Missouri 63131

Environmental Compliance Manager

Name:	Elaine Pereira
Cell phone:	(508) 272-1798
Email:	epereira@braytonpointllc.com

Section A: Source Control

A Source Control

A comprehensive source control program will be implemented at the Off-Site Improvements, One Brayton Point Road, Somerset, MA (the Project), which includes the following components:

- Regular pavement sweeping in the public way
- Catch basin cleaning
- Clearing litter from the roadways, parking area, islands, and perimeter landscape areas
- Site-specific Spill Prevention training

Section B: Spill Prevention

B Spill Prevention

Site-specific Spill prevention equipment and training will be provided by BP LLC.

B.1 Initial Notification

In the event of a reportable quantity spill the onsite Environmental Compliance Manager and roadway improvements construction manager will each be notified immediately.

Environmental Compliance Manager (name):	Elaine Pereira
Environmental Compliance Manager (phone):	(508) 272-1798
Construction Manager (name) :	TBD
Construction Manager (phone):	TBD

If required, the on-site Environmental Compliance Manager will first contact the Fire Department and then notify one or more of the following local Somerset entities, as necessary: the Police Department, the Public Health Commission, the Conservation Commission, and/or the Harbor Master. The Fire Department is ultimately responsible for matters of public health and safety and should be notified immediately.

B.2 Further Notification

If required, and based on the assessment of the Compliance Manager and/or the Fire Chief, (or Deputy Fire Chief), a cleanup contractor may be called to assist. The Massachusetts Department of Environmental Protection DEP and the United States (US) Environmental Protection Agency, (EPA, and/or the US Coast Guard may also be notified depending upon volume, the nature and/or severity of the spill. The Compliance Manager with input from the Fire Chief will be responsible for determining the level of cleanup and notification required. The attached list of emergency phone numbers shall be posted in the main construction/facility office and will be readily accessible to all employees. A hazardous waste spill report shall be completed as necessary using the attached form. If the spill is not hazardous or is below the reportable quantity, and incident report shall be completed, as necessary, using the attached form.

Emergency Notification Phone Numbers

1. ENVIRONMENTAL COMPLIANCE MANAGER

Name: Elaine Pereira — Phone: (508) 272-1798

Home Phone:

Alternate On-site Contact: Jason Howard — Phone: (774) 955-6431

Beeper/Cell:

Home Phone:

Corporate Environmental Manager
Elizabeth Schlaeger — Office 9314) 835-2802/ Cell (314) 307-1734

2. FIRE & POLICE DEPARTMENT — Emergency: 911

Non-emergency, Deputy Chief; Jason Phillips — (508 646-2810

3. CLEANUP CONTRACTOR

Address: — Phone:

4. STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) — Emergency: (800) 340-1133

Andrew Cooney

5. NATIONAL RESPONSE CENTER — Phone: (800) 424-8802

Alternate: U.S. Environmental Protection Agency — Emergency: (800) 424-8802

Business: (800) 424-8802

6. MUNICIPAL HEALTH DEPARTMENT — Phone: (508) 646-2804

MUNICIPAL CONSERVATION COMMISSION: — Phone: (508) 646-2804

7. SOMERSET HARBOR MASTER: Bob Ganem — Phone: (401) 864-7372

Hazardous Waste & Oil Spill Report

Date: _____ **Time:** _____ **AM / PM**

Exact location: _____

Source of spill (include details of vehicle or equipment involved: _____ **Make:** _____ **Size:** _____

Serial Number; if applicable: _____ _____

_____ _____

Weather Conditions: _____ _____

On or near water? ☐ Yes ☐ No **If yes, name of body of water** _____

Type of chemical / oil spilled: _____

Amount of chemical / oil spilled: _____

Reportable Quantity? (Y/N): _____

Cause of spill: _____

Measures taken to contain or clean up spill: _____

Did sheen return after 24 hrs.? (Y/N):

If Y, measures taken to contain or clean up:

Amount of chemical / oil recovered: _____ **Method:** _____

Material collected as a result of cleanup:

_____ drums containing _____

_____ drums containing _____

_____ drums containing _____

Location and method of disposal: _____

Name and address of any person, firm, and/or corporation responsible for collection and disposal: _____

Procedures, method, and precautions instituted to prevent a similar occurrence from recurring: _____

Spill reported by: _____ _____

To the following agencies:

Fire Dept Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____
Police Dept Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____
MA DEP Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____
NRC Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____
Health Dept Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____
Conservation Commission Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____
Harbor Master Date:	_____	**Time:**	_____ **AM / PM**	**Inspector:**	_____

Additional comments: _____

B.3 Assessment – Initial Containment

The Environmental Compliance Manager will assess the incident and initiate containment control measures with the appropriate spill containment equipment included in the spill kit kept on-site. A list of recommended spill equipment to be kept on site is included below.

Fire / Police Department:	911
Fire Department – Non-Emergency	**(508) 646-2810**
Police Department – Non-Emergency:	**(508) 679-2138**
Town of Somerset Health Department Agent	**(508) 646-2804**
Town of Somerset Conservation Commission Agent:	**(508) 646-2804**

Emergency Response Equipment

The following equipment and materials shall be maintained at all times and stored in a secure area for long-term emergency response need.

Supplies	Quantity	Recommended Suppliers
› Sorbent Pillows/"Pigs"	2	http://www.newpig.com Item # KIT276 — mobile container with two pigs
› Sorbent Boom/Sock	25 feet	http://www.forestry-suppliers.com
› Sorbent Pads	50	
› Lite-Dri® Absorbent	5 pounds	
› Shovel	1	Item # 33934 — Shovel (or equivalent)
› Pry Bar	1	Item # 43210 — Manhole cover pick (or equivalent)
› Goggles	1 pair	Item # 23334 — Goggles (or equivalent)
› Gloves – Heavy	1 pair	Item # 90926 — Gloves (or equivalent)

Section C: Snow Management

C Snow Management

Snow storage areas are shown on the attached Map.

- Snow storage areas will be managed to prevent blockage of storm drain catch basins and stormwater drainage swales. Snow combined with sand and debris may block a storm drainage system, diminishing the infiltration capacity of the system and causing localized flooding.
- Sand and debris deposited on vegetated or paved areas shall be cleared from the site and properly disposed of at the end of the snow season, and no later than May 15.
- Snow shall not be dumped into any waterbody, pond, or wetland resource area.

Section D: Maintenance of Stormwater Management Systems

D Maintenance of Stormwater Management Systems

D.1 Pavement Systems

D.1.1 Asphalt Pavement

- Sweep or vacuum asphalt pavement areas four times per year, if necessary, with a rotary brush sweeper (or equivalent) and properly dispose of removed material.
- Recommended sweeping schedule:
    - Oct/Nov
    - Feb/Mar
    - Apr/May
    - Aug/Sep
- More frequent sweeping of paved surfaces would result in less accumulation in catch basins, less cleaning of subsurface structures, and less disposal costs.

D.2 Vegetated Stormwater Management Devices

D.2.1 Vegetated Areas Maintenance

Although not a structural component of the drainage system, the maintenance of vegetated areas may affect the functioning of the stormwater management system. This includes the health/density of vegetative cover and activities such as the application and disposal of lawn and garden care products, disposal of leaves and yard trimmings and proper aeration of soils.

- Inspect planted areas on a semi-annual basis and remove any litter.
- Maintain planted areas adjacent to pavement to prevent soil washout.
- Immediately clean any soil deposited on pavement.
- Re-seed bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming.
- Plant alternative mixture of grass species in the event of unsuccessful establishment.

- The grass vegetation should be cut to a height between five and six inches.
- Pesticide/Herbicide Usage – Only pesticides and herbicides deemed safe for use near waterways will be utilized in areas near stormwater conveyances, any uses will be for spot treatment purposes targeting a specific control application.
- Fertilizer usage should be minimized if not able to be avoided entirely. If deemed necessary, slow release fertilizer should be used. Fertilizer may be used to begin the establishment of vegetation in bare or damaged areas, but should not be applied on a regular basis unless necessary.
- Annual application of compost amendments and aeration are recommended.

D.3 Structural Stormwater Management Devices

D.3.1 Catch Basins / Double Catch Basins

The proper removal of sediments and associated pollutants and trash occurs only when catch basin inlets and sumps are cleaned out regularly. The more frequent the cleaning, the less likely sediments will be re-suspended and subsequently discharged. In addition, frequent cleaning also results in more volume available for future deposition and enhances the overall performance. As noted in the pavement Operation and Maintenance (O&M) section, more frequent sweeping of paved surfaces will result in less accumulation in catch basins, less cleaning of subsurface structures, and less disposal costs.

There are several catch basins at the Project. These catch basins are constructed with sumps (minimum 4 feet) and hooded outlets to trap debris, sediments, and floating contaminants. Disposal of all sediments and floating contaminants must be in accordance with applicable local, state, and federal guidelines. A map of the catch basin locations is included in Section E.5 Maintenance Checklists and Device Location Maps.

Inspections and Cleaning

- All catch basins shall be inspected at least four times per year and cleaned, as necessary.
- Sediment (if more than six inches deep) and/or floating contaminants shall be pumped from the basin and disposed of at an approved offsite facility in accordance with all applicable regulations.
- Any structural damage or other indication of malfunction will be reported to the Compliance Manager and repaired as necessary
- During colder periods, the catch basin grates must be kept free of snow and ice.
- During warmer periods, the catch basin grates must be kept free of leaves, litter, sand, and other debris.

D.3.2 Flared End Sections (Stormwater Outfalls)

The stormwater drainage system has several outfall locations where treated stormwater is discharged to adjacent waterbodies. A map of these locations is included in Section E.5 Maintenance Checklists and Device Location Maps.

- Annual inspections should be supplemented after large storms when washouts may occur.
- Maintain vegetation around outfalls to prevent blockages at the outfall.
- Maintain rip rap pad below each outfall and replace any washouts.
- Remove and dispose of any trash or debris at the outfall.

D.3.3 Underground Sand Filter (and associated Sedimentation Chambers)

There is one underground sand filter proposed off site.

- Inspect after every storm event greater than 1.5 inches for the first year and at least twice a year thereafter by removing the manhole/access port covers.
- Check the filter bed for standing water or other evidence of clogging, such as discolored or accumulated sediments. Sediment should be removed from the filter bed when the accumulations exceed one inch or when there is evidence that the capacity of the filter bed has been significantly reduced (i.e. drawdown time exceeds 36 to 48 hours). The material should be removed with rakes to avoid compaction of the filter bed.
- Check the sedimentation chamber for sediment accumulations, trash, and debris. Sediment should be removed from the forebay when it accumulates to a depth of more than 6 inches.
- Check inlets, outlets, underdrains, and overflow weirs annually for blockage.

D.3.4 Existing Oil/Water Separator

The stormwater drainage system has two oil/water separator structural water quality devices. This unit efficiently remove sediment and oils from stormwater runoff. A map showing the locations is included in Maintenance Checklists and Device Location Maps.

- Inspect device at least four time per year and clean, as necessary.

D.3.5 Water Quality Units

- Refer to included manufacturer documentation for Operations and Maintenance procedures.

Section E: Operations and Maintenance Plan Summary

E Operations and Maintenance Plan Summary

This Operation and Maintenance Plan has been prepared in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) and Water Quality Certification Regulations (314 CMR 9.00). This Operation and Maintenance Plan also demonstrates compliance with the Town of Somerset, Stormwater Management Regulations, dated June 8, 2021 for stormwater design and mitigation. It specifies operational practices and drainage system maintenance requirements for the Project. Requirements should be adjusted by the Compliance Manager as necessary to ensure successful functioning of system components.

E.1 Routine Maintenance Checklists

Routine required maintenance is described in Sections A – D. The following checklists are to be used by the Compliance Manager to implement and document the required maintenance and inspection tasks.

E.2 Reporting and Documentation

The Compliance Manager shall be responsible for ensuring that the scheduled tasks as described in this plan are appropriately completed and recorded in the Maintenance Log. Accurate records of all inspections, routine maintenance and repairs shall be documented and maintained on site.

The Maintenance Log shall:

- Document the completion of required maintenance tasks.
- Identify the person responsible for the completion of tasks.
- Identify any outstanding problems, malfunctions or inconsistencies identified during the course of routine maintenance, and
- Document specific repairs or replacements.

E.3 Construction Practices Maintenance/ Evaluation Checklist

Project Name – City, State

Best Management Practice	Inspection Frequency	Date Inspected	Inspector Initials	Minimum Maintenance and Key Items to Check	Cleaning or Repair Needed ☐Yes/No (List Items)	Date of Cleaning or Repair	Performed by:
Hay Bales/ Silt Fencing	Weekly and after a 0.25 inch rainfall			Sediment build up, broken bales or stakes			
Gravel Construction Entrance	Weekly and after a 0.25 inch rainfall			Filled voids, runoff/sediments into street			
Catch Basin / Protection	Weekly and after 0.25 inch rainfall			Clogged or sediment build-up at surface or in basin			
Temporary Sedimentation Basins	Weekly and after a 0.25 inch rainfall			Cracking, erosion, breakout, sediment buildup, contaminants			

Compliance Manager: _____

E.4 Long-term Maintenance/Evaluation Checklist

Project Name – City, State

Best Management Practice	Minimum Maintenance and Key Items to Check	Inspection Frequency	Date Inspected	Inspector Initials	Cleaning Frequency	Cleaning or Repair Needed ☐Yes/No	Date of Cleaning or Repair	Performed by:
Street Sweeping	Vacuum sweeper	4X per year			4X per year* minimum			
Catch Basins	Remove sediment if 6" deep and remove floatables	4X per year			1X per year			
Outfall Structures	Remove debris and excess vegetation, replace any dislodged riprap	1x per year			As necessary			
Underground Sand Filter	Remove sediment if > 12 Inches	1X per year			As necessary			
Oil/Water Separator	Clean as necessary	4X per year			As necessary			
Water Quality Units	Per manufacturer documentation							

* Recommend sweeping Oct/Nov, Feb/Mar, Apr/May Jul/Aug with late winter most important

Compliance Manager: _____

E.5 Maintenance Checklists and Device Location Maps

These checklists are provided for the site staff to photocopy and use when conducting inspections and cleaning activities to the stormwater management systems.

Catch Basins – Inspect 4 times per year, clean when sediment depth >6 inches or at least once per year.

Catch Basin	Inspected (Y/N)	Sediment Depth (inches)	Cleaning needed (Y/N)	Date Cleaned	**Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)**
CB 001				/ /	
CB 002				/ /	
CB 012				/ /	
CB 010				/ /	
CB 032.1				/ /	
DCB 008				/ /	
DCB 213				/ /	
CB EX1				/ /	
CB EX2				/ /	
CB EX3				/ /	
CB EX4				/ /	
CB EX5				/ /	
CB EX6				/ /	
CB EX7				/ /	
CB EX8				/ /	
CB EX9				/ /	
CB EX10				/ /	
CB EX12				/ /	
CB EX13				/ /	
CB EX14				/ /	
CB EX15				/ /	
CB EX16				/ /	
CB EX17				/ /	
CB EX.S				/ /	

Oil/Water Separator – Inspect 4 times per year, clean 1 time per year.

Unit Number	Inspected (Y/N)	Sediment Depth (inches)	Cleaning needed (Y/N)	Date Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
O/W 010				/ /	

Outfalls – Inspect 1 time per year, clean 1 time per year.

Unit Number	Inspected (Y/N)	Sediment Depth (inches)	Cleaning needed (Y/N)	Date Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
FES 001				/ /	
FES 707				/ /	
FES LSB-3				/ /	
FES 212				/ /	

Underground Sand Filter – Inspect 2 times per year, and after a major storm.

Unit Number	Inspected (Y/N)	Sediment Depth (inches)	Cleaning needed (Y/N)	Date Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
UGSF P3A				/ /	

Water Quality Units – per manufacturer recommendations

Unit Number	Inspected (Y/N)	Sediment Depth (inches)	Cleaning needed (Y/N)	Date Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
WQU 017				/ /	
WQU 030				/ /	

Device Location Maps

Guard House

Substation Building

Impulse and Routine Test Lab

Fire Pump

Raw Material Storage Building

Prequalification and Test Lab

Employee Support Facility

Manufacturing Building and Office

Fixed Cable Storage Building

Cable Storage Building

FES-212

UGSF-P3A

DCB-213

CB-032.1

FES-LSB-3

CB-214.1

CB-EX. S

WQU-030

CB-EX10

CB-010

CB-012

CB-EX7

CB-EX9

CB-EX8

CB-EX5

CB-EX6

CB-EX4

CB-EX12

CB-EX13

CB-EX14

CB-EX3

CB-EX2

CB-EX1

FES-001

WQU-018

DCB-008

FES-707

O/W 010

CB-EX15

CB-EX16

CB-EX17

CB-001

CB-002

Legend

CB	CATCH BASIN
DCB	DOUBLE CATCH BASIN
FES	FLARED END SECTION
O/W	OIL/WATER SEPARATOR
UGSF	UNDERGROUND SAND FILTER
WQU	WATER QUALITY UNIT

Offsite Primary Access Roadway
Operations and Maintenance Plan
Brayton Point LLC
Somerset, MA

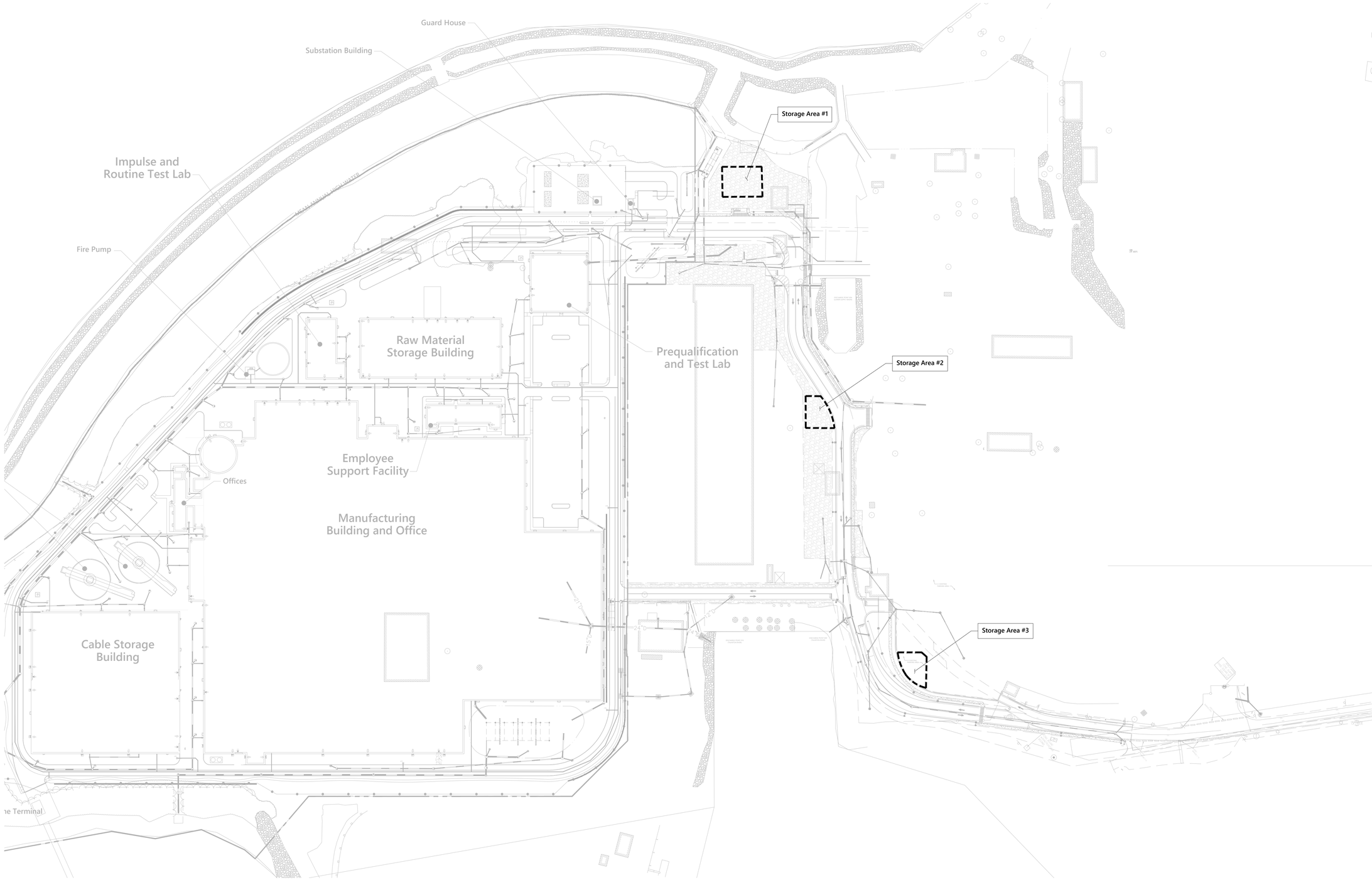
O&M (Offsite)

June 2023

Saved Wednesday, May 31, 2023 5:35:58 PM ERICOBRIEN Plotted Wednesday, May 31, 2023 5:45:48 PM Eric O'Brien

Snow Storage Areas Map

\\vhb\gbl\proj\Boston\15542.00\cad\ld\Eng\Stormwater\Offsite O&M Location Plan.dwg



Legend

SNOW STORAGE AREAS

Offsite Primary Access Roadway
Snow Storage Plan
Brayton Point LCC
Somerset, MA

SS(Offsite)

June 2023

Saved Thursday, April 13, 2023 11:08:00 AM CMONTEIRO Plotted Wednesday, May 31, 2023 5:10:01 PM Eric O'Brien

Section F: Product Literature

MAINTENANCE PROCEDURE

THE FOLLOWING PROCEDURES ARE FOR THE MAINTENANCE OF STORMTRAP AS SUGGESTED BY STORMTRAP, LLC. ALL REGULATIONS SET BY GOVERNING BODIES RETAIN PRECEDENCE OVER THE SUBSEQUENT INSTRUCTIONS.

DO NOT ENTER STORMTRAP UNLESS PROPERLY TRAINED, EQUIPPED, AND QUALIFIED TO ENTER A CONFINED SPACE AS IDENTIFIED BY LOCAL OCCUPATIONAL SAFETY AND HEALTH REGULATIONS.

STORMTRAP RECOMMENDS AN ANNUAL INSPECTION. FREQUENCY OF CLEANING WILL VARY DUE TO SITE CONDITIONS AND STORAGE CAPACITY. MAINTENANCE IS REQUIRED EVERY 3 TO 5 YEARS OR WHEN SEDIMENT OCCUPIES MORE THAN ONE-TENTH OF THE SYSTEM'S VOLUME. INSPECTIONS SHOULD BE PART OF STANDARD OPERATING PROCEDURE.

MAINTENANCE IS PERFORMED USING A VACUUM TRUCK. REMOVE COVER FROM UNIT AT GRADE AND LOWER HOSE INTO STORMTRAP SYSTEM. VACUUM TRUCKS ARE ABLE TO REMOVE MATERIAL FROM A MAXIMUM DISTANCE OF THIRTY-TWO FEET BELOW GRADE. SEDIMENT MAY BE FLUSHED TOWARD A SPECIFIC POINT OR AREA OF THE STORMTRAP SYSTEM AT THE DISCRETION OF THE OWNER (PREFERABLY DIRECTLY BELOW AN ACCESS OPENING FOR EASE OF REMOVAL).

CONTECH®
ENGINEERED SOLUTIONS

CDS® Inspection and Maintenance Guide



CDS TECHNOLOGIES

Maintenance

The CDS system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit. For example, unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (e.g. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment washdown areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

The visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet and separation screen. The inspection should also quantify the accumulation of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (cylinder and screen) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained outside the screen. For deep units, a single manhole access point would allows both sump cleanout and access outside the screen.

The CDS system should be cleaned when the level of sediment has reached 75% of capacity in the isolated sump or when an appreciable level of hydrocarbons and trash has accumulated. If absorbent material is used, it should be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Particles at the top of the pile typically offer less resistance to the end of the rod than consolidated particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine weather the height of the sediment pile off the bottom of the sump floor exceeds 75% of the total height of isolated sump.

Cleaning

Cleaning of a CDS systems should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should also be cleaned out if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill should be cleaned out immediately. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. The screen should be power washed to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure that proper safety precautions have been followed. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the CDS system should be done in accordance with local regulations. In many jurisdictions, disposal of the sediments may be handled in the same manner as the disposal of sediments removed from catch basins or deep sump manholes.



CDS Model	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	y^3	m^3
CDS1515	3	0.9	3.0	0.9	0.5	0.4
CDS2015	4	1.2	3.0	0.9	0.9	0.7
CDS2015	5	1.3	3.0	0.9	1.3	1.0
CDS2020	5	1.3	3.5	1.1	1.3	1.0
CDS2025	5	1.3	4.0	1.2	1.3	1.0
CDS3020	6	1.8	4.0	1.2	2.1	1.6
CDS3025	6	1.8	4.0	1.2	2.1	1.6
CDS3030	6	1.8	4.6	1.4	2.1	1.6
CDS3035	6	1.8	5.0	1.5	2.1	1.6
CDS4030	8	2.4	4.6	1.4	5.6	4.3
CDS4040	8	2.4	5.7	1.7	5.6	4.3
CDS4045	8	2.4	6.2	1.9	5.6	4.3
CDS5640	10	3.0	6.3	1.9	8.7	6.7
CDS5653	10	3.0	7.7	2.3	8.7	6.7
CDS5668	10	3.0	9.3	2.8	8.7	6.7
CDS5678	10	3.0	10.3	3.1	8.7	6.7

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities



Support

- Drawings and specifications are available at www.contechstormwater.com.
- Site-specific design support is available from our engineers.

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Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater, earth stabilization and wastewater treament products. For information, visit www.ContechES.com or call 800.338.1122

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The product(s) described may be protected by one or more of the following US patents: 5,322,629; 5,624,576; 5,707,527; 5,759,415; 5,788,848; 5,985,157; 6,027,639; 6,350,374; 6,406,218; 6,641,720; 6,511,595; 6,649,048; 6,991,114; 6,998,038; 7,186,058; 7,296,692; 7,297,266; 7,517,450 related foreign patents or other patents pending.

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ENGINEERED SOLUTIONS
800.925.5240
www.ContechES.com

CDS Inspection & Maintenance Log

CDS Model: _____ Location: _____

Date	Water depth to sediment[1]	Floatable Layer Thickness[2]	Describe Maintenance Performed	Maintenance Personnel	Comments

1. The water depth to sediment is determined by taking two measurements with a stadia rod: one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. If the difference between these measurements is less than the values listed in table 1 the system should be cleaned out. **Note: to avoid underestimating the volume of sediment in the chamber, the measuring device must be carefully lowered to the top of the sediment pile.**

2. For optimum performance, the system should be cleaned out when the floating hydrocarbon layer accumulates to an appreciable thickness. In the event of an oil spill, the system should be cleaned immediately.

Attachment 6: Illicit Discharge Compliance Statement

Illicit Discharge Compliance Statement

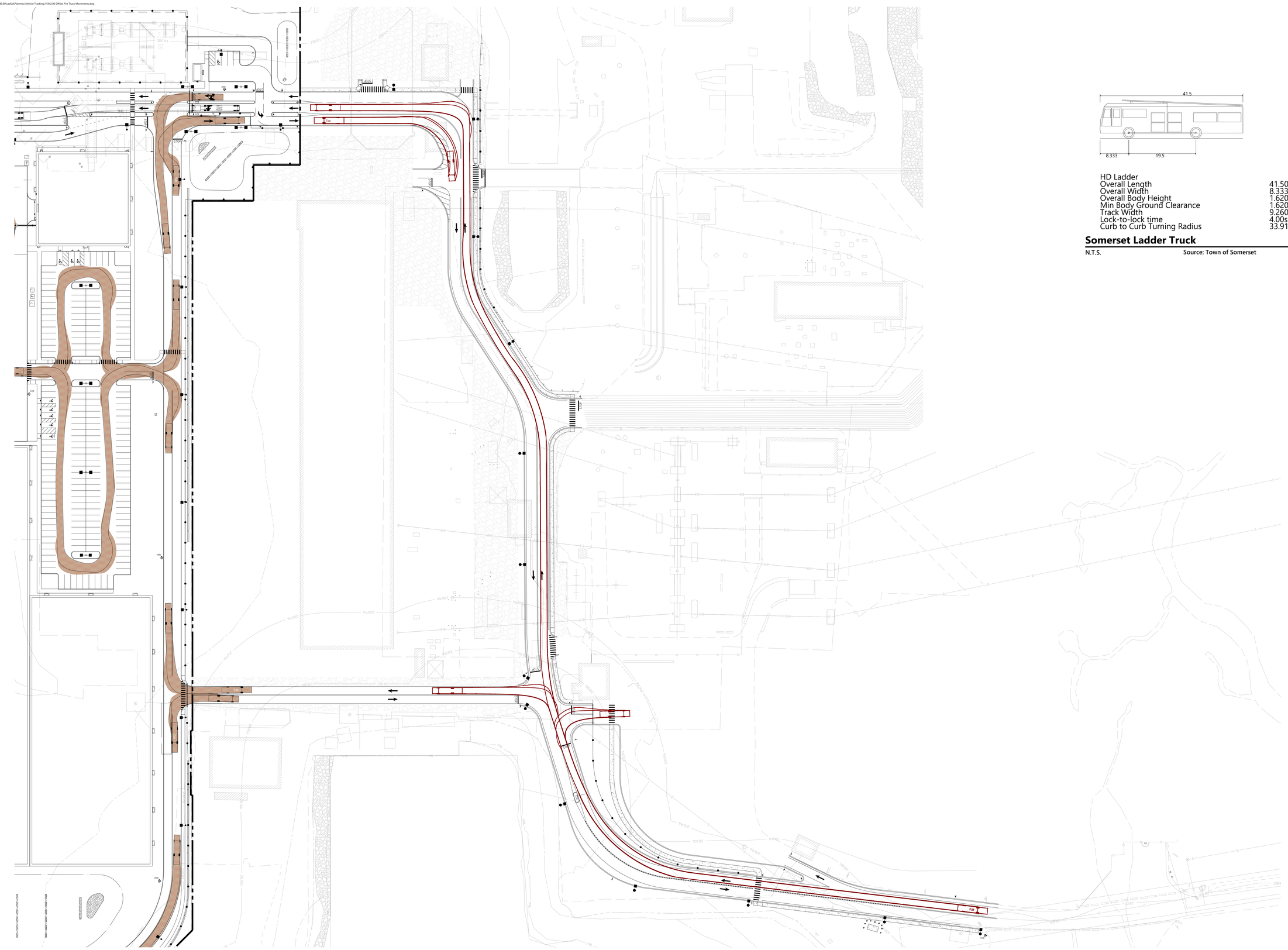
I, as Owner, certify the following as they pertain to the proposed Primary Access Roadway redevelopment at 1 Brayton Point Road, Somerset, MA:

All known sanitary sewer services not currently in use within the Primary Access Roadway redevelopment area which were part of the previous development on this site are or will be completely removed during the roadway redevelopment. The design plans submitted with this report have been designed in full compliance with current standards, including proposing separate sanitary sewer and storm drain systems. The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges.

BRAYTON POINT LLC
a Missouri Limited Liability Company:

By: Environmental Liability Transfer, Inc.
Its: Manager

By: _____ Dated: 4-12-23
Printed Name: Tom Roberts
Title: President



HD Ladder	
Overall Length	41.500ft
Overall Width	8.333ft
Overall Body Height	1.620ft
Min Body Ground Clearance	1.620ft
Track Width	9.260ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	33.917ft

Somerset Ladder Truck

N.T.S. Source: Town of Somerset

Offsite Emergency Access Plan

Prysmian Brayton Point

Somerset, MA

Source:
Prepared for:
Date: **June 2023**

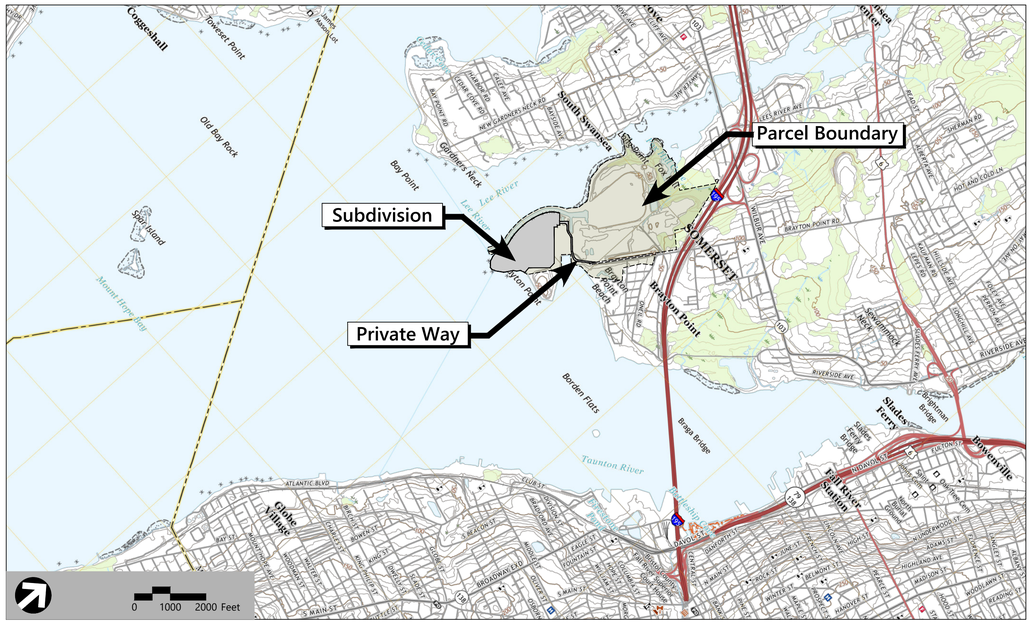
0 40 80 160 Feet

Site Plans

Issued for:	Definitive Subdivision
Date Issued:	June 02, 2023
Latest Issue:	June 02, 2023

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts



Sheet Index

No.	Drawing Title	Latest Issue
C-1.00	Legend and General Notes	6/2/2023
C- 1.01	Locus and Abutter Plan	6/2/2023
C-2.01 to C-2.02	Layout and Materials Plans	6/2/2023
C-2.03	Typical Cross Sections	6/2/2023
C-3.01 to C-3.02	Grading, Drainage, and Erosion Control Plans	6/2/2023
C-4.01 to C-4.02	Utility Plans	6/2/2023
C-5.01 to C-5.04	Plan and Profile Sheets	6/2/2023
C-6.01- C-6.03	Site Details	6/2/2023
SV-1 to SV-10	Plan of Land in Somerset Massachussets	Oct. 11, 2022

Reference Drawings

No.	Drawing Title	Latest Issue
1	Site Topographic Map Brayton Point Point, LLC Somerset Massachusetts	5/10/2023
E2-05	Primary Access Rd. Photometric Plan	4/21/2023

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1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

_____
_____
_____
_____
_____
_____
_____

DATE: _____

Subject to a covenant duly executed dated _____ day of _____, 20__, running with the land, to be duly recorded by or for the owner of record.

This plan is subject to all conditions of the Somerset Planning Board Certificate of Action date _____ filed with the Somerset Town Clerk on _____ and herewith recorded as a part of this plan.

I hereby certify that there has been no appeal taken from this Planning Board action during the 20 day statutory appeal period.

Date: _____

_____
Town Clerk, Town of Somerset

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Applicant

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Louis, MO 63131

Assessor's Map: A2 Lot 2

VHB Project : 15542.00
Issued for : Definitive Subdivision

\\VHBVGBL\PROJ\BOSTON\15542.00\CAD\LD\PLANSET\SUBDIVISION\15542.00 PRELIM SUBDIVISION COV 2. June 2023

Legend

Exist.	Prop.	
		PROPERTY LINE
		PROJECT LIMIT LINE
		RIGHT-OF-WAY/PRIVATE WAY
		EASEMENT
		BUILDING SETBACK
		PARKING SETBACK
10+00	10+00	BASELINE
		CONSTRUCTION LAYOUT
		ZONING LINE
		TOWN LINE
		LIMIT OF DISTURBANCE
		WETLAND LINE WITH FLAG
		FLOODPLAIN
HWL	HWL	HIGH WATER LINE (MEAN HIGH WATER)
LSCSF AE/VE ZONE	LSCSF AE/VE ZONE	LAND SUBJECT TO COASTAL STORM FLOWAGE (AE AND/OR VE ZONE)
TCB	TCB	TOP OF COASTAL BANK
100'BZ	100'BZ	100' BUFFER ZONE
200'RA	200'RA	200' RIVERBANK AREA
CH91	CH91	CHAPTER 91 JURISDICTION
MWE	MWE	MASSGIS WETLAND EDGE
WF	WF	FLAGGED WETLAND EDGE
		GRAVEL ROAD
EOP	EOP	EDGE OF PAVEMENT
BB	BB	BITUMINOUS BERM
BC	BC	BITUMINOUS CURB
CC	CC	CONCRETE CURB
CG	CG	CURB AND GUTTER
CE	ECC	EXTRUDED CONCRETE CURB
CC	MCC	MONOLITHIC CONCRETE CURB
CC	PCC	PRECAST CONC. CURB
SGE	SGE	SLOPED GRAN. EDGING
VGC	VGC	VERT. GRAN. CURB
		LIMIT OF CURB TYPE
		SAWCUT
		BUILDING
	EN	BUILDING ENTRANCE
	LD	LOADING DOCK
	RD	ROLL UP DOOR
		BOLLARD
D	D	DUMPSTER PAD
		SIGN
		DOUBLE SIGN
		STEEL GUARDRAIL
		WOOD GUARDRAIL
		PATH
		TREE LINE
		WIRE FENCE
		FENCE
		STOCKADE FENCE
		STONE WALL
		RETAINING WALL
		STREAM / POND / WATER COURSE
		DETENTION BASIN
		HAY BALES
		SILT FENCE
		SILT SOCK
		SILT SOCK / SILT FENCE
		TURBIDITY CURTAIN
4	4	MINOR CONTOUR
20	20	MAJOR CONTOUR
10	10	PARKING COUNT
	C10	COMPACT PARKING STALLS
DYL	DYL	DOUBLE YELLOW LINE
SL	SL	STOP LINE
		CROSSWALK
		ACCESSIBLE CURB RAMP
		ACCESSIBLE PARKING
VAN	VAN	VAN-ACCESSIBLE PARKING

Exist.	Prop.	
		CONCRETE
		HEAVY DUTY PAVEMENT
		BUILDINGS
		RIPRAP
		CONSTRUCTION EXIT
27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
132.75 ×	132.75 ×	SPOT ELEVATION
45.0 TW× 38.5 BW	45.0 TW× 38.5 BW	TOP & BOTTOM OF WALL ELEVATION
		BORING LOCATION
		TEST PIT LOCATION
MW	MW	MONITORING WELL
UD	UD	UNDERDRAIN
12"D	12"D	DRAIN
6"RD	6"RD	ROOF DRAIN
12"S	12"S	SEWER
FM	FM	FORCE MAIN
OHW	OHW	OVERHEAD WIRE
6"W	6"W	WATER
4"FP	4"FP	FIRE PROTECTION
	2"DW	DOMESTIC WATER
3"G	G	GAS
E	E	ELECTRIC
STM	STM	STEAM
T	T	TELEPHONE
FA	FA	FIRE ALARM
CATV	CATV	CABLE TV
CA	CA	COMPRESSED AIR
		CATCH BASIN CONCENTRIC
		CATCH BASIN ECCENTRIC
		DOUBLE CATCH BASIN CONCENTRIC
		DOUBLE CATCH BASIN ECCENTRIC
		GUTTER INLET
D		DRAIN MANHOLE CONCENTRIC
D		DRAIN MANHOLE ECCENTRIC
TD		TRENCH DRAIN
		PLUG OR CAP
CO	CO	CLEANOUT
		FLARED END SECTION
		HEADWALL
S		SEWER MANHOLE CONCENTRIC
S		SEWER MANHOLE ECCENTRIC
CS	CS	CURB STOP & BOX
WV	WV	WATER VALVE & BOX
TSV	TSV	TAPPING SLEEVE, VALVE & BOX
		SIAMESE CONNECTION
HYD	HYD	FIRE HYDRANT
WM	WM	WATER METER
PIV	PIV	POST INDICATOR VALVE
W	W	WATER WELL
		BACK FLOW PREVENTOR
GG	GG	GAS GATE
GM	GM	GAS METER
E	EMH	ELECTRIC MANHOLE
EM	EM	ELECTRIC METER
		LIGHT POLE
T	TMH	TELEPHONE MANHOLE
T	T	TRANSFORMER PAD
		UTILITY POLE
		GUY POLE
		GUY WIRE & ANCHOR
HH	HH	HAND HOLE
PB	PB	PULL BOX
		MATCHLINE

Abbreviations

General

ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
AUL	ACTIVITY USE LIMITATION
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
LOW	LIMIT OF WORK
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWL	SOLID WHITE LANE LINE
TBV	TO BE VERIFIED
TS	TOP OF SLOPE
TYP	TYPICAL

Utility

CA	COMPRESSED AIR
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
OHW	OVERHEAD WIRE
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SG=	SWITCHGEAR
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE
YDI	YARD DRAIN INLET

Notes

General

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE SIX (6) INCHES LOAM AND SEED.
5. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
6. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
7. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
9. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
10. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
11. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
12. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
13. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.

Utilities

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
   A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
   B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
   C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
   A. WATER PIPES SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON
   B. SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE
   C. STORM DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP)
   D. PIPE INSTALLATION AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING CODE WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE WITH LOCAL PLUMBING INSPECTOR PRIOR TO BEGINNING WORK.
8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
10. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

Layout and Materials

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE THREE (3) FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE BITUMINOUS BERM (BB) WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
4. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Demolition

1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
2. EXISTING UTILITIES SHALL REMAIN UNLESS OTHERWISE NOTED. ANY TERMINATIONS SHALL BE IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
4. THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

Existing Conditions Information

1. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB IN MAY, 2020, AND FROM DEEDS AND PLANS OF RECORD. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VHB, IN MAY, 2020.
   A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB ENVIRONMENTAL DEPARTMENT
   B. FLAGS MARKING THE WETLANDS WERE FIELD SURVEYED BY VHB IN MARCH, 2013.
   C. WETLANDS LABELED "MASSGIS WETLANDS" WERE DOWNLOADED FROM THE MASSMAPPER INTERACTIVE ON-LINE MAP, ACCESSED ON OCTOBER 12, 2022. THESE WETLANDS WERE NOT SURVEYED IN THE FIELD. RESOURCES AREAS BASED ON MASSGIS WETLANDS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON ACTUAL FIELD CONDITIONS.
   D. THE 100' BUFFER ZONE, 200' RIVERBANK WETLAND, AND LAND SUBJECT TO COASTAL STORM FLOWAGE DELINEATIONS ARE BASED ON ACTUAL TOPOGRAPHIC SURVEY WHERE AVAILABLE ON EXISTING CONDITIONS PLANS. IN LIMITED AREAS WHERE TOPOGRAPHIC SURVEY IS NOT AVAILABLE, DELINEATIONS ARE INTERPRETED BASED ON BEST AVAILABLE INFORMATION.
2. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD OF1988.

Document Use

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

Sign Summary

M.U.T.C.D. Number	Specification Width	Specification Height	Desc.
R1-1	30"	30"	STOP
R5-1	30"	30"	DO NOT ENTER
S-3	24"	18"	VISITORS
W11-2	30"	30"	
W16-7P	24"	12"	
W16-9P	30"	18"	AHEAD

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1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by EOB | Checked by SL

Issued for: Definitive Subdivision | Date: June 2, 2023

Not Approved for Construction

Drawing Title: Legend and General Notes

Drawing Number: C-1.00

Sheet 2 of 16

Project Number: 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41038
REGISTERED PROFESSIONAL ENGINEER
12-2023

\\vhb\gbl\proj\Boston\15542.00\cad\ld\Planset\subdivision\Locus.dwg



ZONING DISTRICT BOUNDARY

SOMERSET ASSESSOR'S PLAT BOUNDARY

BRAYTON POINT PARCEL

PRYSMIAN SUBDIVISION

PRIVATE DRIVE

Abutters List

vhb.com

vhb

101 Walnut Street
PO Box 9151
Watertown, MA 02471
617.924.1770

0 200 400 800 Feet

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Apprvd.

Designed by: EOB
Checked by: SL

Issued for: **Definitive Subdivision**
Date: June 2, 2023

Not Approved for Construction

Drawing Title: **Locus and Abutter Plan**

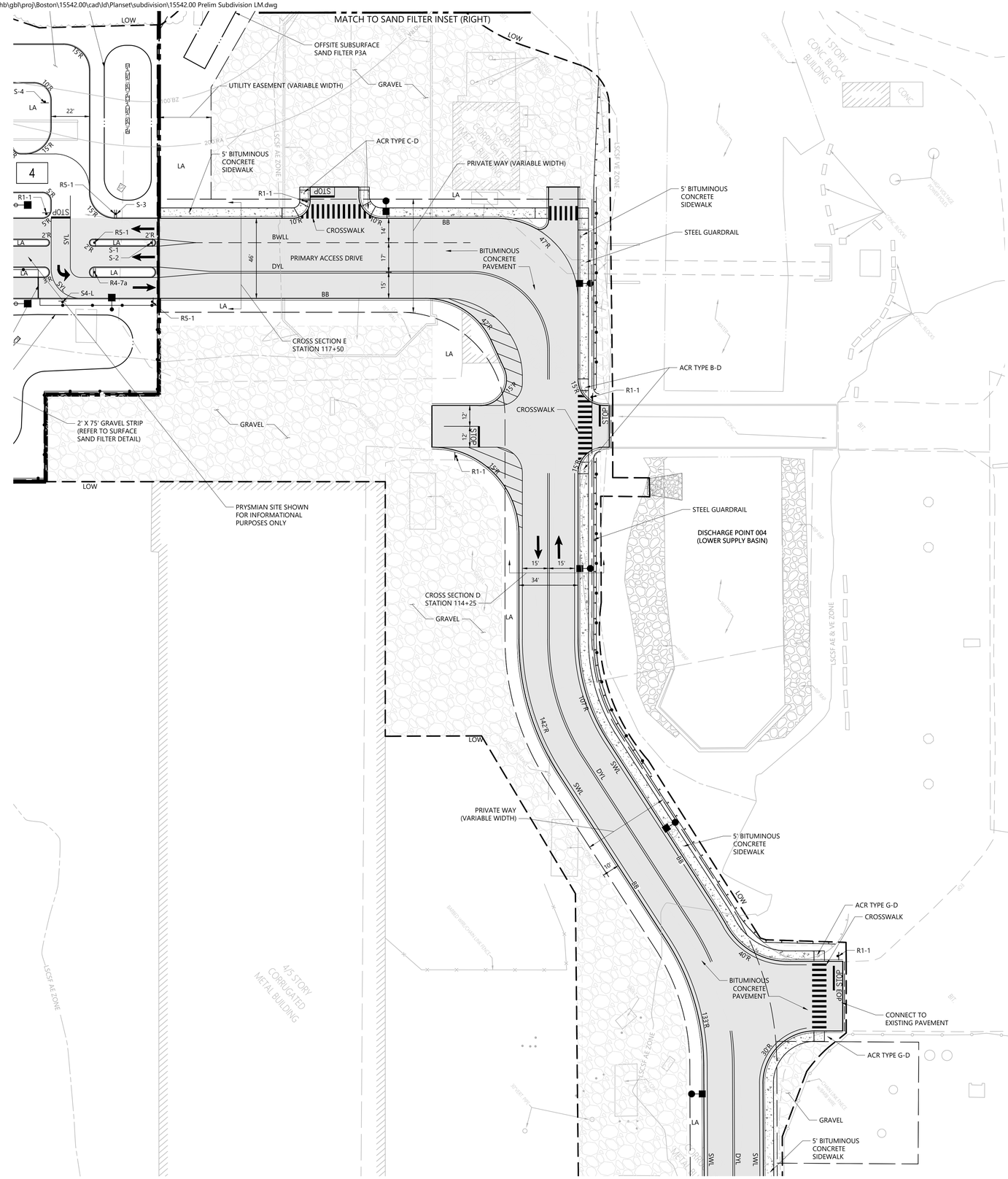
Drawing Number: **C- 1.01**

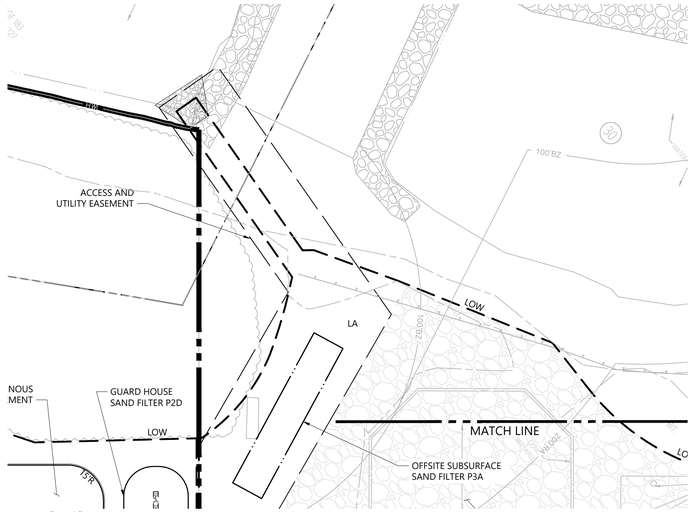
Sheet 3 of

Project Number: 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Saved Friday, June 2, 2023 3:37:52 PM CMONTEIRO Plotted Friday, June 2, 2023 5:04:33 PM Eric O'Brien





Sand Filter Inset

1" = 30'

See Sheet C2.02

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1 Cedar Street
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Providence, RI 02903
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NOTE:
1. REFER TO PLAN AND PROFILE FOR ROADWAY STATIONING

0 15 30 60 Feet

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by EOB | Checked by SL

Issued for: **Definitive Subdivision** — Date: **June 2, 2023**

Not Approved for Construction

Drawing Title
Layout and Materials Plan 1

Drawing Number
C-2.01

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Sheet 4 of 16

Project Number 15542.00

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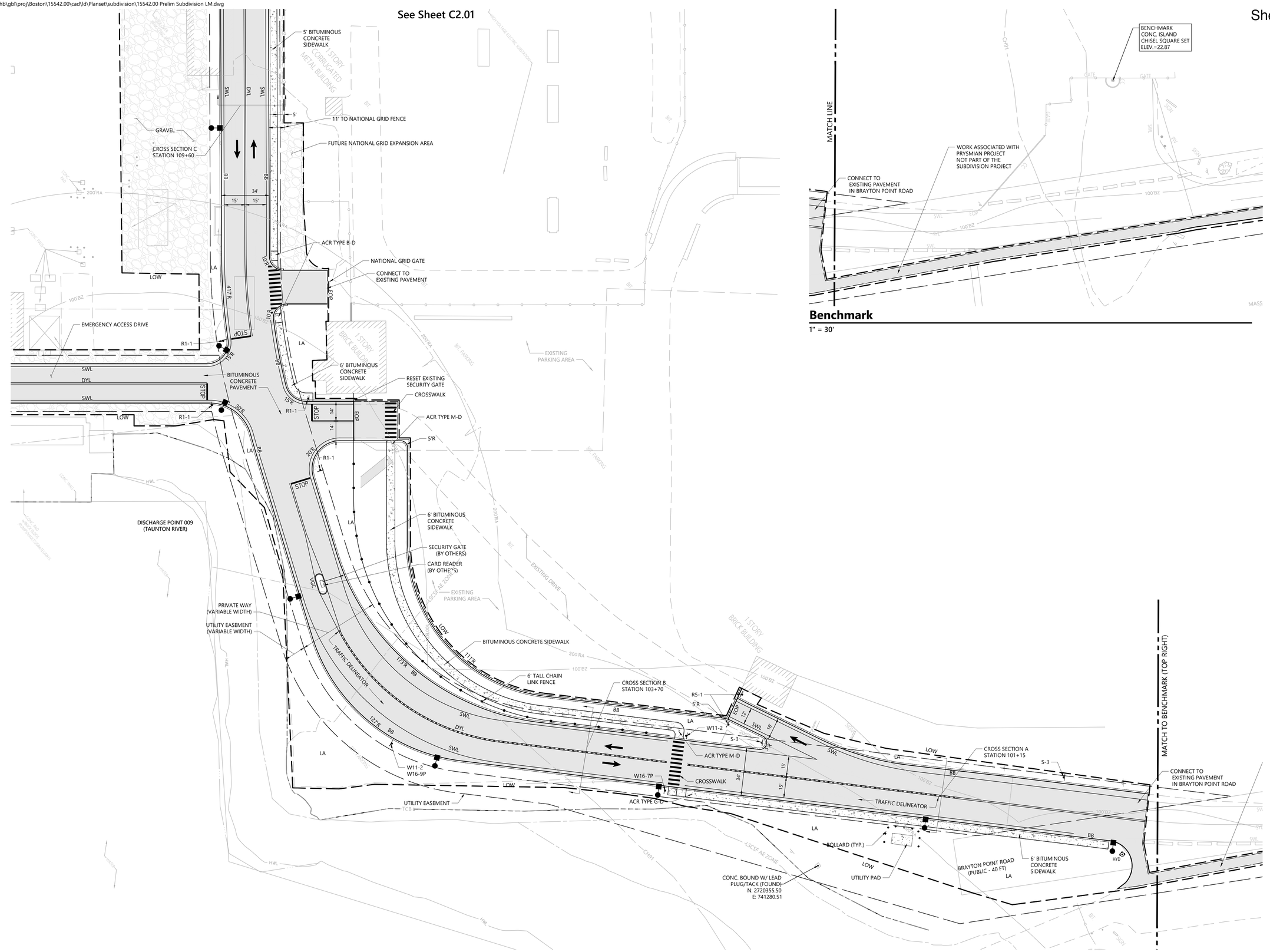
See Sheet C2.01



Benchmark

1" = 30'

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NOTE:
1. REFER TO PLAN AND PROFILE FOR ROADWAY STATIONING

0 15 30 60 Feet

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
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Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by EOB | Checked by SL

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Drawing Title
Layout and Materials Plan 2

Drawing Number
C-2.02

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
Registered Professional Engineer
6-2-2023

Sheet 5 of 16

Project Number
15542.00

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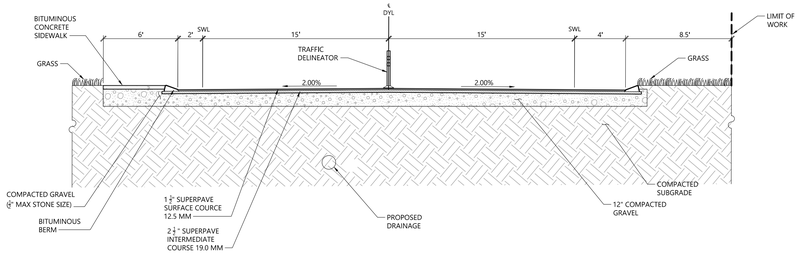

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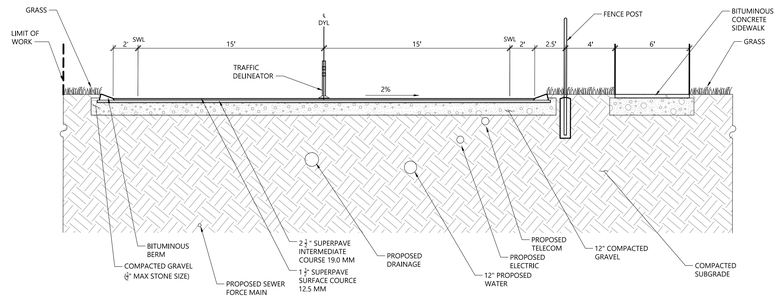
STATION 101+15



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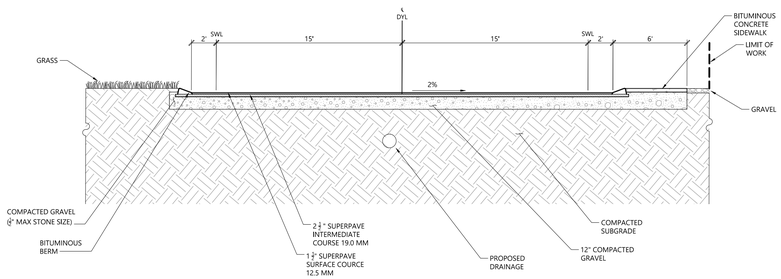
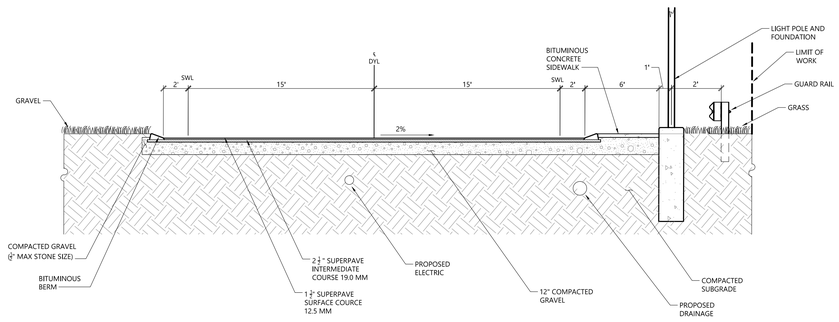
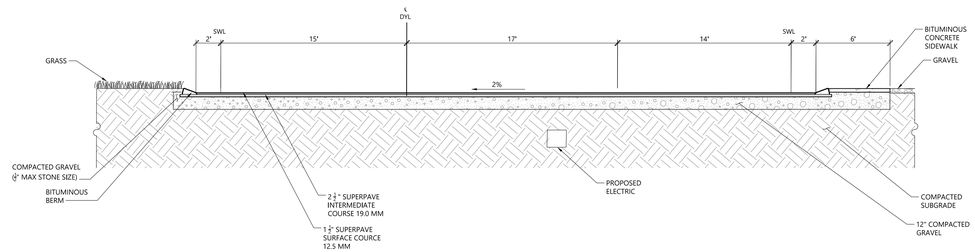
STATION 103+70



CROSS SECTION C
STATION 109+60



CROSS SECTION D
STATION 114+25



CROSS SECTION E
STATION 117+50

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DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Apprvd.

Designed by	Checked by
EOB	SL

Issued for: **Definitive Subdivision** — Date: **June 2, 2023**

Not Approved for Construction

Drawing Title
Typical Cross Section

Drawing Number
C-2.03

Sheet 6 of 16

Project Number
15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

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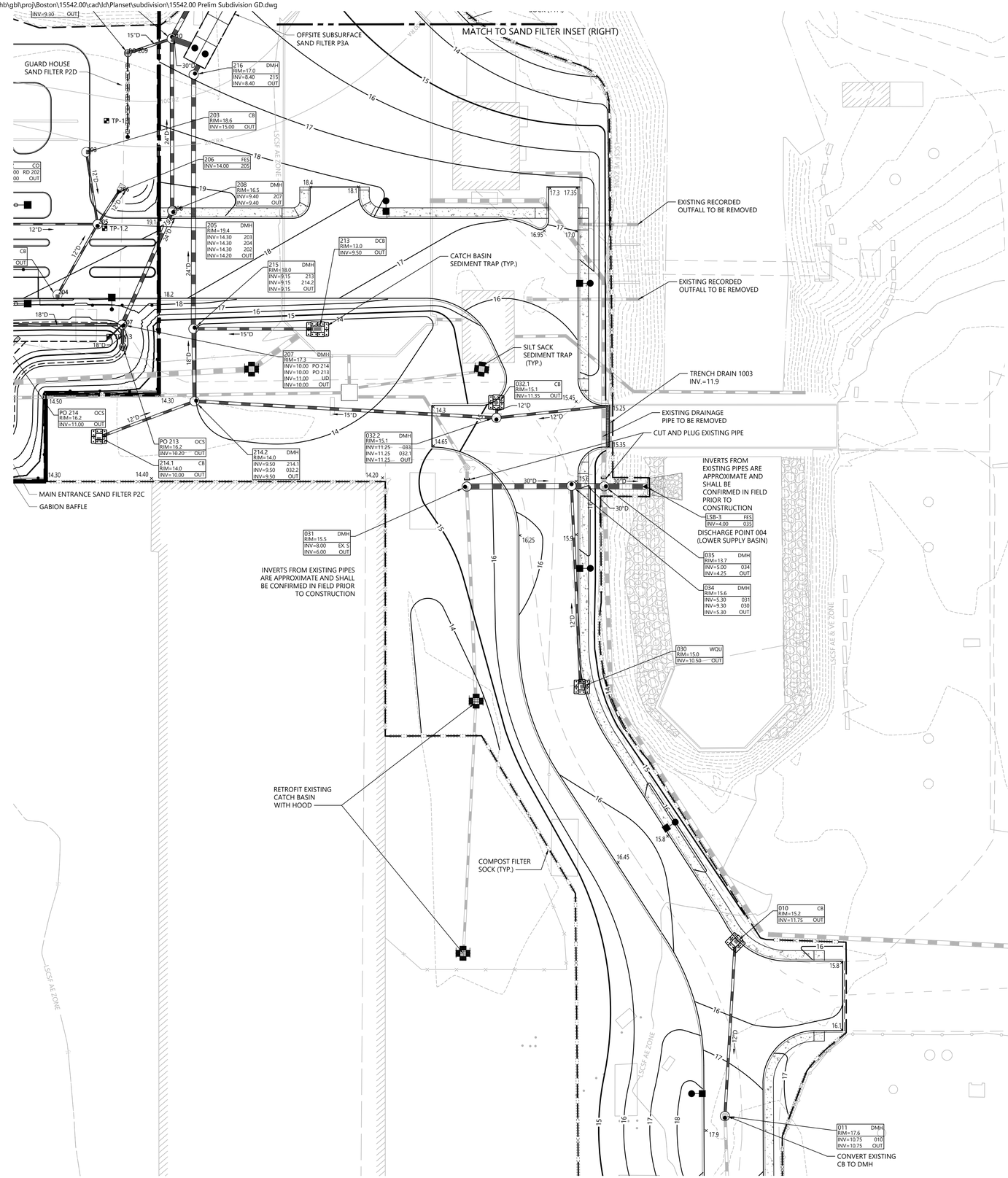

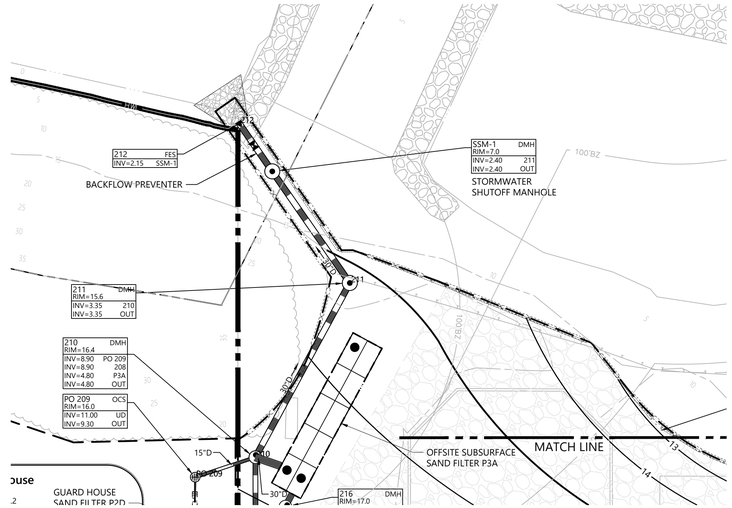

Sand Filter Inset

1" = 30'

Sheet 7 of 29

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1 Cedar Street
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0 15 30 60 Feet

APPROVAL REQUIRED UNDER
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SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
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Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by EOB | Checked by SL

Issued for: **Definitive Subdivision** | Date: **June 2, 2023**

Not Approved for Construction

Drawing Title

Grading, Drainage, and Erosion Control Plan 1

Drawing Number

C-3.01

Sheet 7 of 16

Project Number 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

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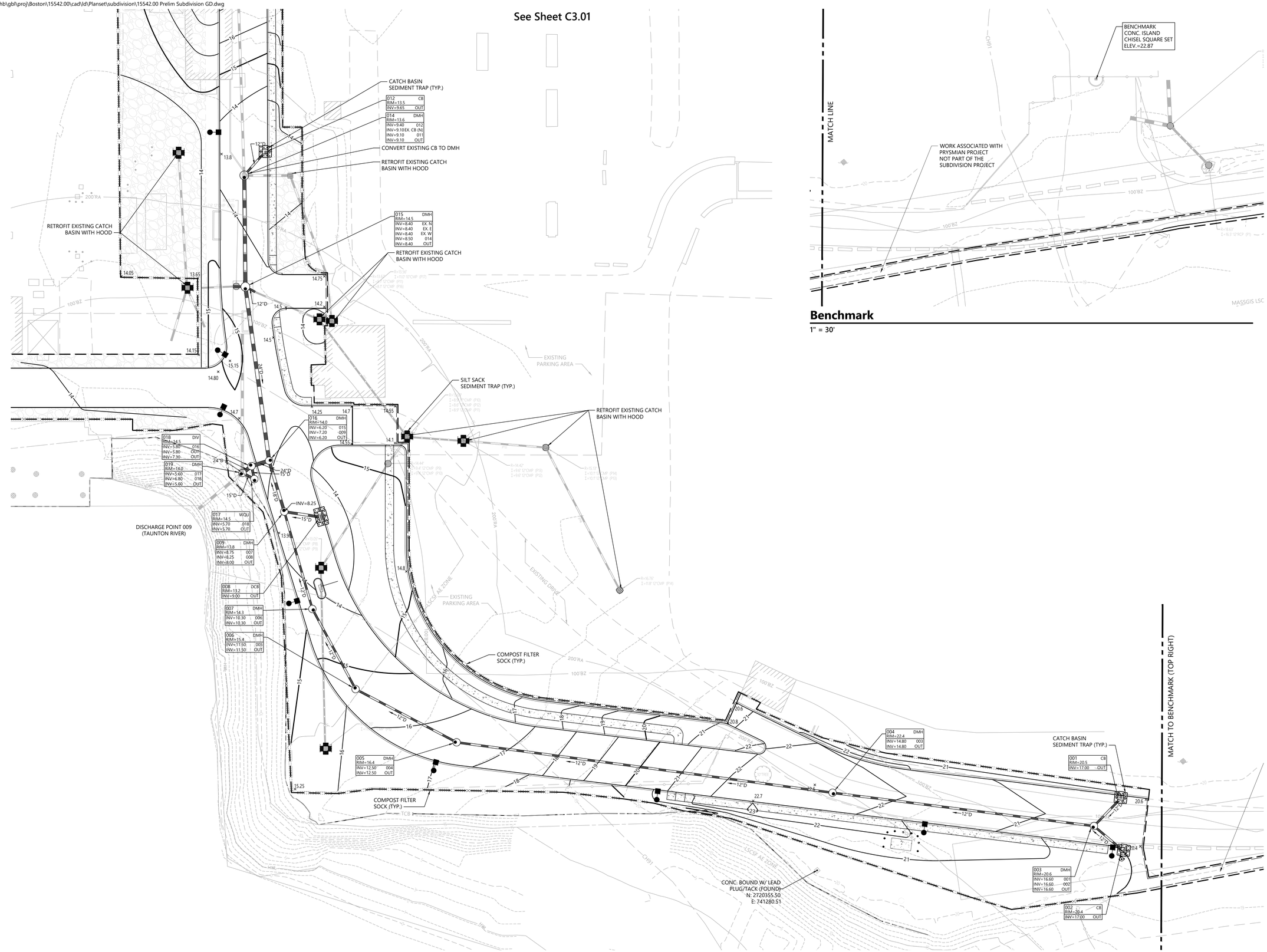
See Sheet C3.01



Benchmark

1" = 30'

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0 15 30 60 Feet

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DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by: EOB
Checked by: SL

Issued for: Definitive Subdivision
Date: June 2, 2023

Not Approved for Construction

Drawing Title

Grading, Drainage, and Erosion Control Plan 2

Drawing Number

C-3.02

Sheet 8 of 16

Project Number 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

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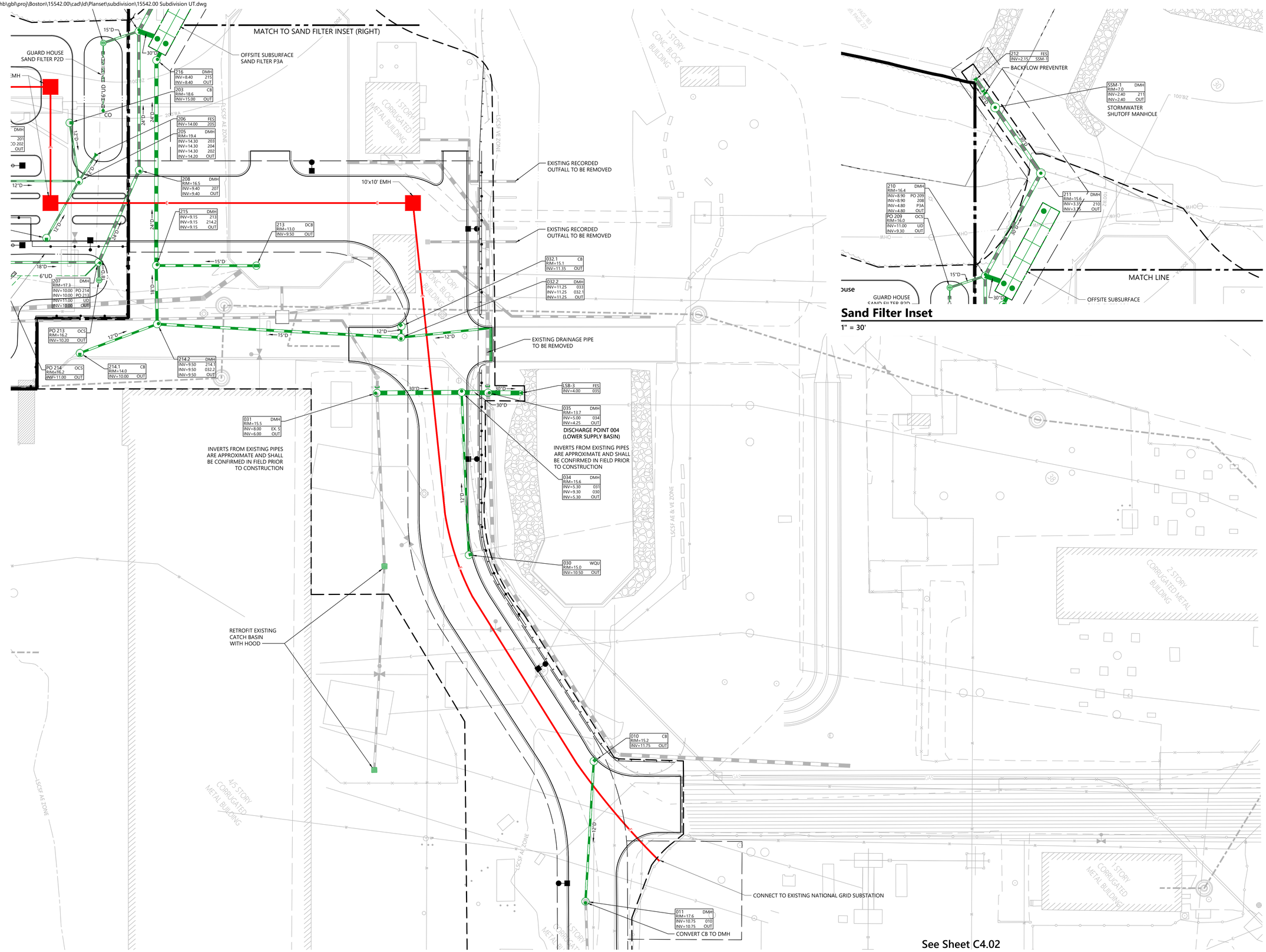

Sand Filter Inset

1" = 30'

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Legend

D — DRAINAGE
E — ELECTRICAL

0 15 30 60 Feet

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

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1515 Des Peres Road
Suite 300 St. Lois, MO 63131

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No.	Revision	Date	Appvd.

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Issued for: **Definitive Subdivision** | Date: **June 2, 2023**

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Drawing Title: **Utility Plan 1**

Drawing Number: **C-4.01**

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Sheet 9 of 16

Project Number: 15542.00

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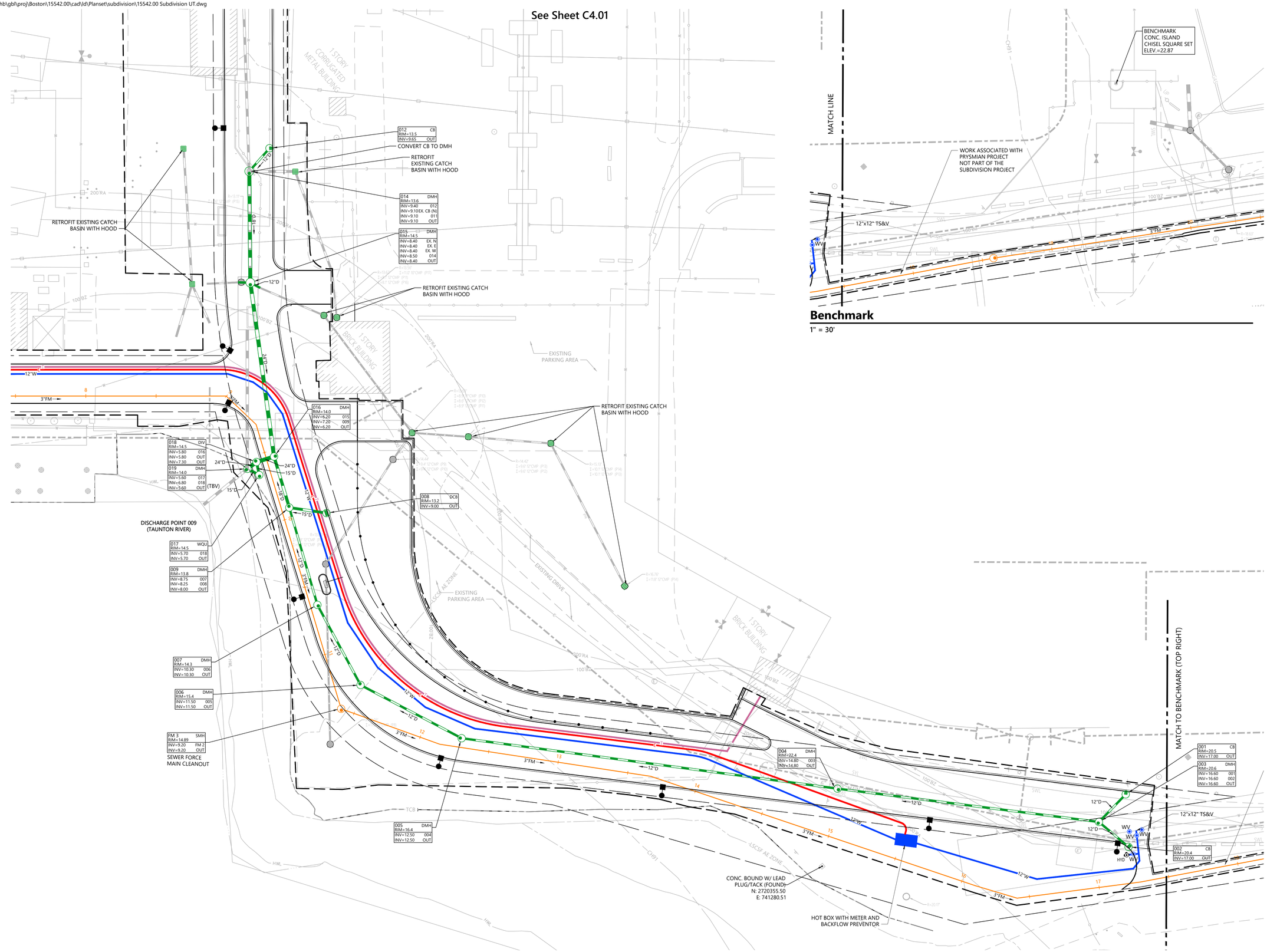
See Sheet C4.01



Benchmark

1" = 30'

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Legend

- W — WATER LINE - DOMESTIC
- FM — SANITARY SEWER - FORCE MAIN
- D — DRAINAGE
- E — ELECTRICAL
- T — TELECOM

0 15 30 60 Feet

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE:

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
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Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

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Issued for: **Definitive Subdivision** — Date: June 2, 2023

Not Approved for Construction

Drawing Title: **Utility Plan 2**

Drawing Number: **C-4.02**

Sheet 10 of 16

Project Number: 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED
6-2-2023

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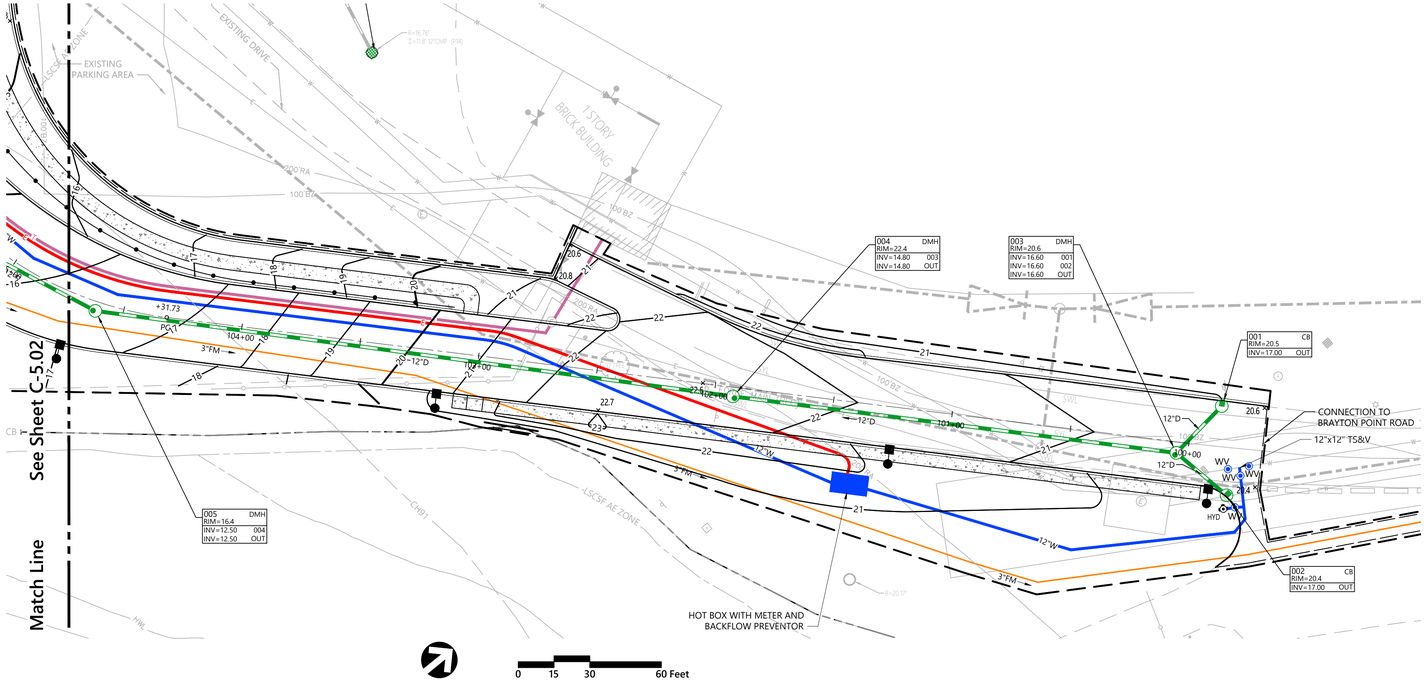

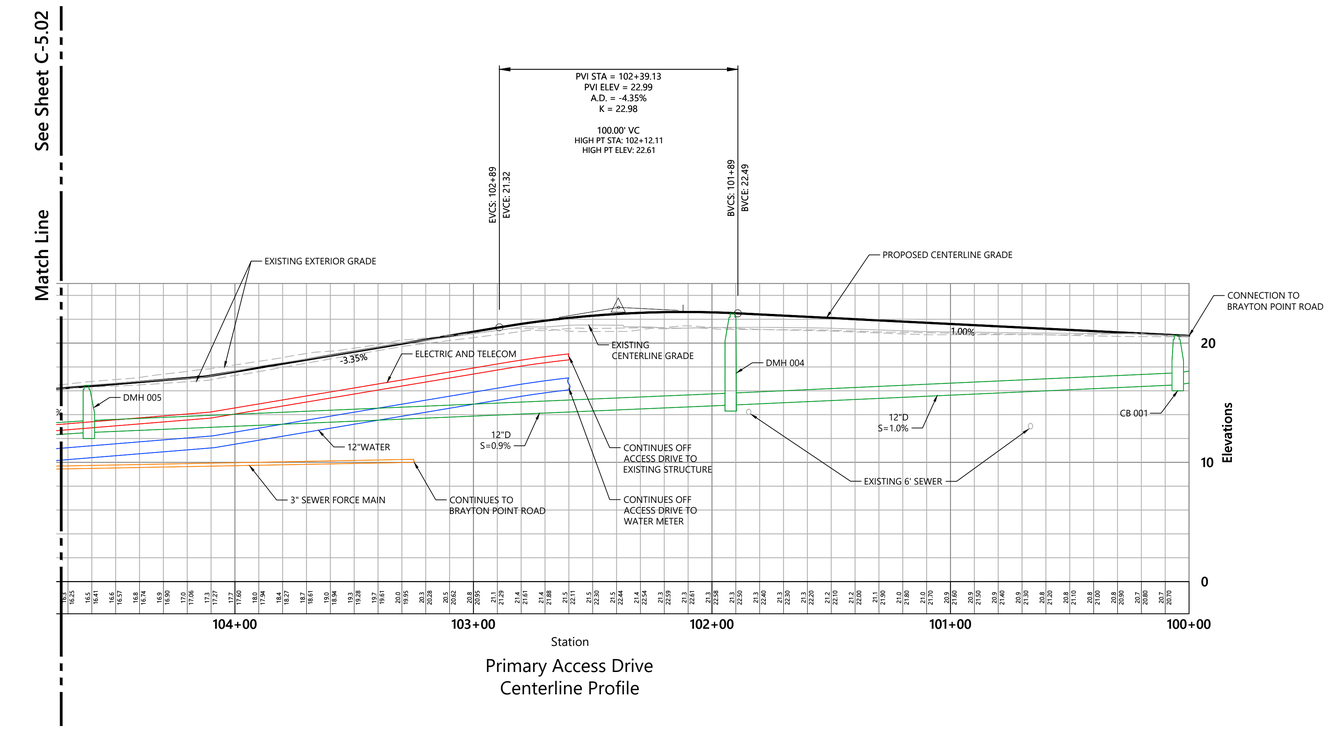

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Legend

- W — WATER LINE - DOMESTIC
- FM — SANITARY SEWER - FORCE MAIN
- D — DRAINAGE
- E — ELECTRICAL
- T — TELECOM

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

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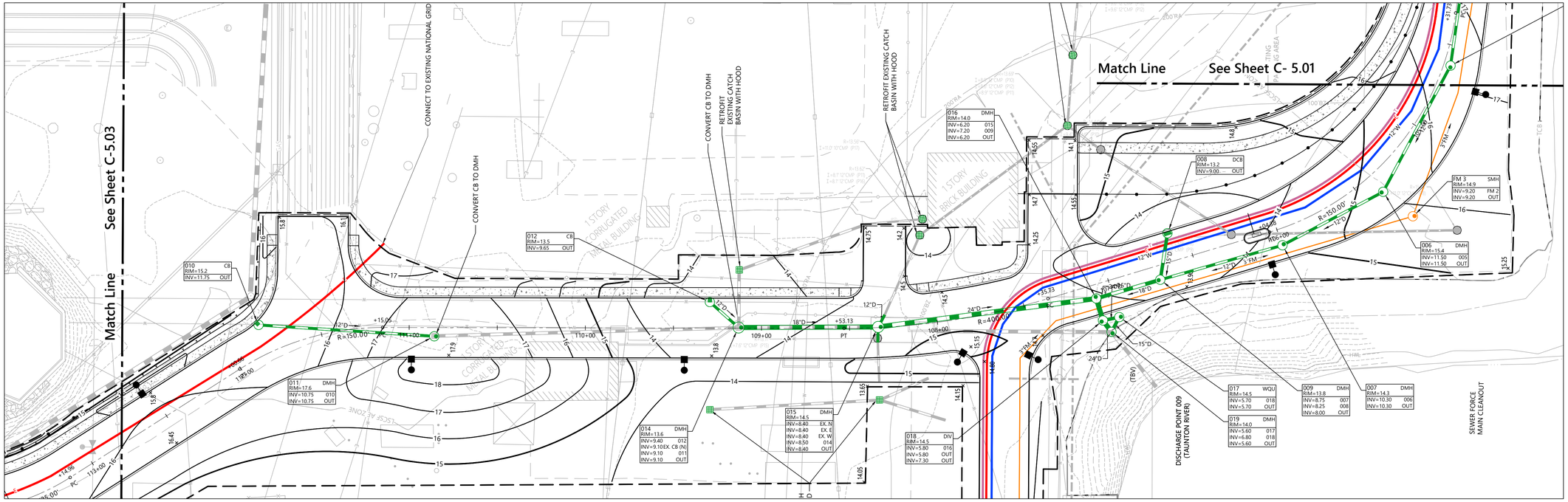
Drawing Title: **Plan and Profile 1**

Drawing Number: **C-5.01**

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Sheet 11 of 16

Project Number: 15542.00



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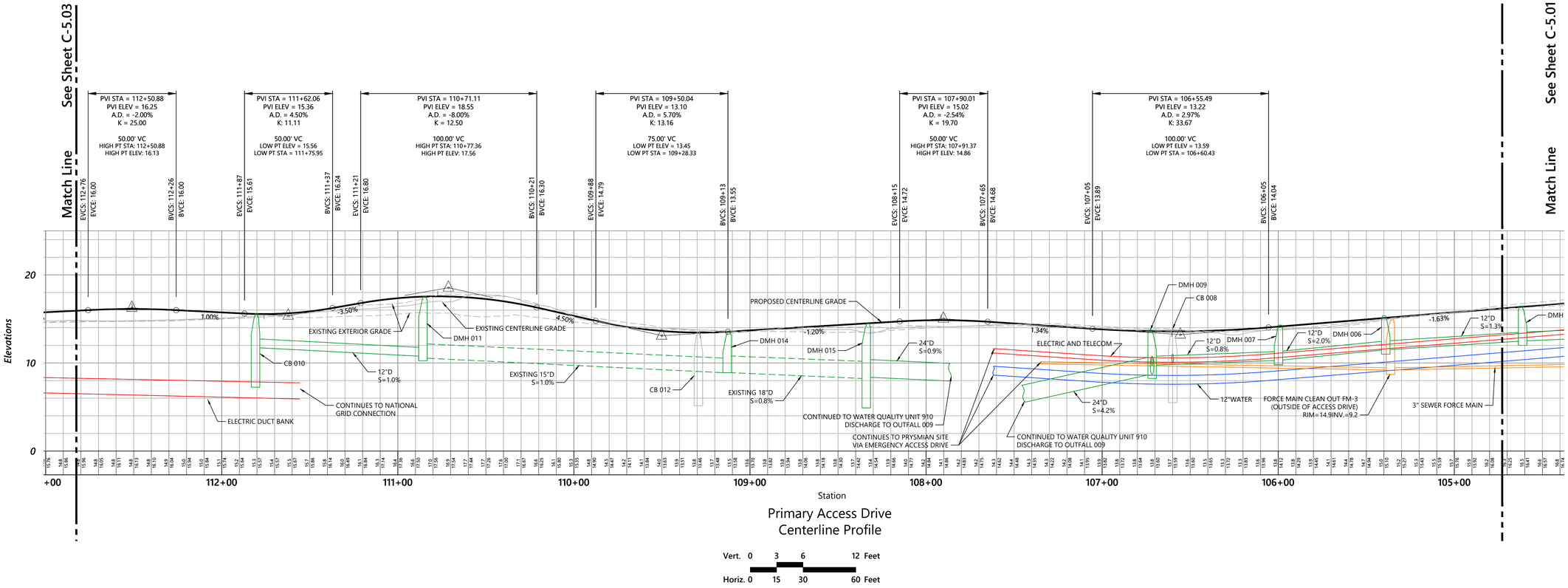

Primary Access Drive
Centerline Profile

Vert. 0 3 6 12 Feet

Horiz. 0 15 30 60 Feet

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Legend

- W — WATER LINE - DOMESTIC
- FM — SANITARY SEWER - FORCE MAIN
- D — DRAINAGE
- E — ELECTRICAL
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APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

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Drawing Title: **Plan and Profile 2**

Drawing Number: **C-5.02**

Sheet 12 of 16

Project Number: 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

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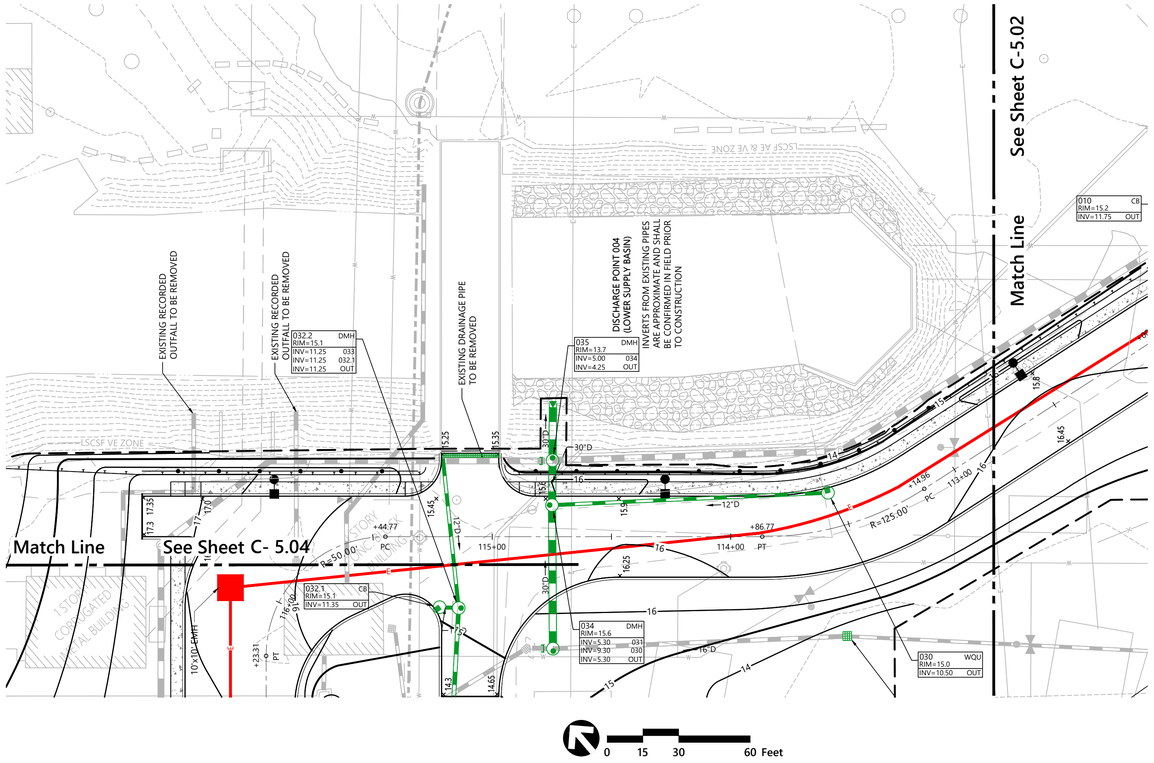

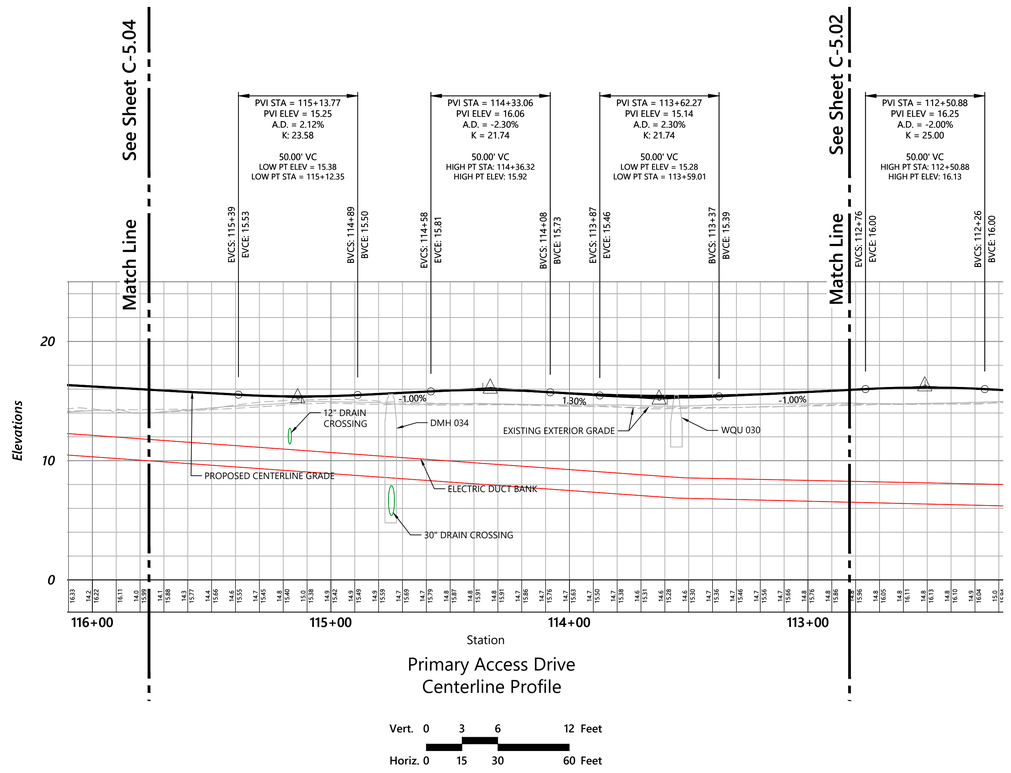

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Legend

- W — WATER LINE - DOMESTIC
- FM — SANITARY SEWER - FORCE MAIN
- D — DRAINAGE
- E — ELECTRICAL
- T — TELECOM

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW SOMERSET PLANNING BOARD

DATE: _____

Applicant:

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4 Tesseneer Road
Highland Heights, Kentucky 410763

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1515 Des Peres Road
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Somerset, Massachusetts

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Drawing Title
Plan and Profile 3

Drawing Number
C-5.03

Sheet 13 of 16

Project Number
15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

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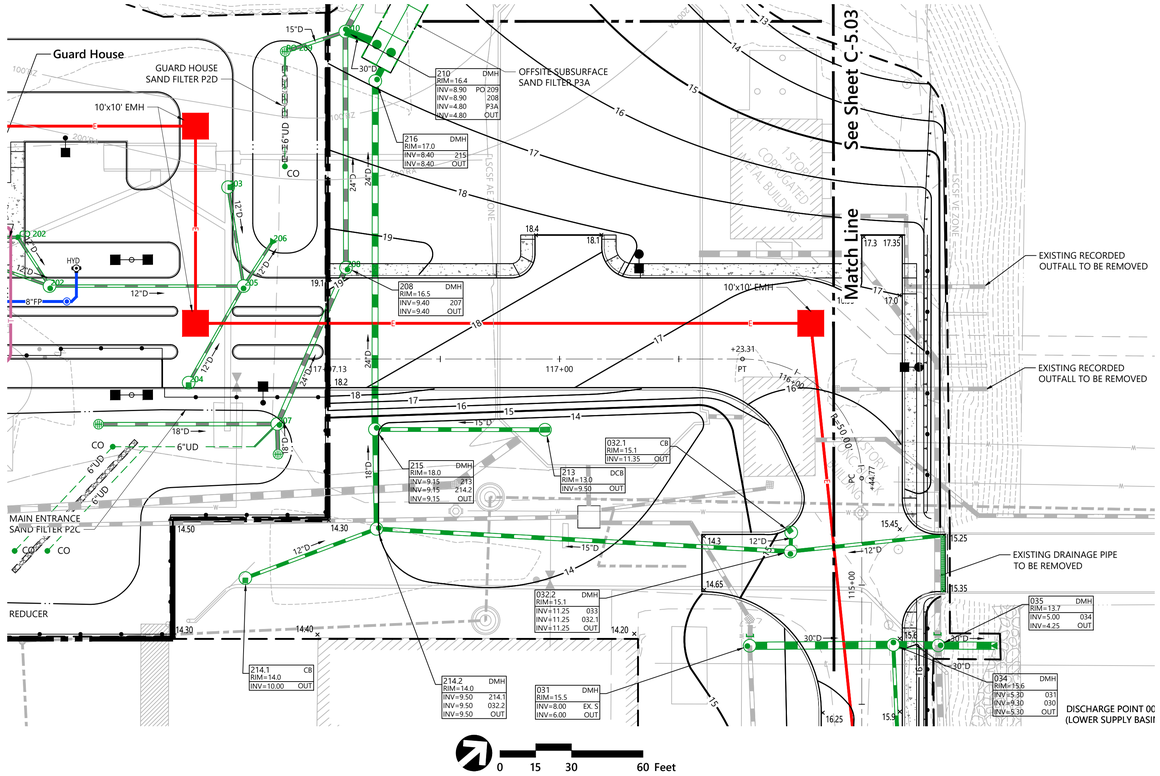

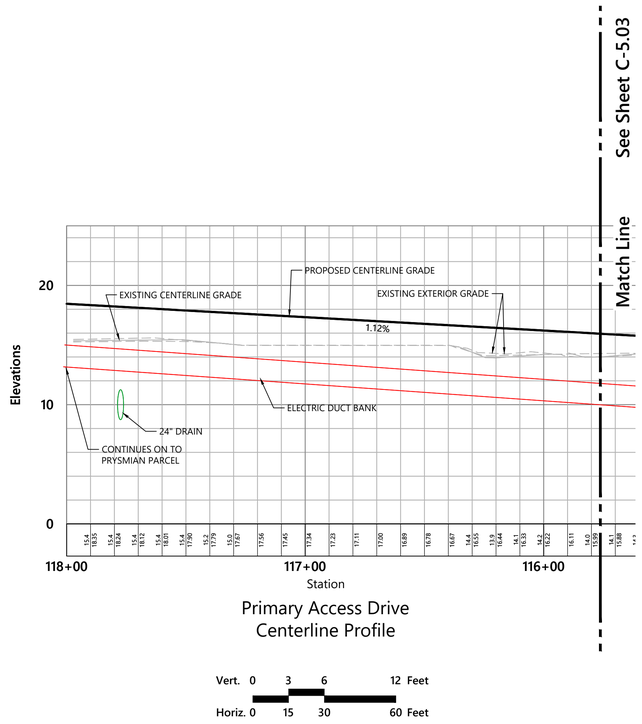

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Legend

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SOMERSET PLANNING BOARD

DATE: _____

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Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
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Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

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Checked by: SL

Issued for: **Definitive Subdivision**
Date: **June 2, 2023**

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Drawing Title
Plan and Profile 4

Drawing Number
C-5.04

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Sheet 14 of 16

Project Number
15542.00

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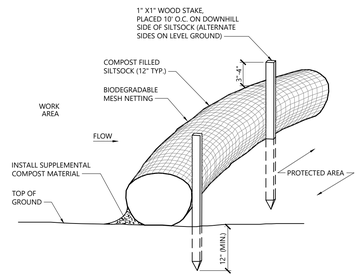


NOTES

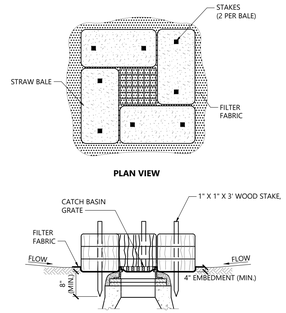
1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL.
2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. UPON SITE STABILIZATION, COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Siltsock - Erosion Control Barrier

10/20

N.T.S. Source: VHB LD_658

REV



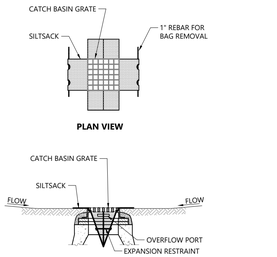
NOTES

1. ENCLOSE STRUCTURE WITH HAYBALES IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING BINDER COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. IF GRATE IS AGAINST EXISTING CURB THEN BALES ARE TO BE PLACED AROUND THREE SIDES OF GRATE ONLY.
3. GRATE TO BE PLACED OVER FILTER FABRIC.
4. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

Catch Basin Sediment Trap

1/16

N.T.S. Source: VHB LD_673



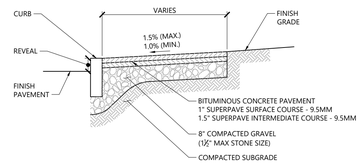
NOTES

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment Trap

1/20

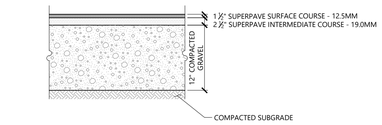
N.T.S. Source: VHB LD_674



Bituminous Concrete Sidewalk

3/20

N.T.S. Source: VHB REV LD_422



NOTES

SUB-BASE, SUB-COURSE, AND PAVEMENT SHALL CONFORM TO SECTION 400 OF THE COMMONWEALTH OF DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

Bituminous Concrete Pavement Sections

11/19

N.T.S. Source: VHB REV LD_430

NOTES

ALL CURBING TO BE MACHINE EXTRUDED

Bituminous Berm (BB)

1/16

N.T.S. Source: VHB LD_407

Vertical Granite Curb - Type VB (VGC)

3/20

N.T.S. Source: VHB LD_402B

NOTES

DETAIL PROVIDED FOR GENERAL INFORMATION ONLY. CONTRACTOR TO PROVIDE STAMPED FINAL DESIGN OF LIGHT POLE FOUNDATION BASED ON RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER.

Light Pole Foundation Detail (Up to 40' Pole)

12/19

N.T.S. Source: VHB LD_310

Sign Post - Type 'B'

3/19

N.T.S. Source: VHB LD_702

Bollard

12/19

N.T.S. Source: VHB LD_700

NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
3. COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY ENGINEER.

Utility Trench

11/19

N.T.S. Source: VHB LD_300

NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) Type 'C-D'

12/20

N.T.S. Source: VHB LD_502

NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) Type 'G-D'

12/20

N.T.S. Source: VHB LD_506

NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'M-D'

12/20

N.T.S. Source: VHB LD_512

NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) - Type 'B-D'

12/20

N.T.S. Source: VHB LD_501

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by EOB | Checked by SL

Issued for: Definitive Subdivision

Date: June 2, 2023

Not Approved for Construction

Drawing Title: Site Details 1

Drawing Number: C-6.01

Sheet 15 of 16

Project Number: 15542.00

Saved Friday, June 2, 2023 3:50:16 PM ERICOBRIEN Plotted Friday, June 2, 2023 5:14:38 PM Eric O'Brien

vhb.com

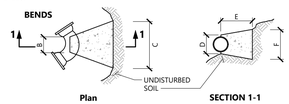
1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

TABLE OF DIMENSIONS

BENDS	B	C	D	E	F
6" 11 ¼"	8"	15"	12"	24"	12"
6" 22 ½"	"	19"	"	"	13"
8" 11 ¼"	"	20"	"	"	12"
8" 22 ½"	"	22"	"	"	17"
12" 11 ¼"	"	30"	"	"	15"
12" 22 ½"	"	35"	"	"	25"

BENDS	B	C	D	E	F
6" 45"	8"	30"	12"	24"	14"
6" 90"	"	30"	"	"	27"
8" 45"	"	30"	"	"	24"
8" 90"	"	38"	"	"	36"
12" 45"	"	40"	"	"	40"
12" 90"	"	60"	"	"	52"

BENDS



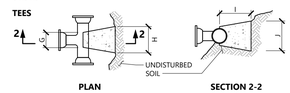
Plan SECTION 1-1

TABLE OF DIMENSIONS

TEES	G	H	I	J
6"X6"X6"	12"	24"	24"	18"
8"X8"X6"	"	"	"	12"X12"X8"
8"X8"X8"	"	"	"	24"

TEES	G	H	I	J
12"X12"X6"	12"	24"	24"	18"
12"X12"X8"	"	"	"	24"
12"X12"X12"	"	36"	"	36"

TEES



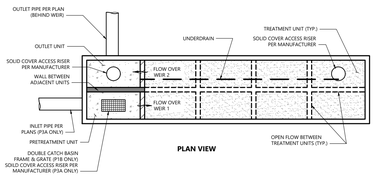
PLAN SECTION 2-2

NOTES

1. PROVIDE BLOCKS FOR TAPPING SLEEVES, DEAD ENDS, GATE VALVES, AND VERTICAL BENDS (SAME SIZE AS REQUIRED FOR TEES). PROVIDE ANCHOR RODS AT VERTICAL BENDS AND GATE VALVES.
2. CONCRETE SHALL NOT BE PLACED AGAINST PIPE BEYOND FITTING.
3. CONCRETE SHALL BE 3,000 PSI-TYPE I.

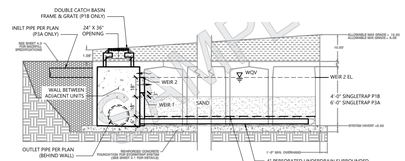
Concrete Thrust Block 1/16

N.T.S. Source: VHB LD_260



PLAN VIEW

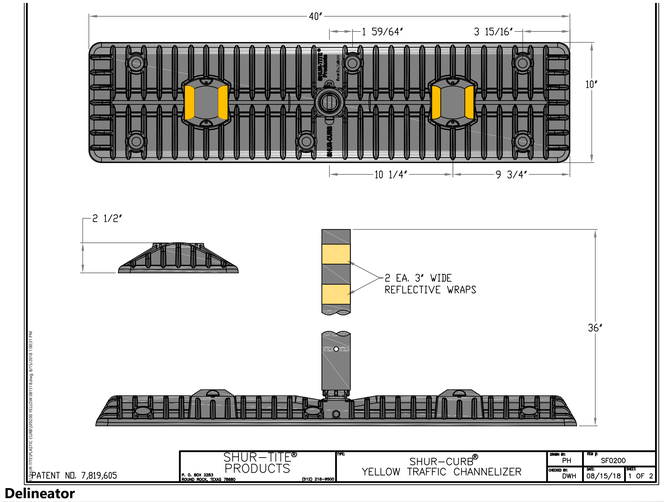
DIMENSIONS					
SAND FILTER	ALLOWABLE MAX GRADE EL.	ALLOWABLE MIN GRADE EL.	WEIR 1 EL.	WEIR 2 EL.	SYSTEM INVERT EL.
P1B	22.5	13.5	10.05	11.3	7.8
P3A	22.25	13.35	7.15	8.4	4.9



4'-0" SINGLETRAP
PROFILE VIEW

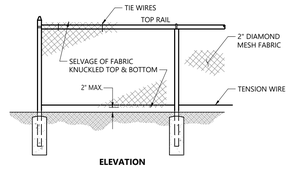
Subsurface Sand Filters P1B & P3A (StormTrap ST1) 9/21

N.T.S. Source: VHB

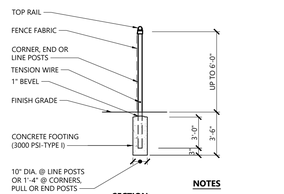


Traffic Delineator

N.T.S. Shur-Tite



ELEVATION



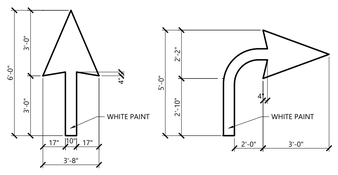
SECTION

NOTES

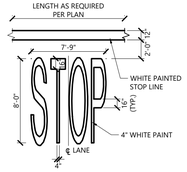
1. MATERIALS TO BE SUPPLIED AND INSTALLED IN CONFORMANCE WITH "CHAIN LINK MANUFACTURER'S INSTITUTE" PRODUCT MANUAL.

Chain Link Fence up to 6' 10/20

N.T.S. Source: VHB LD_481



LENGTH AS REQUIRED PER PLAN

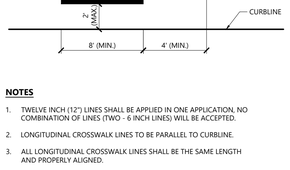


NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON SITE WORK IN LOCATIONS SHOWN.

Painted Pavement Markings - On Site 1/16

N.T.S. Source: VHB LD_554

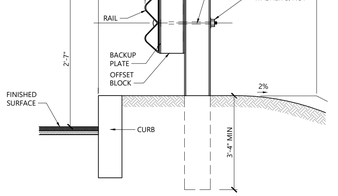


NOTES

1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
2. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
3. ALL LONGITUDINAL CROSSWALK LINES SHALL BE THE SAME LENGTH AND PROPERLY ALIGNED.
4. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.

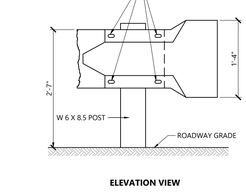
Crosswalk 12/19

N.T.S. Source: VHB LD_553A



PLAN VIEW

SECTION VIEW

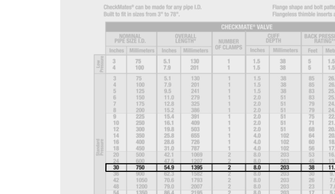


PLAN VIEW

ELEVATION VIEW

Steel Beam Guardrail with Steel Post 10/20

N.T.S. Source: VHB LD_456



Backflow Preventer - Tideflex Checkmate Inline Check Valv

N.T.S. Source: Red Valve

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE:

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Apprvd.

Designed by EOB | Checked by SL

Issued for Definitive Subdivision | Date June 2, 2023

Not Approved for Construction

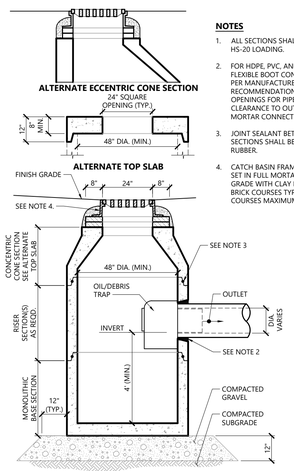
Drawing Title
Site Details 2

Drawing Number
C-6.02

Sheet 16 of 16

Project Number
15542.00



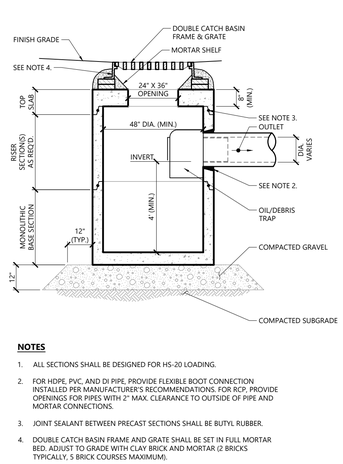


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Catch Basin (CB) With Oil/Debris Trap 3/21

N.T.S. Source: VHB LD_101

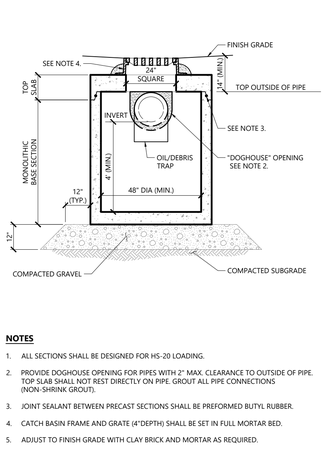


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
4. DOUBLE CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICKS TYPICALLY, 5 BRICK COURSES MAXIMUM).

Double Grate Catch Basin (DCB) with Oil/Debris Trap 11/19

N.T.S. Source: VHB LD_103

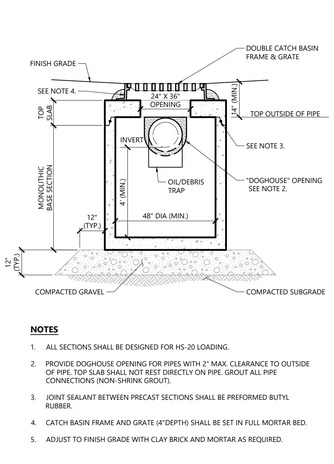


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE (4"DEPTH) SHALL BE SET IN FULL MORTAR BED.
5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

Catch Basin (CB) Shallow Cover with Oil/Debris Trap 1/16

N.T.S. Source: VHB LD_105

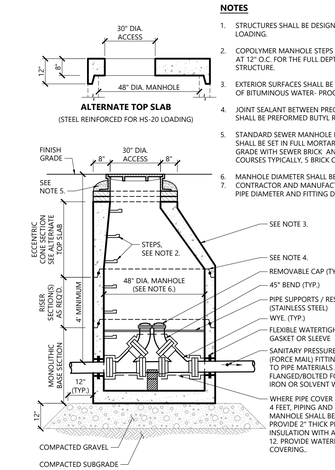


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE (4"DEPTH) SHALL BE SET IN FULL MORTAR BED.
5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

Double Grate Catch Basin (DCB) Shallow Cover with Oil/Debris Trap 1/16

N.T.S. Source: VHB LD_106



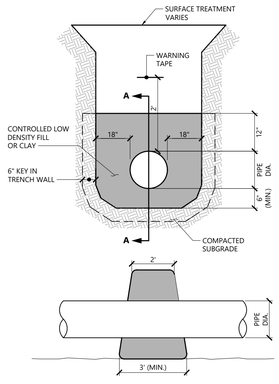
NOTES

1. STRUCTURES SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER- PROOFING MATERIAL.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)
6. MANHOLE DIAMETER SHALL BE VERIFIED BY
7. CONTRACTOR AND MANUFACTURER BASED ON PIPE DIAMETER AND FITTING DIMENSIONS.

Sanitary Pressure Sewer Cleanout Manhole (FM-CO) 1/16

N.T.S. Source: VHB REV LD_206

Saved Friday, June 2, 2023 3:50:16 PM ERCORBRIEN Plotted Friday, June 2, 2023 5:14:44 PM Eric O'Brien



SECTION A-A

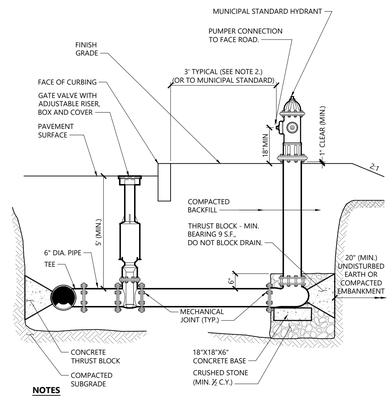
NOTES

ANTI-SEEPAGE COLLAR TO BE INSTALLED AT 100' MAX. SPACING ALONG ALL PIPING SYSTEMS.

Anti-Seepage Collar

11/19

N.T.S. Source: VHB LD_301



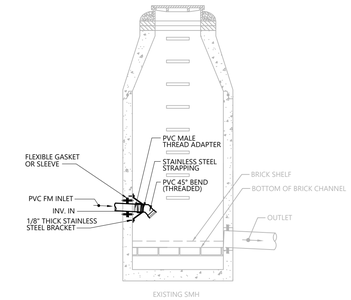
NOTES

1. CONCRETE THRUST BLOCKS TO BE USED ONLY WHERE THEY CAN BEAR ON UNDISTURBED EARTH AS SHOWN. USE CLAMPS AND TIE RODS OR OTHER ACCEPTABLE METHOD OF JOINT RESTRAINT WHERE SOIL CONDITIONS PROHIBIT THE USE OF THRUST BLOCKS.
2. HYDRANT IN SIDEWALK AREAS TO BE LOCATED TO PROVIDE MINIMUM CLEAR SIDEWALK PASSAGE WIDTH OF 3 FEET AT HYDRANT.
3. A 36-INCH CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT UNLESS OTHERWISE APPROVED BY AUTHORITY HAVING JURISDICTION.

Hydrant Construction

12/19

N.T.S. Source: VHB LD_250

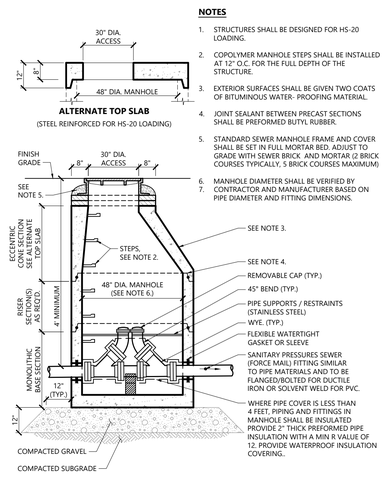


NOTES

1. ALL FITTINGS INSIDE MANHOLE TO BE SCH. 40 PRESSURE PIPE.
2. DIRECT PVC 45° BEND INTO BRICK CHANNEL (SEE SANITARY SEWER MANHOLE DETAIL FOR BRICK CHANNEL CONSTRUCTION).
3. PVC 45° BEND TO BE THREADED AND CONSTRUCTED TO ALLOW FOR EASY REMOVAL FOR CLEANING

Force Main Turn Down (Connection to SMH)

N.T.S. Source: VHB



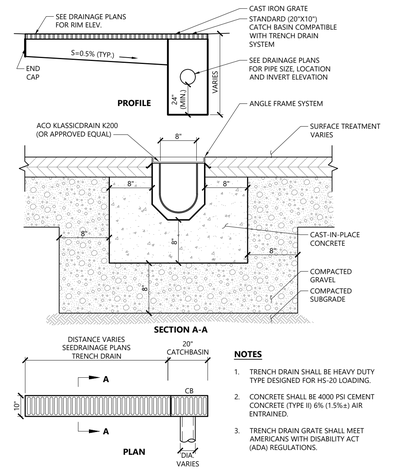
NOTES

1. STRUCTURES SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER- PROOFING MATERIAL.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)
6. MANHOLE DIAMETER SHALL BE VERIFIED BY
7. CONTRACTOR AND MANUFACTURER BASED ON PIPE DIAMETER AND FITTING DIMENSIONS.

Sanitary Pressure Sewer Cleanout Manhole (FM-CO)

1/16

N.T.S. Source: VHB LD_206



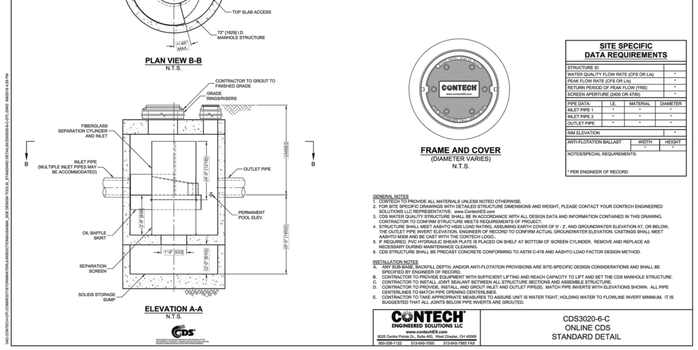
NOTES

1. TRENCH DRAIN SHALL BE HEAVY DUTY TYPE DESIGNED FOR HS-20 LOADING.
2. CONCRETE SHALL BE 4000 PSI CEMENT CONCRETE (TYPE II) 6% (1.5%±) AIR ENTRAINED.
3. TRENCH DRAIN GRATE SHALL MEET AMERICANS WITH DISABILITY ACT (ADA) REGULATIONS.

Trench Drain

12/19

N.T.S. Source: VHB LD_190-A



CDS3020-6-C DESIGN NOTES
CDS3020-6-C RATED TREATMENT CAPACITY IS 3.9 CFS, OR PER LOCAL REGULATIONS.
THE STANDARD CDS3020-6-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH		HEIGHT
	*		*
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE FOR ADDITIONAL OR ALTERNATE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE, www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. ANY DEVIATIONS MUST BE APPROVED IN WRITING BY THE ENGINEER OF RECORD.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANOUT.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

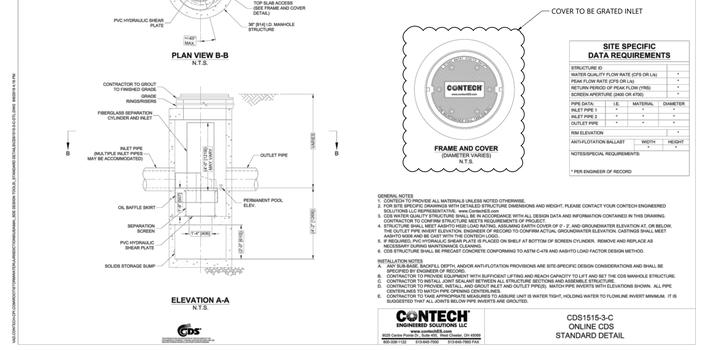
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE A CRANE WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS3020-6-C
ONLINE CDS
STANDARD DETAIL

Water Quality Unit - WQU 017

N.T.S. Source: Contech



CDS1515-3-C DESIGN NOTES
CDS1515-3-C RATED TREATMENT CAPACITY IS 1.0 CFS, OR PER LOCAL REGULATIONS.
THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH		HEIGHT
	*		*
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE, www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. ANY DEVIATIONS MUST BE APPROVED IN WRITING BY THE ENGINEER OF RECORD.
4. STRUCTURE SHALL MEET AASHTO H20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANOUT.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE A CRANE WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

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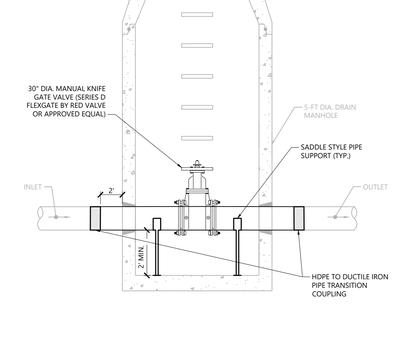
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS1515-3-C
ONLINE CDS
STANDARD DETAIL

Water Quality Unit - WQU 030

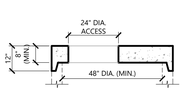
N.T.S. Source: Contech



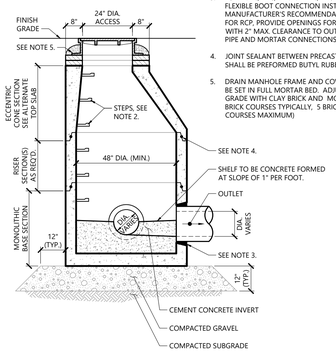
Stormwater Shutoff Manhole

1/16

N.T.S. Source: VHB LD_267



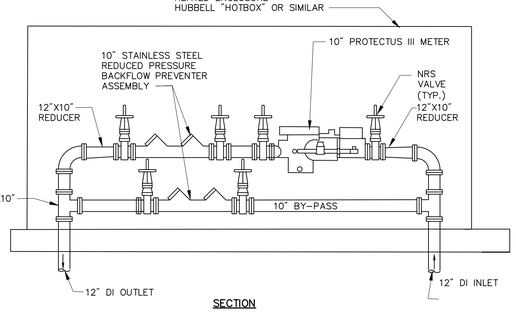
ALTERNATE TOP SLAB



NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

Drain Manhole (DMH)



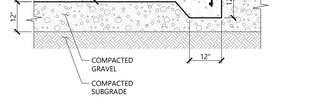
SECTION

Notes:

1. WATER EQUIPMENT SUBJECT TO CHANGE PENDING FINAL APPROVAL FROM THE WATER AUTHORITY. CONTRACTOR TO VERIFY EQUIPMENT WITH ENGINEER PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL DETERMINE SIZE OF ENCLOSURE. CONCRETE PAD SHALL BE INSIDE DIMENSIONS OF ENCLOSURE PLUS 12" AND SHALL BE INSTALLED PER MANUFACTURER REQUIREMENTS.

Water Equipment Heated Enclosure Detail

7/07



NOTES

1. SIZE OF PAD TO BE AS INDICATED ON PLANS.
2. CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 30 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

Utility Pad

vhb.com
1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

APPROVAL REQUIRED UNDER THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE:

Applicant:

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 410763

Owner:

Brayton Point, LLC
1515 Des Peres Road
Suite 300 St. Lois, MO 63131

Submarine Cable Factory

Brayton Point Road
Somerset, Massachusetts

No.	Revision	Date	Appvd.

Designed by EOB Checked by SL

Issued for: Definitive Subdivision Date: June 2, 2023

Not Approved for Construction

Drawing Title: Site Details 3

Drawing Number: C-6.03

Sheet 17 of 16

Project Number: 15542.00

COMMONWEALTH OF MASSACHUSETTS
SCOTT D. LINDGREN
CIVIL
No. 41036
REGISTERED PROFESSIONAL ENGINEER
6-2-2023

Saved Friday, June 2, 2023 3:50:16 PM ERICOBRIEN Plotted Friday, June 2, 2023 5:14:48 PM Eric O'Brien

RESERVED FOR REGISTRY USE ONLY

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Certification

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED
PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

Record Owner

BRAYTON POINT LLC
1 BRAYTON POINT ROAD
SOMERSET, MASS.
PID 273002A000020
BOOK 9433, PAGE 29

General Notes

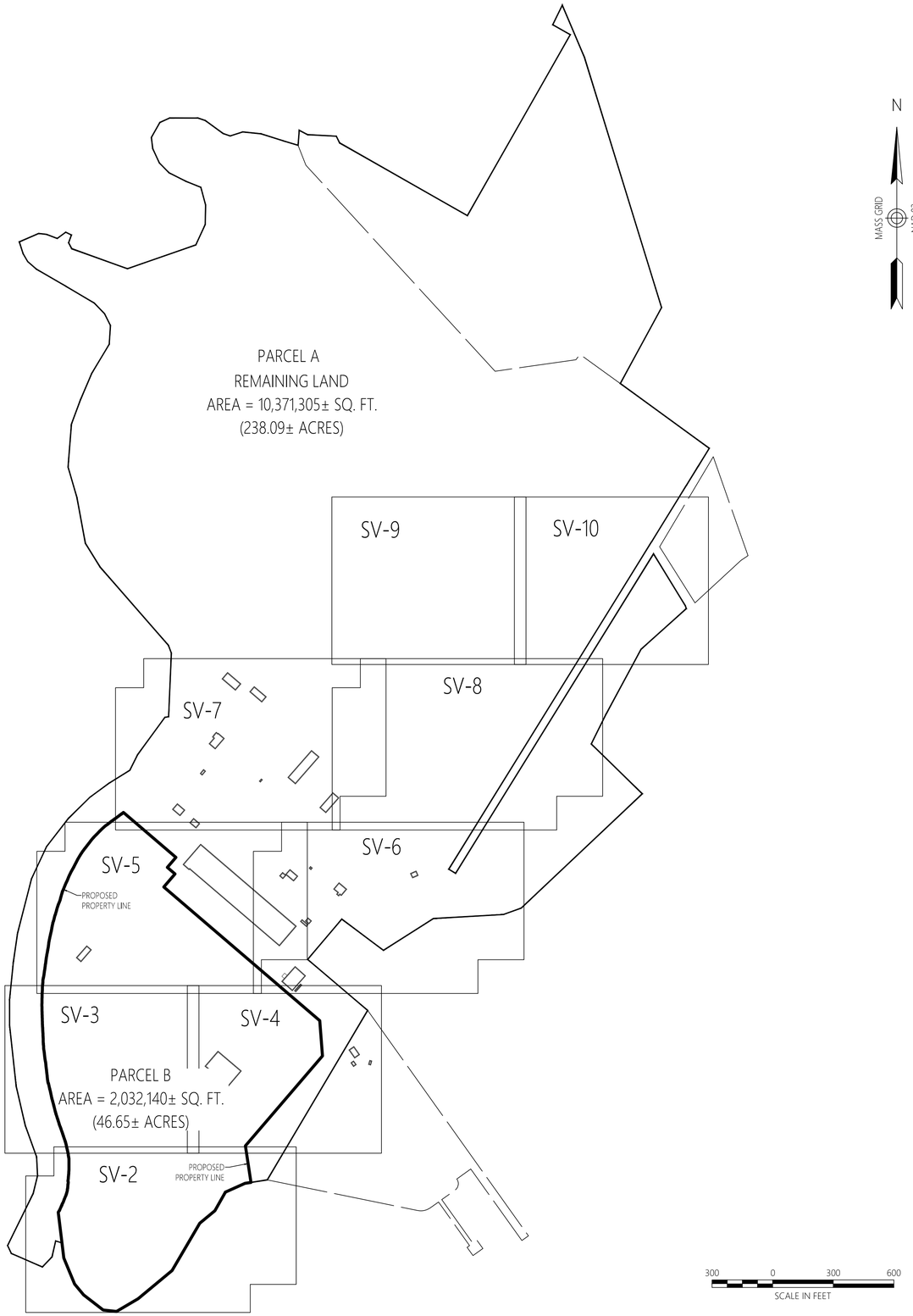
1) THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN APRIL, 2022 AND FROM DEEDS AND PLANS OF RECORD. A PORTION OF THE PERIMETER BOUNDARY LINE OF THE EXISTING PARCEL FOLLOWS THE MEAN LOW WATER AS SHOWN ON PLAN. SEE RECORD PLAN IN PLAN BOOK 112, PLAN 9.

2) HORIZONTAL DATUM IS BASED ON MASS. GRID SYSTEM, NAD 1983.

3) THE LOT LIES ENTIRELY WITHIN THE INDUSTRIAL DISTRICT (I) AS SHOWN ON THE "OFFICIAL ZONING" MAP TOWN OF SOMERSET, MASSACHUSETTS", LAST AMENDED MARCH 19, 2018. DIMENSIONAL REQUIREMENTS FOR AN (I) AT THE TIME OF THIS SURVEY ARE: TABLE A - ITEM 6(a)*

	REQUIRED
MINIMUM LOT AREA	20,000 S.F.
MINIMUM FRONTAGE	ANY
MINIMUM FRONT YARD SETBACK	50 FEET
MINIMUM SIDE YARD SETBACK	25 FEET
MINIMUM REAR YARD SETBACK	25 FEET
MAXIMUM BUILDING HEIGHT	ANY

4) THE PURPOSE OF THIS PLAN IS TO DIVIDE EXISTING PARCEL INTO PARCELS A & B. THIS PLAN ALSO SHOWS PROPOSED EASEMENTS.

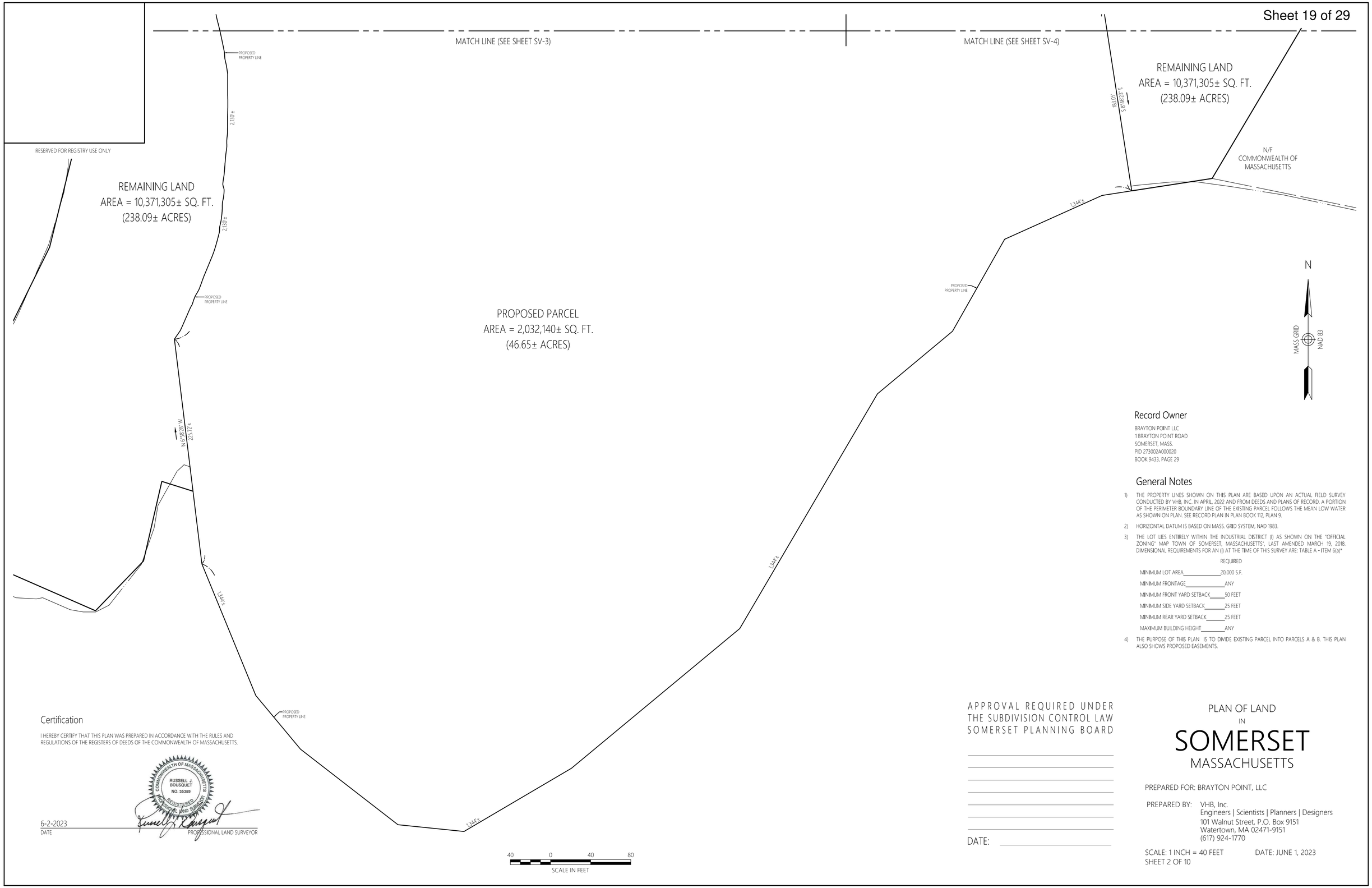


PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
Watertown, MA 02471-9151
(617) 924-1770

SCALE: 1 INCH = 300 FEET DATE: JUNE 1, 2023
SHEET 1 OF 10 - KEY



Record Owner

BRAYTON POINT LLC
1 BRAYTON POINT ROAD
SOMERSET, MASS.
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BOOK 9433, PAGE 29

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MINIMUM SIDE YARD SETBACK	25 FEET
MINIMUM REAR YARD SETBACK	25 FEET
MAXIMUM BUILDING HEIGHT	ANY

4) THE PURPOSE OF THIS PLAN IS TO DIVIDE EXISTING PARCEL INTO PARCELS A & B. THIS PLAN ALSO SHOWS PROPOSED EASEMENTS.

Certification

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED
PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
Watertown, MA 02471-9151
(617) 924-1770

SCALE: 1 INCH = 40 FEET DATE: JUNE 1, 2023
SHEET 2 OF 10

RESERVED FOR REGISTRY USE ONLY

MATCH LINE (SEE SHEET SV-5)

N

MASS GRID
NAD 83

PROPOSED
PROPERTY LINE

2,130'±

PROPOSED PARCEL
AREA = 2,032,140± SQ. FT.
(46.65± ACRES)

MATCH LINE (SEE SHEET SV-4)

REMAINING LAND
AREA = 10,371,305± SQ. FT.
(238.09± ACRES)

MATCH LINE (SEE SHEET SV-2)

40 0 40 80
SCALE IN FEET

General Notes

1) THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN APRIL, 2022 AND FROM DEEDS AND PLANS OF RECORD. A PORTION OF THE PERIMETER BOUNDARY LINE OF THE EXISTING PARCEL FOLLOWS THE MEAN LOW WATER AS SHOWN ON PLAN. SEE RECORD PLAN IN PLAN BOOK 112, PLAN 9.
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MINIMUM FRONT YARD SETBACK	50 FEET
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MINIMUM REAR YARD SETBACK	25 FEET
MAXIMUM BUILDING HEIGHT	ANY

4) THE PURPOSE OF THIS PLAN IS TO DIVIDE EXISTING PARCEL INTO PARCELS A & B. THIS PLAN ALSO SHOWS PROPOSED EASEMENTS.

Record Owner

BRAYTON POINT LLC
1 BRAYTON POINT ROAD
SOMERSET, MASS.
PID 273002A000020
BOOK 9433, PAGE 29

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COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED
PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
Watertown, MA 02471-9151
(617) 924-1770

SCALE: 1 INCH = 40 FEET DATE: JUNE 1, 2023
SHEET 3 OF 10

RESERVED FOR REGISTRY USE ONLY

MATCH LINE (SEE SHEET SV-3)

MATCH LINE (SEE SHEET SV-6)

S 49°24'14" E
30.00'

N 40°35'46" E
2.35'

S 49°24'14" E
185.00'

PROPOSED PROPERTY LINE

N 40°35'46" E
384.68' (TIE)

175.00'
S 49°24'14" E

PROPOSED PARCEL
AREA = 2,032,140± SQ. FT.
(46.65± ACRES)

1 STORY
CORRUGATED METAL
BUILDING

1 STORY
CONC. BUILDING

1 STORY
CORRUGATED METAL
BUILDING

S 49°24'14" E
S 40°35'46" W

PROPOSED PROPERTY LINE

REMAINING LAND
AREA = 10,371,305± SQ. FT.
(238.09± ACRES)

MATCH LINE (SEE SHEET SV-2)

40 0 40 80
SCALE IN FEET

N

MASS GRID
NAD 83

N/F
COMMONWEALTH OF MASSACHUSETTS
(AREA LEASED TO BRAYTON POINT, LLC)

General Notes

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	REQUIRED
MINIMUM LOT AREA	20,000 S.F.
MINIMUM FRONTAGE	ANY
MINIMUM FRONT YARD SETBACK	50 FEET
MINIMUM SIDE YARD SETBACK	25 FEET
MINIMUM REAR YARD SETBACK	25 FEET
MAXIMUM BUILDING HEIGHT	ANY

4) THE PURPOSE OF THIS PLAN IS TO DIVIDE EXISTING PARCEL INTO PARCELS A & B. THIS PLAN ALSO SHOWS PROPOSED EASEMENTS.

Certification

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

Record Owner

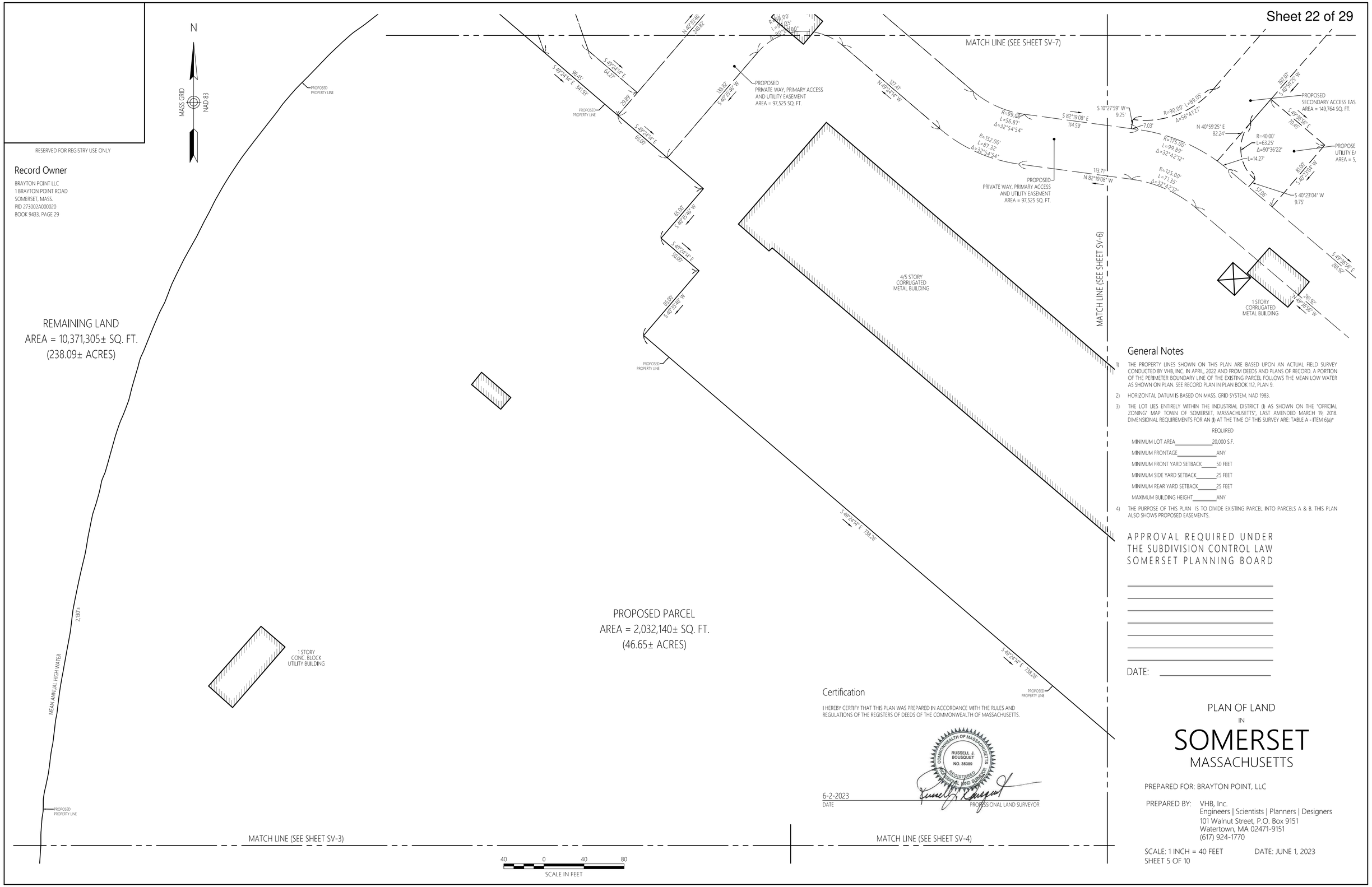
BRAYTON POINT LLC
1 BRAYTON POINT ROAD
SOMERSET, MASS.
PID 273002A000020
BOOK 9433, PAGE 29

PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
Watertown, MA 02471-9151
(617) 924-1770

SCALE: 1 INCH = 40 FEET DATE: JUNE 1, 2023
SHEET 4 OF 10



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MAXIMUM BUILDING HEIGHT	ANY

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SOMERSET PLANNING BOARD

DATE: _____

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COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
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SCALE: 1 INCH = 40 FEET DATE: JUNE 1, 2023
SHEET 5 OF 10

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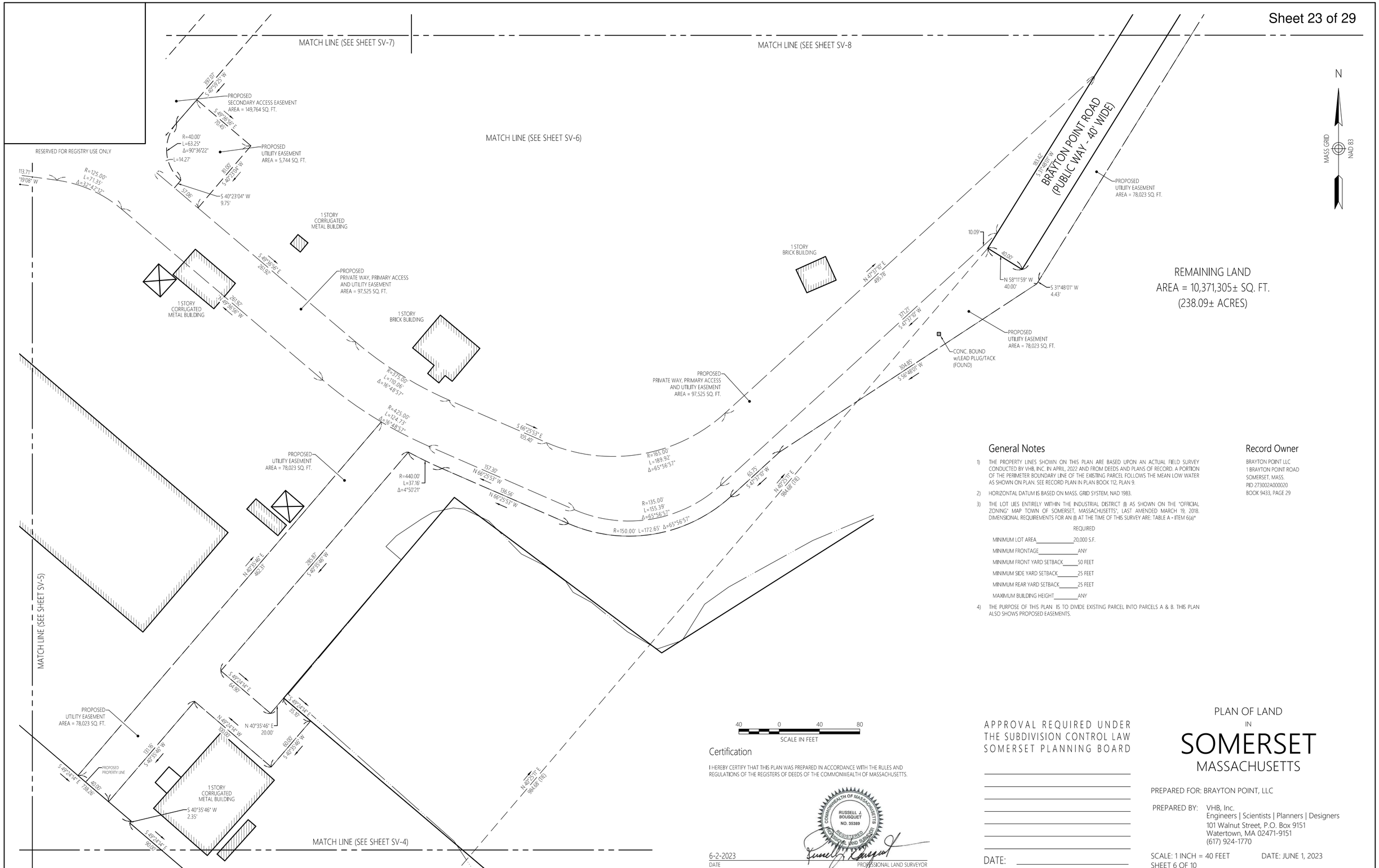

REMAINING LAND
AREA = 10,371,305± SQ. FT.
(238.09± ACRES)

General Notes

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MINIMUM REAR YARD SETBACK	25 FEET
MAXIMUM BUILDING HEIGHT	ANY

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Record Owner

BRAYTON POINT LLC
1 BRAYTON POINT ROAD
SOMERSET, MASS.
PID 273002A000020
BOOK 9433, PAGE 29

40 0 40 80
SCALE IN FEET

Certification

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RUSSELL J. BOUSQUET
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REGISTERED
PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

DATE: _____

PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
Watertown, MA 02471-9151
(617) 924-1770

SCALE: 1 INCH = 40 FEET DATE: JUNE 1, 2023
SHEET 6 OF 10

RESERVED FOR REGISTRY USE ONLY

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BRAYTON POINT LLC
1 BRAYTON POINT ROAD
SOMERSET, MASS.
PID 273002A000020
BOOK 9433, PAGE 29

REMAINING LAND
AREA = 10,371,305± SQ. FT.
(238.09± ACRES)

GARAGE

2 STORY
CONC. BLOCK
BUILDING

1 STORY
CORRUGATED METAL
BUILDING

1 STORY
CONC. BLOCK
BUILDING

2 STORY
CORRUGATED METAL
BUILDING

1 STORY
CORRUGATED
METAL BUILDING

1 STORY
CONC. BLOCK
BUILDING

N

MASS GRID
NAD 83

MATCH LINE (SEE SHEET SV-9)

MATCH LINE (SEE SHEET SV-8)

N 28°25'11" E
364.09'

S 28°25'11" W
364.09'

PROPOSED
SECONDARY ACCESS EASEMENT
AREA = 149,764 SQ. FT.

N 28°20'59" E
340.83'

247.71'
S 28°20'59" W

R=40.00'
L=27.66'
Δ=39°36'55"

N 11°15'56" W
69.88'

Δ=52°15'21"
R=90.00'
L=82.08'

PROPOSED
SECONDARY ACCESS EASEMENT
AREA = 149,764 SQ. FT.

N 40°59'25" E
339.34'

397.07'
S 40°59'25" W

PROPOSED
DRAIN EASEMENT
AREA = 9,441 SQ. FT.

S 84°24'14" E
126.84'

N 5°35'46" E
50.00'

94.41'
N 84°24'14" W

2.00' ±

PROPOSED
PROPERTY LINE

N 14°39'28" W
75.16'

S 80°00'00" W
25.10'

PROPOSED
PRIVATE WAY, PRIMARY ACCESS
AND UTILITY EASEMENT
AREA = 97,525 SQ. FT.

N 80°35'35" E
248.82'

S 49°24'14" E
293.30'

R=60.00'
L=94.25'
Δ=90°00'00"

MATCH LINE (SEE SHEET SV-5)

MATCH LINE (SEE SHEET SV-6)

40 0 40 80
SCALE IN FEET

Certification

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COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED
PROFESSIONAL LAND SURVEYOR

6-2-2023
DATE

PROFESSIONAL LAND SURVEYOR

APPROVAL REQUIRED UNDER
THE SUBDIVISION CONTROL LAW
SOMERSET PLANNING BOARD

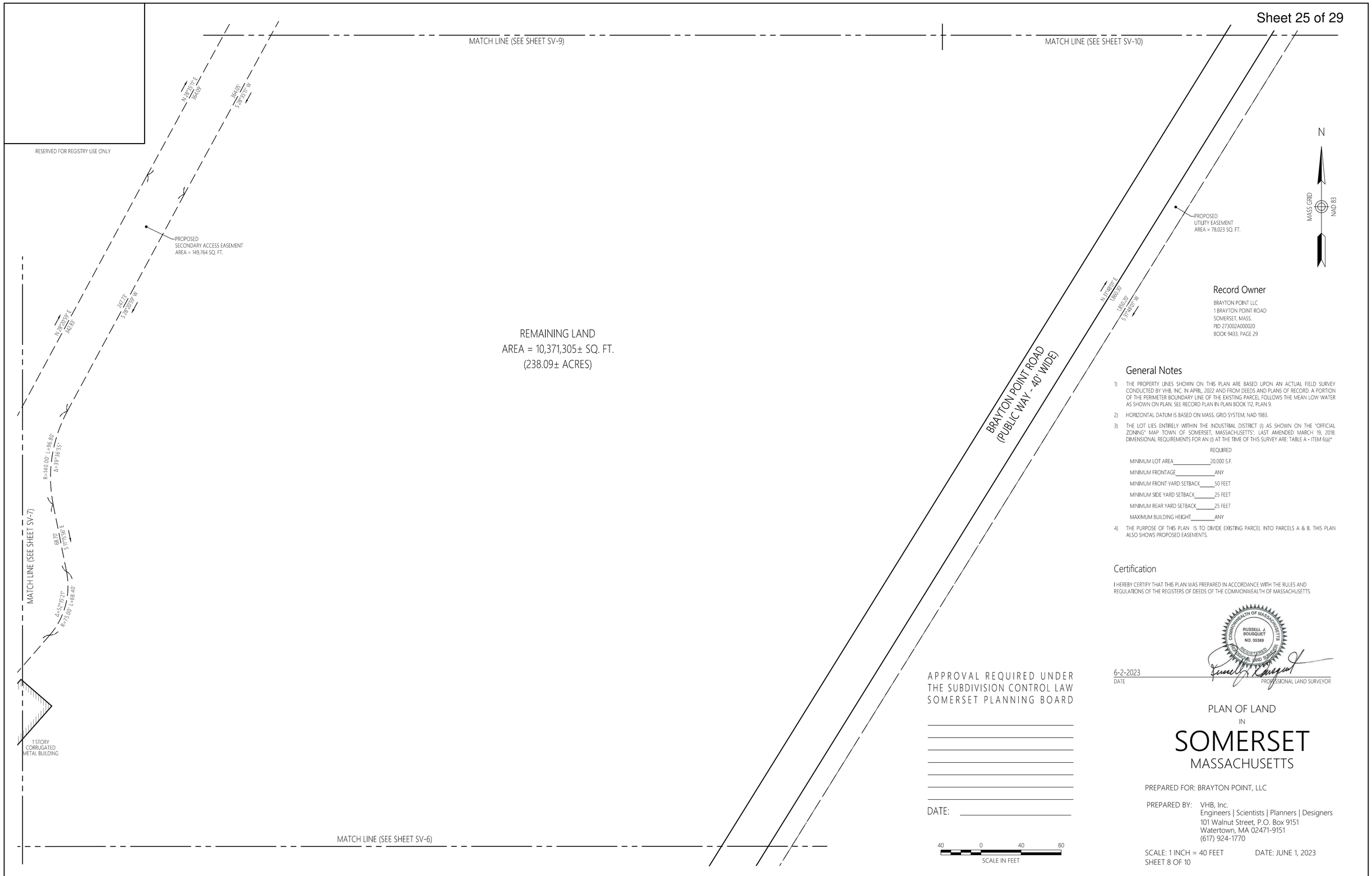
DATE: _____

PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

PREPARED FOR: BRAYTON POINT, LLC

PREPARED BY: VHB, Inc.
Engineers | Scientists | Planners | Designers
101 Walnut Street, P.O. Box 9151
Watertown, MA 02471-9151
(617) 924-1770

SCALE: 1 INCH = 40 FEET DATE: JUNE 1, 2023
SHEET 7 OF 10



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1 BRAYTON POINT ROAD
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SOMERSET
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SHEET 8 OF 10

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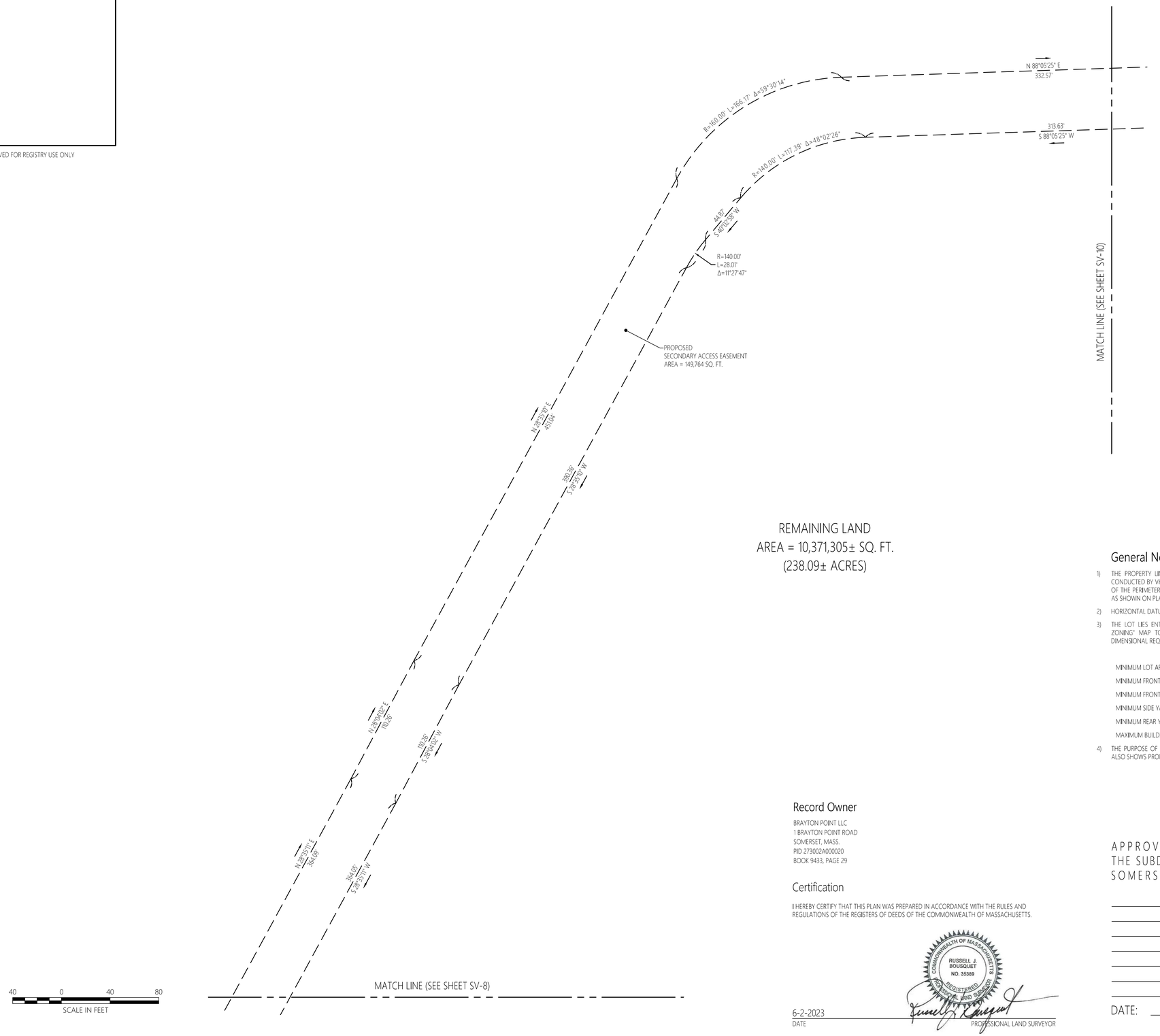
RESERVED FOR REGISTRY USE ONLY

MATCH LINE (SEE SHEET SV-6)



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PLAN OF LAND
IN
SOMERSET
MASSACHUSETTS

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SHEET 9 OF 10

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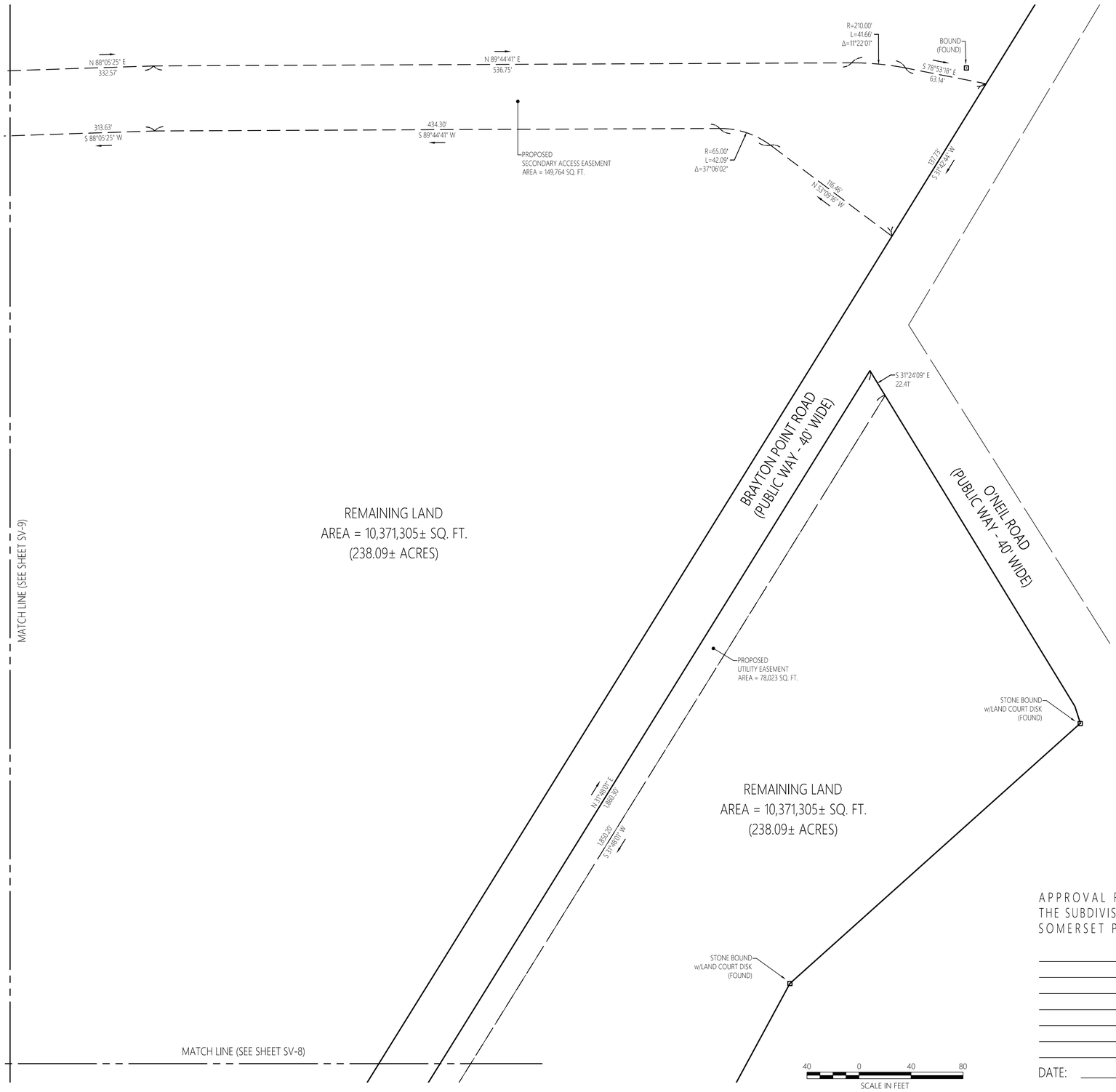

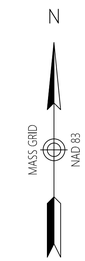

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SOMERSET PLANNING BOARD

DATE:

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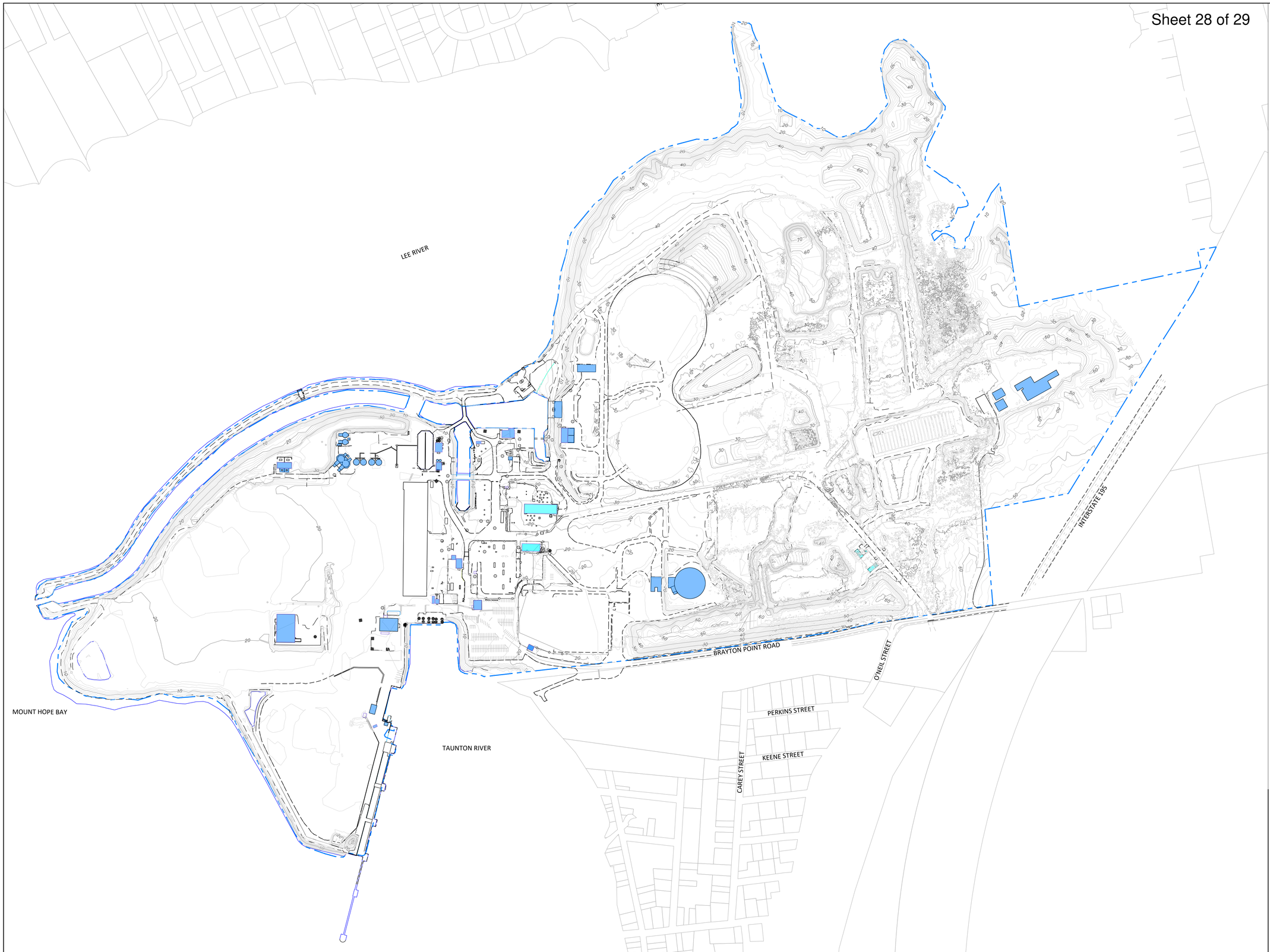


LEGEND

- IRON PIN
- BOUND
- CATCH BASIN
- MANHOLE
- SITE LIGHTING
- STRUCTURE NOT BELONGING TO BP LLC
- STRUCTURE STILL REMAINING
- BRAYTON POINT LLC PROPERTY LINE
- ABUTTERS PROPERTY LINE
- EDGE OF PAVEMENT
- MAJOR CONTOUR
- MINOR CONTOUR

HORIZONTAL SCALE

200 0 100 200 400 800

(IN FEET)

1"=200'

(SHOULD BE PRINTED ON ARCH E1 (42 X 30 INCHES))

EnviroAnalytics Group

DRAWN BY: MN	
APPROVED BY: EBS	
DATE: 05/10/2023	
SCALE: AS SHOWN	

REVISION NUMBER:	DATE OF REVISION:	BY:	DESCRIPTION:
#1	NA	NA	NA
#2	NA	NA	NA
#3	NA	NA	NA

SITE TOPOGRAPHIC MAP
BRAYTON POINT, LLC
SOMERSET, MASSACHUSETTS

PROJECT NUMBER:	SHEET NUMBER:
NA	1 OF 1
DRAWING DATE:	FIGURE NUMBER:
05/10/2023	**1**

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ORIGINAL PLAT SHEETS

PATH P:\PEA\2021\0161- Prysmian Cable Project\Drawings\Electrical

PLOTTED 6/22/2023 7:50 AM

LAST UPDATE 6/22/2023 7:49 AM

USER NAME Jun Gervacio

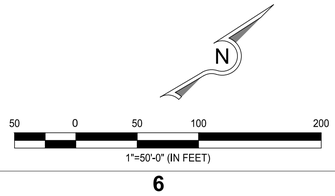
FILE NAME e2-05.dwg



LIGHT POLE FIXTURE/HEAD CONFIGURATIONS

POLE NAME	NO. OF HEADS	FIXTURE CAT. NO.	COLOR TEMPERATURE	MANUFACTURER	TILT	MTG. HGT. (FT)	NOTES	AMPS(@277V) /FIXTURE	VA/FIXTURE	VA/POLE	VA/PHASE	EPA/FIXTURE	EPA/POLE	WEIGHT/ FIXTURE	WEIGHT/ POLE	B	U	G
LP-3	1	DSX2 LED P2 30K 70CRI T2M MVOLT RPA PIR	3000K	LITHONIA LIGHTING	0	25	PROGRAM CONTROLLER - OCCUPIED @ 100%, UNOCCUPIED @ 25%	0.37	179	179	90	1.06	1	48	48	2	0	2

PHOTOMETRIC TABLE			
GROUP	MIN.	MAX.	AVG
PRIMARY ACCESS ROAD	0.14	5.1	2.24
VALUES ARE FOOTCANDLE (FC)			
COMPUTED IN ACCORDANCE WITH IES RECOMMENDATIONS			



Prysmian Group

professional engineering associates
PO Box 8836 | Greenville, South Carolina | 29604
www.peasc.com | 864-242-4373

LS3P
2 WEST WASHINGTON STREET STE 600
GREENVILLE, SOUTH CAROLINA 29601
TEL. 864.233.4027 FAX. 864.235.0405
WWW.LS3P.COM

LOC
Live Oak Consultants, LLC
Engineers, Project Managers & Planners
NORTH CHARLESTON, SC
www.LiveOakConsultants.com
Email: info@LiveOakConsultants.com
PROJECT NO.: 20210161

NOT FOR CONSTRUCTION

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Prysmian Subsea Cable Factory - MA

Brayton Point
Fall River, MA

PEA PROJECT: 3109-218780

Δ	DATE	DESCRIPTION
A	05/31/2023	LIGHTING CALCULATION

SHEET NAME:
PRIMARY ACCESS RD. PHOTOMETRIC PLAN

ORIG SUBMISSION: 04/21/2023

SHEET:
E2-05

Project Status

E
D
C
B
A

1 2 3 4 5 6

Submarine Cable Factory

Somerset, Massachusetts

PREPARED FOR

Prysmian Group

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October 2022

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Executive Summary

On behalf of Prysmian Projects North America, LLC. (the "Proponent"), a subsidiary of the Prysmian Group (the "Applicant"), VHB has prepared this Traffic Impact and Access Study (TIAS) to evaluate the impacts associated with the development of a new state-of-the-art cable manufacturing plant on a portion of the former Brayton Point Power Station site and a Marine Terminal in the adjacent in-water area, in the Town of Somerset, Massachusetts (see Figure 1 for site location and access routes which is located at the end of this section). The Proponent is acquiring approximately 47 acres of the approximately 300-acre former power station site. Development of the Project on the 47-acre Project Site and adjacent in-water area will allow the Proponent to design, manufacture, and deliver submarine transmission cable to support offshore wind projects in the United States.

This analysis quantifies existing and projected future traffic conditions with and without the Project and identifies potential transportation improvements within the study area where applicable.

Overall, the analysis presented in the TIA indicates that the existing transportation infrastructure around the Project Site will support the traffic impacts of the Project with the Transportation Mitigation proposed and the TDM measures described in this report. This is due to the fact that the Project is projected to add minimal traffic volumes to the study area during the peak hours (7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM) because the shift changes of the Project will occur during off-peak hours (6:00 AM, 2:00 PM, and 10:00 PM). The only traffic projected to be entering and exiting during the study area peak periods are the 16 office employees and occasionally one to two trucks. This will result in negligible impacts to traffic operations during the morning and evening peak hours of the study area intersections.

Key findings of the TIA and benefits of the Project as it relates to transportation are as follows:

› The study area intersections peak hours (7:00 AM – 8:00 AM and 4:00 PM – 5:00 PM) will not occur during the same time periods as the shift changes, which will occur during off-peak hours (6:00 AM, 2:00 PM, and 10:00 PM).

› It is expected that only the 16 office workers will be entering and exiting Project Site during the morning and evening intersection peak hours; however, in order to be conservative (overestimating projected traffic), ITE trip generation data was used. Based on the conservatively high ITE data, the Project Site is projected to generate 116 trips during the morning peak (85 entering and 31 exiting) and 109 trips during the evening peak hour (40 entering and 69 exiting). (Refer to Section 6.1.4.3 below for further information.)

› The actual number of trucks that the Project is projected to generate is 20 truck trips per day (10 round trips). In order to be conservative, ITE rates project the Project would generate 122 trucks per day (61 round trips). The actual number will be much less because products will be transported by water access. The water access reduces the number and impacts of truck traffic along study area intersections. (Refer to Section 6.1.4.3 below for further information.)

› Capacity analysis of the signalized study area intersections shows that the Wilbur Avenue (Route 103) at Lees River Avenue operates at acceptable levels of service during the morning and evening peak hours under 2022 Existing, 2029 No-Build, and 2029 Build conditions.

› The analysis shows that there is some congestion at the Wilbur Avenue (Route 103) at Brayton Point Road intersection during the weekday evening peak hour under existing conditions that will continue under future No-Build Condition, which is primarily due to the heavy left-turn traffic on the eastbound approach and will not be increased as a result of the Project.

› Under the 2029 Build Condition, with optimized traffic signal timings, the signalized intersections are projected to operate at acceptable levels.

› The Project is not adding any significant volume of traffic at study area unsignalized intersections.

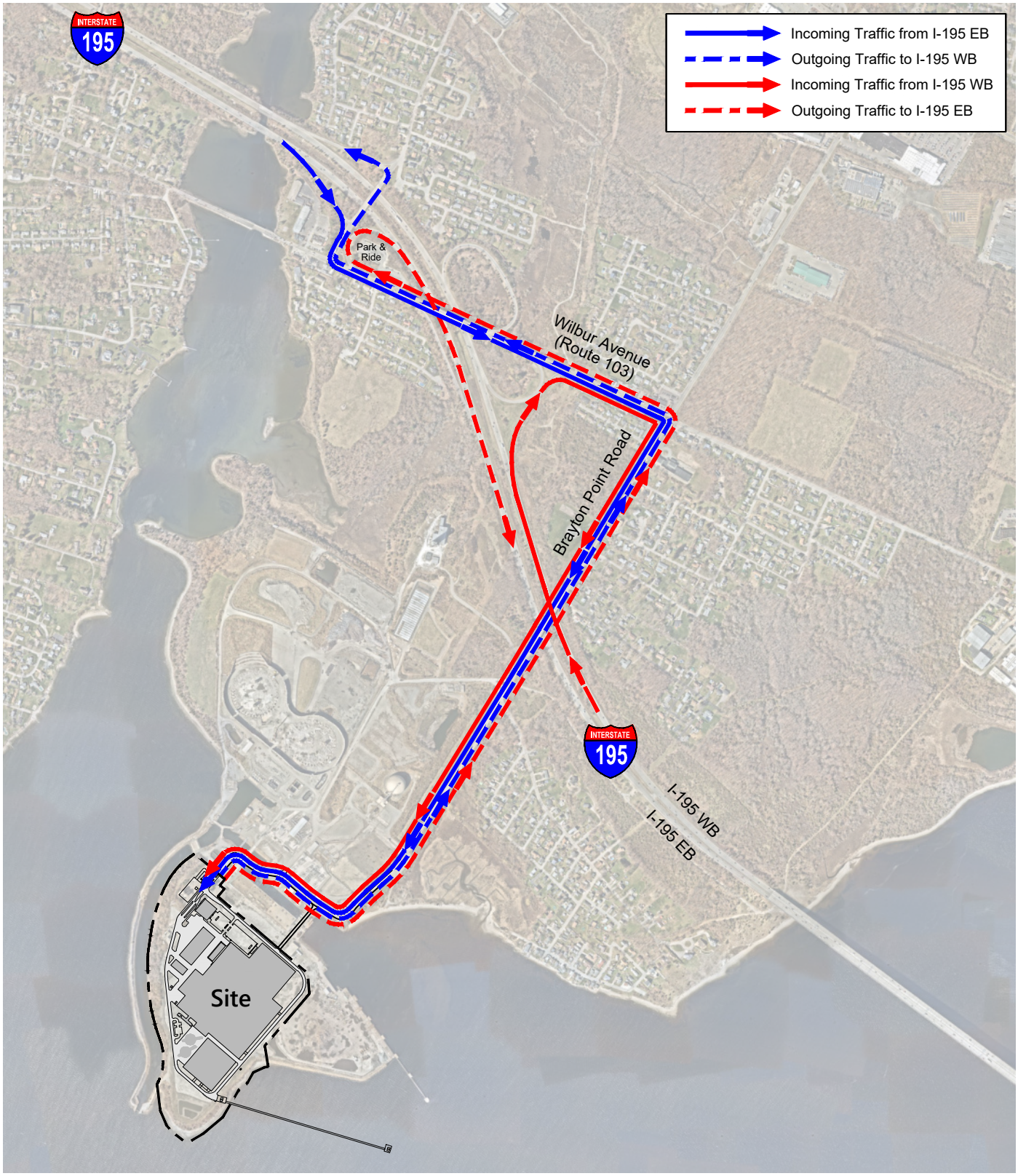
› The capacity analysis of the unsignalized study area intersections shows that there are some delays on the side streets that are under stop and yield conditions; however, it should be noted that the analytical methodologies typically used for the analysis of unsignalized intersections use conservative analysis parameters that over-estimation of calculated delays.

› The Project includes the construction of over 200 parking spaces to accommodate the approximately 115 employees per three shifts plus 16 office employees and any overlap that occurs during the shift changes.

› Although the Project is projected to have minimal impacts on the peak hour operations of the study area intersections, the Proponent will optimize the traffic signal timings at the Wilbur Avenue intersections with Lees River Avenue and Brayton Point Road after the Project is operational.

› The Proponent will implement a TDM program that is aimed at reducing the number of single occupant vehicles; the Project's expected shifts (6 AM to 2 PM; 2 PM to 10 PM; and 10 PM to 6 AM) will occur outside of the area's existing peak periods; therefore, the Project is already committed to promoting travel during off-peak hours through the setting of the facility's shifts.

Overall, the analysis presented in the TIA indicates that the existing transportation infrastructure around the Project Site will support the traffic impacts of the Project with the TDM measures described in this report.



Source: 2022 NearMap Aerial

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Figure 1
Site Location and
Access Routes

Prysmian Brayton Point
Somerset, Massachusetts

1

Introduction

On behalf of Prysmian Projects North America, LLC. (the "Proponent"), VHB has prepared this Traffic Impact and Access Study (the "Study") for the new state-of-the-art cable manufacturing plant on a portion of the former Brayton Point Power Station site and a Marine Terminal in Somerset, Massachusetts. The location of the Site is shown above in Figure 1.

Background and Project Description

The Project is the development of a new state-of-the-art cable manufacturing plant on a portion of the former Brayton Point Power Station site and a Marine Terminal in the adjacent in-water area, in the Town of Somerset, Massachusetts (see Figure 1 located above). The Proponent is acquiring approximately 47 acres of the approximately 300-acre former power station site. Development of the Project on the 47-acre Project Site and adjacent in-water area will allow the Proponent to design, manufacture, and deliver submarine transmission cable to support offshore wind projects in the United States.

The Project will be Prysmian's first submarine power cables manufacturing facility in the United States and the Commonwealth's first Tier 1 offshore wind manufacturing facility. The Project presents an innovative opportunity to deliver on both Prysmian and the Commonwealth's commitment to wind power.

This report summarizes the comprehensive Transportation Impact Assessment (TIA) that has been performed to evaluate the potential traffic impacts associated with the Project. It includes a detailed review of the transportation and parking conditions associated with the Project and the surrounding area for the 2022 Existing conditions, 2029 No-Build condition, and the 2029 Build condition of the Project.

Study Methodology

This TIA has been performed in general conformance with the MassDOT guidelines for traffic impact assessments. Prior to completing this study, the Proponent submitted a Transportation Scoping Letter (TSL) to MassDOT. In response, MassDOT issued a letter outlining the scope of the TIA and this study has been prepared based on their response. The TIA was referenced in the ENF Certificate. After further review, MassDOT has followed up with an email stating that "the Project is not anticipated to trigger any MEPA threshold for review for transportation impacts." They also stated that, "Additionally, it is our understanding the Project does not propose access via any state jurisdictional roadway. As a Result, MassDOT ultimately will not be required to review this Project."

The TIA has been prepared in three stages. The first stage involved an assessment of existing traffic conditions within the Project study area, including: an inventory of existing roadway geometry; observations of traffic flow, including daily and peak period traffic counts; a summary of existing public transit facilities in the area; existing bicycle and pedestrian accommodations; a review of vehicular crash data; and a summary of proposed parking conditions.

The second stage of the study established the framework for evaluating the transportation impacts of the Project. Specific travel demand forecasts for the Project were assessed along with future traffic demands on the study area roadways due to projected background traffic growth and other proposed area redevelopments that may occur independent of the Project. The year 2029, a seven-year time horizon, was selected as the design year for analysis for the preparation of this TIA. Parking conditions for the Project were also reviewed.

The third and final stage of the study discusses possible measures to improve existing and future traffic operations in the area by offsetting the traffic-related impacts associated with the Project.

2

Existing Conditions

Evaluation of the transportation impacts associated with the Project requires a thorough understanding of the existing transportation conditions in the Project study area including roadway geometry, traffic controls, daily and peak hour traffic flow, and traffic safety data. Each of these elements is described in detail below.

Study Area

The study area was established based on an understanding of the area transportation network and the operational characteristics of the Project, as well as the discussions with the Town and MassDOT. Based on this approach, the study area consists of the following intersections, which are also illustrated in Figure 2:

- Lee River Avenue at I-195 West On-Ramp
- Lee River Avenue at I-195 East Off-Ramp
- Wilbur Avenue (Route 103) at Lees River Avenue
- Wilbur Avenue (Route 103) westbound at I-195 East On-Ramp
- Wilbur Avenue (Route 103) eastbound at Home Street/Park & Ride Driveway
- Wilbur Avenue (Route 103) eastbound at I-195 East On-Ramp
- Wilbur Avenue (Route 103) westbound at I-195 West Off-Ramp
- Wilbur Avenue (Route 103) eastbound at I-195 West On-Ramp
- Wilbur Avenue (Route 103) eastbound at I-195 West Off-Ramp
- Wilbur Avenue (Route 103) at Brayton Point Road
- Brayton Point Road at O'Neil Road

This TIA also provides an assessment of proposed roadways that will be present under future conditions. There is one proposed access drive that is an extension of the southern end of Brayton Point Road that curves to the west into the Project Site.

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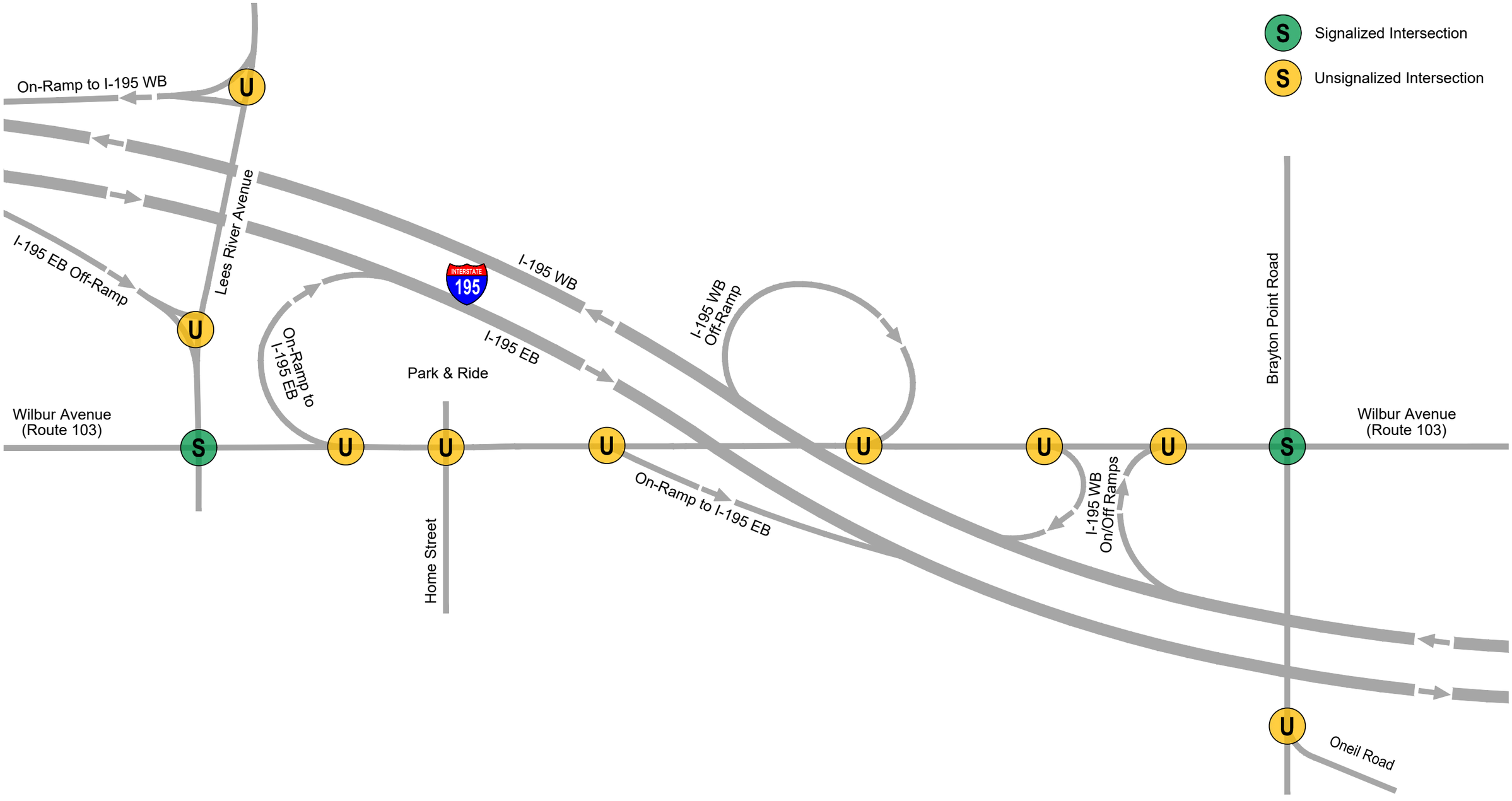

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Figure 2
Study Area Intersection Map

Prysmian Brayton Point
Somerset, Massachusetts

Future conditions scenarios incorporate roadway and intersection reconfigurations and improvements, which are described later in this report.

The existing conditions evaluation consisted of an inventory of the traffic control, roadway, driveway and intersection geometry in the study area, the collection of daily and peak hour traffic volumes (from record sources as well as new counts), and a review of recent crash history.

Roadway Geometry

Descriptions of the study area roadways and intersections are provided below, including descriptions of the existing lane configurations, traffic control at the study area intersections, and the roadway jurisdiction in this area. The observed existing geometry and traffic control at each study area intersection is illustrated in Figure 3, located at the end of this section.

Roadways

Access to the Project is provided from a proposed driveway that is an extension of the southern end of Brayton Point Road that curves to the west into the Project Site. Brayton Point Road is under the jurisdiction of the Town of Somerset. Wilbur Avenue (Route 103) is under MassDOT jurisdiction. Lees River Avenue is generally under jurisdiction of the Town of Somerset, but at the intersections with the I-195 Ramps and the bridge over I-195 it is under MassDOT jurisdiction.

Lees River Avenue

Lees River Avenue is a two-lane roadway (one lane in each direction) generally oriented in the north-south direction. Lees River Avenue is a regional commuter route that serves as a connection between Wilbur Avenue (Route 103), the I-195 East Off-Ramp, and the I-195 West On-Ramp to the south and Route 6 and Read Street to the north. Lees River Avenue is classified as an urban minor arterial roadway. Lees River Avenue is generally under jurisdiction of the Town of Somerset; however, at the I-195 Ramps and the bridge over I-195 it is under MassDOT jurisdiction. Sidewalks are not provided along either side of the roadway except along the east side of the bridge over I-195. The posted speed limit is 30 mph. Land use along Lees River Avenue consists of residential uses north of the bridge over I-195 and commercial uses south of the bridge.

Wilbur Avenue (Route 103)

Wilbur Avenue (Route 103) is a two-lane roadway (one lane in each direction) generally oriented in the east-west direction. Wilbur Avenue (Route 103) is a regional commuter route that serves as a connection between Warren, Rhode Island to the west and Riverside Avenue to the east. Wilbur Avenue (Route 103) is classified as an urban minor arterial roadway and is under MassDOT jurisdiction. In the vicinity of Lees River Avenue, sidewalks are provided along the north side of the roadway. The rest of Wilbur Avenue has no sidewalks except on the south side of the bridge over I-195. The posted speed limit is 40 mph. Land use along Wilbur Avenue (Route 103) consists of a mix of commercial and residential uses.

Brayton Point Road

Brayton Point Road is a two-lane roadway (one lane in each direction) generally oriented in the north-south direction. Brayton Point Road serves as a connection from the Project Site to the south with Route 6 and Reed Street to the north. Brayton Point is an urban major collector and is under the jurisdiction of Town of Somerset. South of O'Neil Road there are no sidewalks provided on either side of the roadway. Between O'Neil Road and Crestview Avenue there is sidewalk on the east side of the roadway. Between Crestview Avenue and Wilbur Avenue (Route 103) there is sidewalk on both sides of the roadway. North of Wilbur Avenue there is sidewalk on the west side of the roadway. The posted speed limit is 25 mph south of Wilbur Avenue (Route 103) and 30 mph north of Wilbur Avenue (Route 103). Land use along Brayton Point Road consists of a primarily residential uses with some commercial uses in the vicinity of Wilbur Avenue (Route 103).

Study Area Intersections

The traffic control and the lane usage of the study area intersections is shown in Figure 3 at the end of this section.

Lee River Avenue at I-195 West On-Ramp

Lees River Avenue generally runs in the north-south direction and is intersected by the I-195 Off-Ramp from the west, to form a T-type unsignalized intersection. The I-195 Off-Ramp westbound departure consists of one lane. The northbound Lees River Avenue approach consist of a shared left-turn/through lane and the southbound approach consist of a shared through/right-turn lane. There are no pedestrian or bicycle accommodations provided at this intersection. North of the study area, the posted speed limit traveling southbound on Lees River Avenue is 35 mph. There is no posted speed limit traveling northbound.

Lee River Avenue at I-195 East Off-Ramp

Lees River Avenue generally runs in the north-south direction and is intersected by the I-195 Off-Ramp from the west, to form a T-type unsignalized intersection. The I-195 Off-Ramp eastbound approach consists of an exclusive left-turn lane that operates under stop control and a channelized right-turn lane that operates under yield control. The northbound and southbound Lees River Avenue approaches consist of a through lane. There are no pedestrian or bicycle accommodations provided at this intersection. North of the study area, the posted speed limit traveling southbound on Lees River Avenue is 35 mph. There is no posted speed limit traveling northbound.

Wilbur Avenue (Route 103) at Lees River Avenue

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by Lees River Avenue from the north, to form a T-type signalized intersection. The Wilbur Avenue eastbound approach consists of a shared left-turn/through lane. The Wilbur Avenue westbound approach consists of a through lane and an exclusive right-turn lane. The Lees River Avenue southbound approach consist of a shared left-turn /right-turn lane. Pedestrian accommodations include sidewalks on the northeast, northwest, and southwest corners of the intersection and a signalized crosswalk on the west leg of the intersection. There are no

bicycle accommodations provided at this intersection. North of the study area, the posted speed limit traveling southbound on Lees River Avenue is 35 mph. There is no posted speed limit traveling northbound on Lees River Avenue. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) westbound at I-195 East On-Ramp

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by the I-195 East On-Ramp from the north, to form a T-type signalized intersection. The Wilbur Avenue eastbound approach consists of a through lane. The Wilbur Avenue westbound approach consists of a shared through/right-turn lane. The I-195 East On-Ramp is a one-way one lane roadway away from the intersection. Pedestrian accommodations include sidewalks along the north side of Wilbur Avenue and an unsignalized crosswalk on the north leg of the intersection across the I-195 On-Ramp. There are no bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) at Home Street/Park & Ride Driveway

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by the Home Street from the south and the Park& Ride driveway form the south to form a four-legged unsignalized intersection. The Wilbur Avenue eastbound approach consists of a shared left-turn/through/right-turn lane. The Wilbur Avenue westbound approach consists of a shared left-turn/through/right-turn lane. The Home Street northbound approach and the Park & Ride Driveway southbound approach consist of a shared left-turn/through/right-turn lane under stop control. Pedestrian accommodations include sidewalks along the north side of Wilbur Avenue to the west of the intersection and there are no crosswalks provided. There are no bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) eastbound at I-195 East On-Ramp

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by the I-195 East On-Ramp from the south, to form a T-type signalized intersection. The Wilbur Avenue eastbound approach consists of a shared through/right-turn lane. The Wilbur Avenue westbound approach consists of a through lane. The I-195 East On-Ramp is a one-way one lane roadway away from the intersection. There are no pedestrian or bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) westbound at I-195 West Off-Ramp

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by the I-195 West Off-Ramp from the north, to form a T-type signalized intersection. The Wilbur Avenue eastbound and westbound approaches consist of a through lane. The I-195 West Off-Ramp is a one-way right-turn lane under yield control. There are no pedestrian or bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) eastbound at I-195 West On-Ramp

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by the I-195 East On-Ramp from the south, to form a T-type signalized intersection. The Wilbur Avenue eastbound approach consists of a shared through/right-turn lane. The Wilbur Avenue westbound approach consists of a through lane. The I-195 West On-Ramp is a one-way one lane roadway away from the intersection. There are no pedestrian or bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) eastbound at I-195 West Off-Ramp

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by the I-195 West Off-Ramp from the south, to form a T-type signalized intersection. The Wilbur Avenue eastbound and westbound approaches consist of a through lane. The I-195 West Off-Ramp is a one-way right-turn lane under yield control. There are no pedestrian or bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph.

Wilbur Avenue (Route 103) at Brayton Point Road

Wilbur Avenue (Route 103) generally runs in the east-west direction and is intersected by Brayton Point Road from the north-south, to form a four-legged signalized intersection. All approaches consist of one wide shared left-turn/through/right-turn lane. Pedestrian accommodations include sidewalks on all corners of the intersection and signalized crosswalks on all legs of the intersection. There are no bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph. The posted speed limit on Brayton Point Road is 25 mph south of Wilbur Avenue and 30 mph north of Wilbur Avenue.

Brayton Point Road at O'Neil Road.

Brayton Point Road generally runs in the north-south direction and is intersected by O'Neil Road from the east, to form a T-type unsignalized intersection. The Brayton Point Road southbound approach operates as one lane curving left onto O'Neil Road that splits to a through movement to continue onto Brayton Point Road. The O'Neil Road westbound approach operates as one lane curving right onto Brayton Point Road that also allows left-turns onto Brayton Point Road. The Brayton Point Road northbound approach consists of one shared through/right-turn lane that operates under yield control. Pedestrian accommodations include sidewalks along the northeast corner of the intersection with no crosswalks on any of the legs of the intersection. There are no bicycle accommodations provided at this intersection. The posted speed limit on Wilbur Avenue is 40 mph. The posted speed limit on Brayton Point Road is 25 mph. There is no posted speed limit on O'Neil Road.

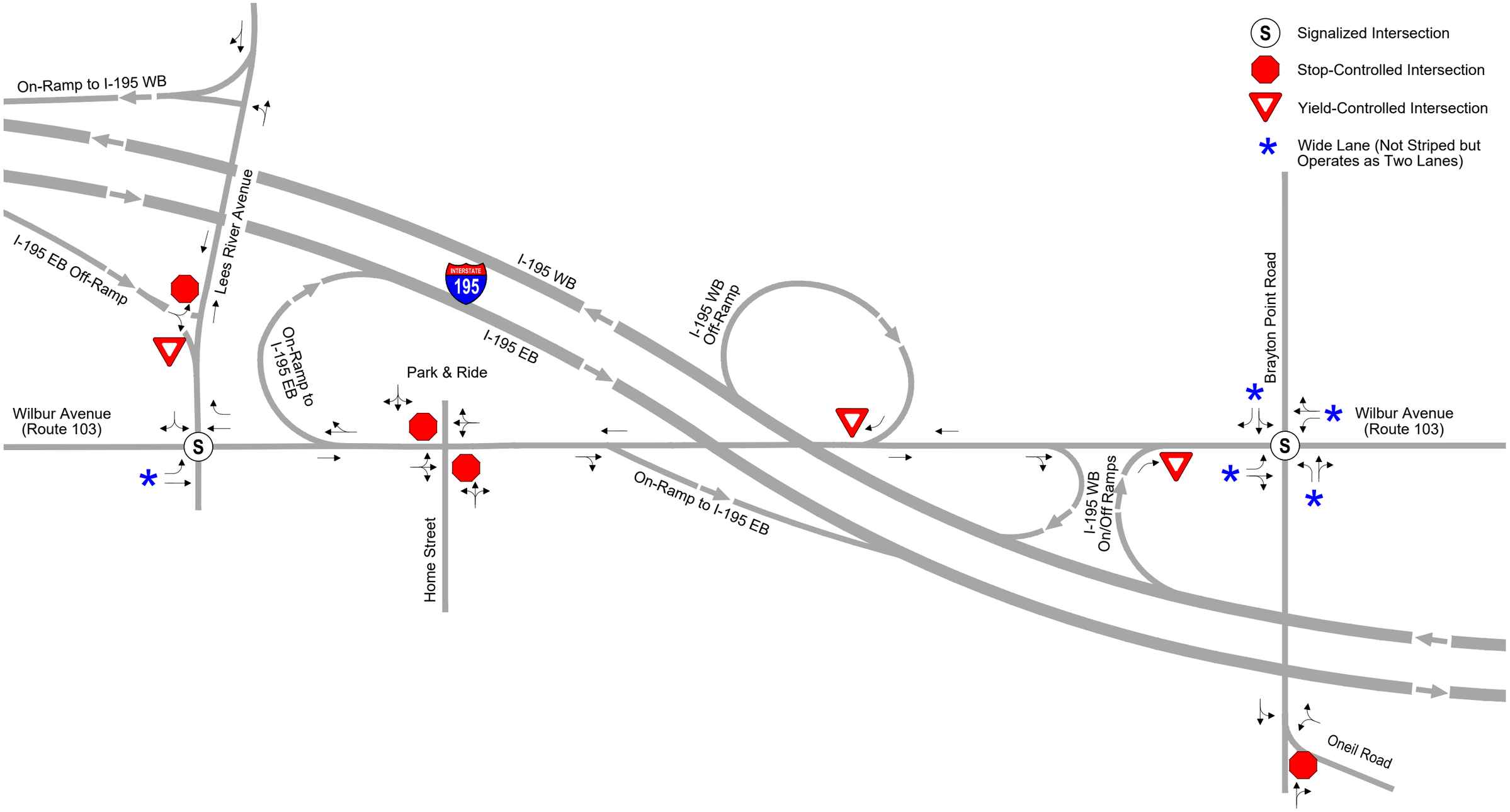

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Figure 3
Traffic Control and Lane Usage

Prysmian Brayton Point
Somerset, Massachusetts

Traffic Volumes

To quantify existing traffic conditions, VHB performed turning movement counts (TMCs) at the following intersections on Thursday June 9, 2022:

- Lee River Avenue at I-195 West On-Ramp
- Lee River Avenue at I-195 East Off-Ramp
- Wilbur Avenue (Route 103) at Lees River Avenue
- Wilbur Avenue (Route 103) eastbound at Home Street/Park & Ride Driveway
- Wilbur Avenue (Route 103) eastbound at I-195 West On-Ramp
- Wilbur Avenue (Route 103) eastbound at I-195 West Off-Ramp
- Wilbur Avenue (Route 103) at Brayton Point Road
- Brayton Point Road at O'Neil Road

In addition to counting the intersections listed above, traffic volumes at the following intersections were calculated based on the volume of traffic gained or lost between the counted intersections:

- Wilbur Avenue (Route 103) westbound at I-195 East On-Ramp
- Wilbur Avenue (Route 103) eastbound at I-195 East On-Ramp
- Wilbur Avenue (Route 103) westbound at I-195 West Off-Ramp

There are no side streets or driveways between the Wilbur Avenue (Route 103) at Lees River Avenue intersection and the Wilbur Avenue (Route 103) at Home Street/Park & Ride Driveway; therefore, the loss in westbound traffic on Wilbur Avenue was used to develop the traffic volumes using the Wilbur Avenue (Route 103) West On-Ramp. Similarly, the traffic counts at the Wilbur Avenue (Route 103) at Home Street/Park & Ride Driveway intersection and Wilbur Avenue (Route 103) eastbound at the I-195 West On-Ramp intersection were used to calculate the traffic volumes at the Wilbur Avenue (Route 103) eastbound at I-195 East On-Ramp and Wilbur Avenue (Route 103) westbound at I-195 West Off-Ramp intersections.

It was determined that based on existing data, the study area weekday morning peak hour occurred between 7:00 AM and 8:00 AM. The study area weekday evening peak hour was determined to be between 4:00 PM and 5:00 PM.

In accordance with the latest MassDOT guidance regarding the impacts of COVID on existing traffic volumes, traffic volumes collected after March 1, 2022 do not need to be adjusted, but consultants should still contact MassDOT for approval and confirmation of this approach since these guidelines have not been officially released (2022 MassDOT Guidance - DRAFT). VHB submitted a memorandum to the MassDOT Assistant State Traffic Engineer requesting concurrence with the justification to use no adjustment factors for COVID or seasonality on the traffic counts performed in June. MassDOT responded to this memorandum and concurred with VHB that no COVID or seasonal adjustments are required. The traffic counts were performed while school was in session, and they were counted in an area where office is not a predominant land use

Automatic traffic recorder (ATR) counts were performed on Wilbur Avenue (Route 103) west of Brayton Point Road and on Brayton Point Road south of I-195 on June 8, 2022 and June 9, 2022. The daily traffic volume on Wilbur Avenue (Route 103) west of Brayton Point Road was observed to be 15,970 vehicles per hour on Tuesday, June 8, 2022 (8,250 eastbound and 7,720 westbound). The daily traffic volume on Brayton Point Road, south of I-195 bridge, was observed to be 1,350 vehicles per hour on June 8, 2022 (675 northbound and 675). All traffic count data is included in the Appendix.

Seasonal Variation

MassDOT historical traffic counts were reviewed to understand the seasonality of traffic count data collected in the months of June 2022 within the study area. There are no published MassDOT seasonal adjustment factors for traffic volumes in 2022, and therefore the 2019 seasonal adjustment factors were reviewed. Based on the review, the June 2022 volumes collected were higher than average-month conditions. For a conservative analysis (using higher than average traffic conditions), no seasonal factors will be applied to the counts.

The MassDOT seasonal adjustment factors by roadway type are presented in **Error! Reference source not found.**. As previously stated, Lees River Avenue and Wilbur Avenue (Route 103) are classified as urban minor arterial roadways. Brayton Point is an urban major collector. All study area roadways therefore fall under the U4-U7 roadway type for MassDOT seasonal adjustment factors.

Table 1 MassDOT Seasonal Adjustment Factors

Roadway Type	June Counts
U4-U7[1]	0.86

Source: MassDOT
Note: June 2019 seasonal adjustment factors were not used to remain conservative (overestimating the traffic volumes).
[1] Minor arterial, major collector, minor collector, local roadway

Figures 4 and 5 illustrate the resulting 2022 Existing traffic volume conditions during the weekday morning and weekday evening peak hours conditions, respectively.

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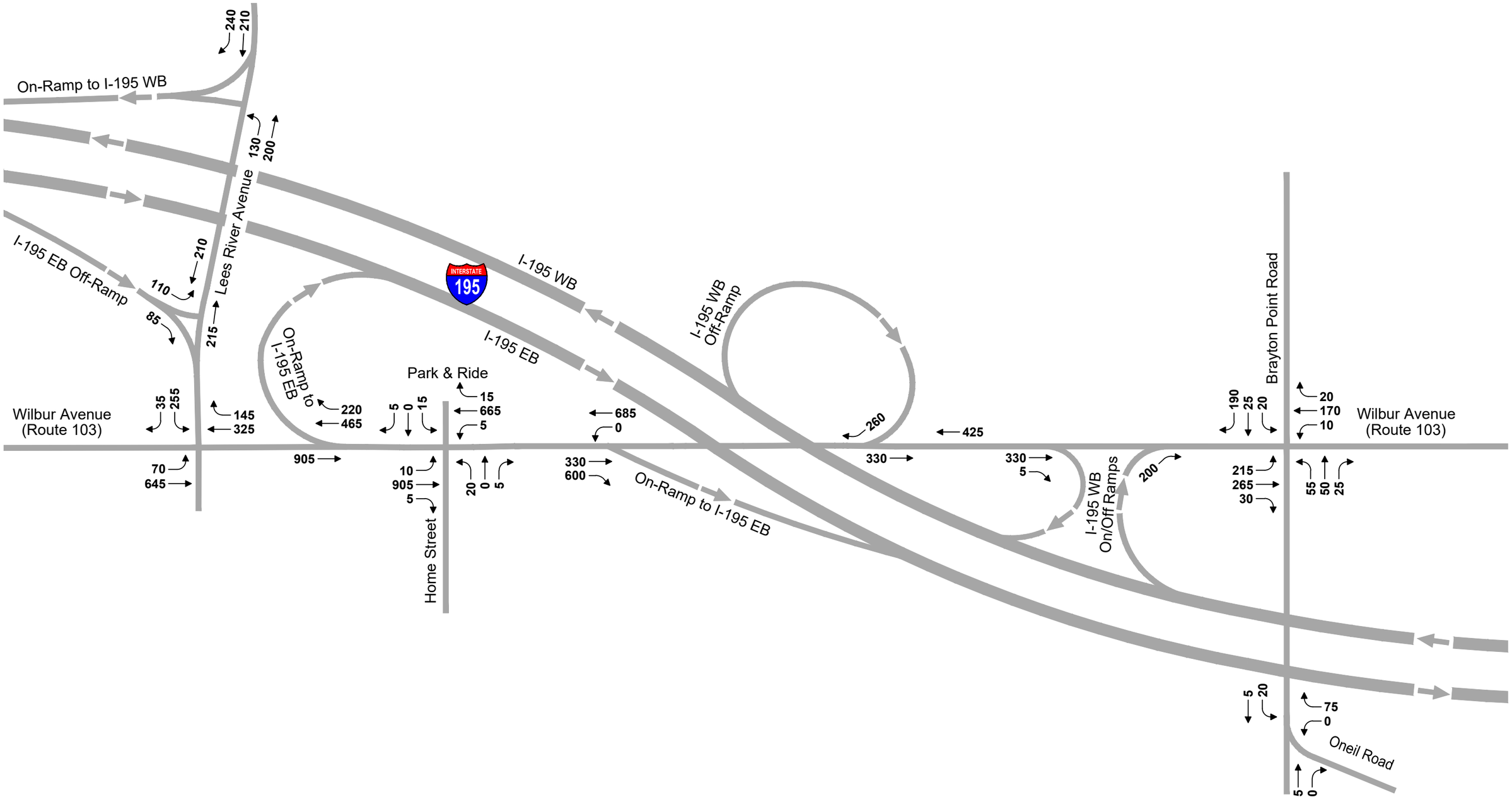

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Figure 4

2022 Existing Conditions:
Weekday Morning Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

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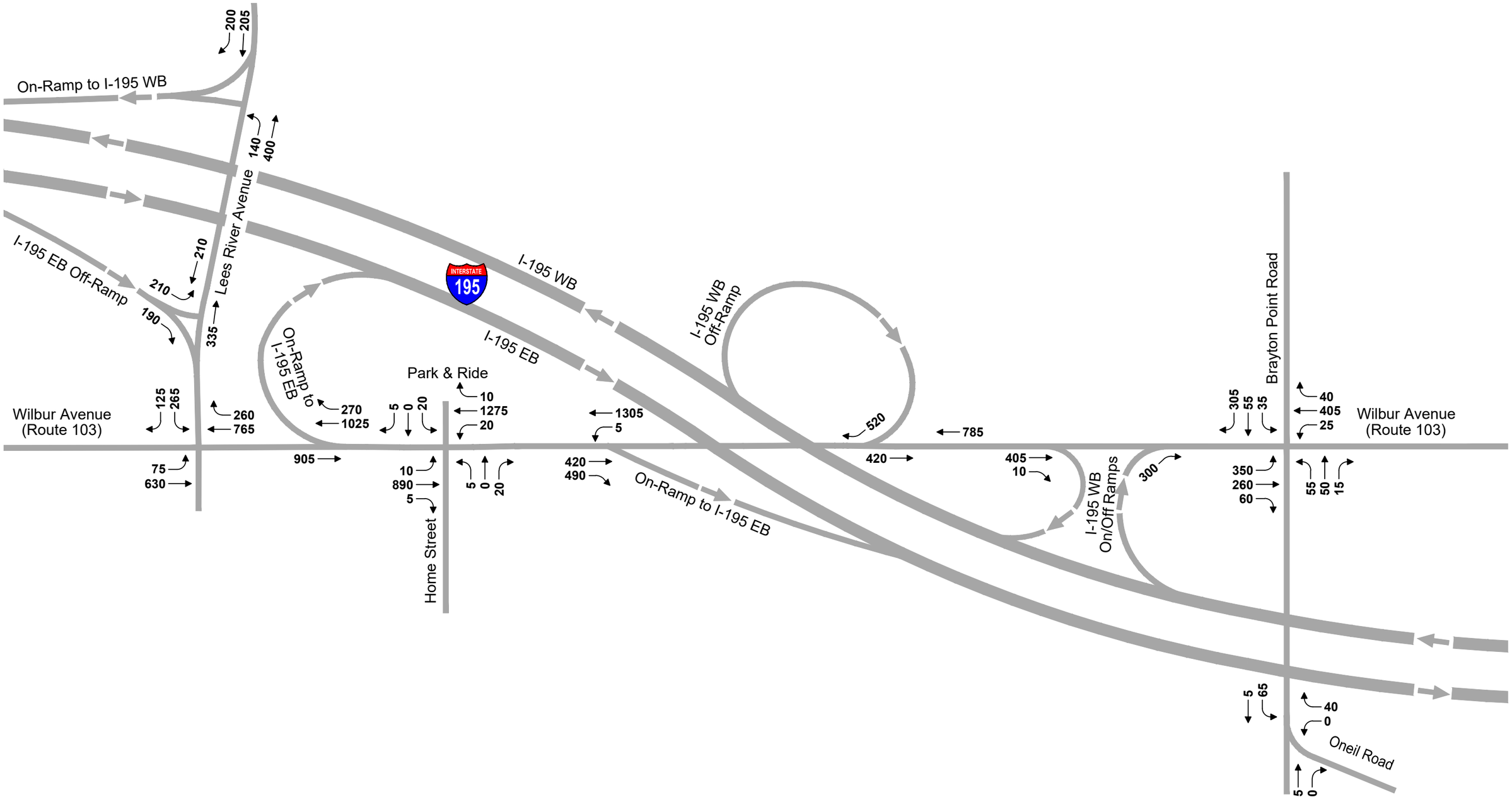

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Figure 5

2022 Existing Conditions:
Weekday Evening Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

Multimodal Transportation

Public Transportation

Public transportation in Somerset and the nearby surrounding area is provided by the Southeast Regional Transit Authority (SRTA). The closest bus stop to the Project Site is at the Somerset Stop & Shop, located in the plaza located on the southeast corner of the Route 6 at Brayton Point Road intersection (SRTA Route 14). This stop is located over 1.5 miles from the Project Site and is not likely to be used to access the Project Site. The most recent published schedules for SRTA Route 14 – Swansea Mall are provided in the Appendix.

There are no commuter rail stations in the Town of Somerset.

There is a park-and-ride lot located with the study area, on the north side of Wilbur Avenue at 1759 Wilbur Avenue. The parking lot provides parking spaces for carpool, and vanpool.

Bicycle and Pedestrian Accommodations

Limited pedestrian accommodations are provided throughout the study area. Lees River Avenue has no sidewalks provided along either side of the roadway except along the east side of the bridge over I-195. Wilbur Avenue (Route 103) has limited sidewalks in the vicinity of the Lees River Avenue, along the north side of the roadway. The rest of Wilbur Avenue within the Project limits has no sidewalks except along the south side of the bridge over I-195. Brayton Point Road has no sidewalks provided along either side of the roadway between the Project Site entrance and O'Neil Road. There is a sidewalk on the east side of the Brayton Point Road between O'Neil Road and Crestview Avenue and sidewalks on both sides of the roadway between Crestview Avenue and Wilbur Avenue (Route 103).

Accommodations for bicycles in the study area are limited. No off-road bicycle facilities exist within the vicinity of the study area. There are no dedicated on-road bicycle facilities provided on Lees River Avenue or Brayton Point Road within the study area limits. There are shoulders present along the north side of Wilbur Avenue from the Park & Ride Driveway to Brayton Point Road, with the exception of a short segment between the middle of the bridge over I-195 and the I-195 West off-ramp to Wilbur Avenue (Route 103) west. There are limited shoulders available along the south side of Wilbur Avenue (Route 103) including the section between the Wilbur Avenue eastbound on-ramp to I-195 East and the on-ramp to I-195 West and for a short segment east of the I-195 West off-ramp to Wilbur Avenue eastbound.

Crash History

To identify potential vehicle crash trends in the study area, vehicular crash data for the study area intersections were obtained from MassDOT for the most recent five-year period (2015-2019) available. A summary of the MassDOT vehicle crash history is provided in **Error! Reference source not found.**, and the detailed crash data is provided in the Appendix.

In addition to summarizing the crash history, crash rates were also calculated for the study area intersections. Intersection crash rates are calculated based on the number of crashes at an intersection and the daily volume of traffic traveling through that intersection. The MassDOT average intersection crash rate for District 5 (the MassDOT district designation for the Town of Somerset) is 0.75 for signalized intersections and 0.57 for unsignalized intersections. In other words, on average, 0.75 crashes occurred per million vehicles entering signalized intersections and 0.57 crashes occurred per million vehicles entering unsignalized intersections throughout District 5. The crash rate worksheets for the study area intersections are included in the Appendix.

As shown in **Error! Reference source not found.**, the following study area intersections have a calculated crash rate that exceeds the district average:

- Wilbur Avenue (Route 103) at Lees River Avenue
- Wilbur Avenue (Route 103) WB at I-195 WB Off-Ramp
- Wilbur Avenue at I-195 WB Ramps
- Wilbur Avenue at Brayton Point Road

The other study area intersections experienced calculated crash rates below the district average.

The crashes that occurred within the study area were primarily angle, rear-end collisions, and sideswipe, same direction, resulting in property damage and non-fatal injuries. No crashes were reported involving fatal injuries.

Crashes involving non-motorists (bike, pedestrian) occurred at the following intersections:

- Lees River Avenue at I-195 WB Off-Ramp (one crash)
- Wilbur Avenue (Route 103) at Lees River Avenue (one crash)

The following issues were noted at the Wilbur Avenue (Route 103) at Brayton Point Road intersection:

- Most of the crashes are rear-end and angle collisions resulting in property damage only.
- Rear-end and angle collisions are typical for intersection operations, especially at intersections without protected left-turn phases.
- The traffic signal equipment is over 20 years old and in generally poor condition.

The following issues were noted at the Wilbur Avenue (Route 103) at Brayton Point Road intersection:

- Thirty-nine percent of crashes were rear end collisions, which may indicate potential inadequacy of signal clearance intervals.

- Thirty-nine percent of crashes were angle collisions, which is likely due to the unprotected left turn movements at the traffic signal.
- Sixty-three percent of crashes occurred during weekday off-peak hour.
- Thirty-three percent of crashes occurred during wet or snowy pavement conditions.
- The gas station driveway opposite Lees River Avenue is unsignalized.
- The vehicle detection system along Wilbur Avenue is not efficient as there are loop detectors set back from the stop line.
- The traffic signal equipment is over 20 years old and in generally poor condition.

Highway Safety Improvement Program

In addition to calculating the crash rate, study area intersections were also reviewed in the MassDOT HSIP database. An HSIP-eligible cluster is one in which the total number of "equivalent property damage only" crashes in the area is within the top 5 percent of all clusters in that region. Being HSIP-eligible makes a location eligible for Federal Highway Administration (FHWA) and MassDOT funds to address the identified safety issues at these locations.

Vehicle crash data obtained from MassDOT for the study area locations indicates that the intersection of Lees River Avenue and Wilbur Avenue (Route 103) is listed as a 2017-2019 Highway Safety Improvement Program (HSIP) cluster. However, given the minimal volume of traffic added to this intersection by the Project during peak hours, the intersection would not have been included in the study area of most traffic studies and therefore an RSA would not be performed.

Using the conservatively high ITE trip generation rates, the Project is only projected to increase the traffic at the intersection by approximately 32 vehicles during the morning peak hour and approximately 31 vehicles during the evening peak hour. This results in only a 2.0% increase in traffic during the morning peak hour (17 southbound left turns, 7 eastbound throughs, 2 westbound throughs and 6 westbound right turns) and only a 1.9% increase during the evening peak hour (8 southbound left turns, 3 eastbound throughs, 6 westbound throughs and 14 westbound right turns). The typical threshold for determining if an intersection should be included in the study area of a TIAS is if the increase in Project generated trips are anticipated to increase peak hour traffic volume by five percent or more, or by more than 100 vehicles per hour. This intersection does not meet that threshold; therefore, it would not typically be included in the TIAS study area, and an RSA would not be performed.

MassDOT has also stated that "the Project is not anticipated to trigger any MEPA threshold for review for transportation impacts" and that that it is their understanding that "the Project does not propose access via any state jurisdictional roadway. As a Result, MassDOT ultimately will not be required to review this project."

	Lees River Ave at I-195 WB On-Ramp	Lees River Ave at I-195 EB Off-Ramp	Wilbur Ave at Lees River Ave	Wilbur Ave WB at I-195 EB On-Ramp	Wilbur Ave at Home St	Wilbur Ave EB at I-195 EB On-Ramp	Wilbur Ave WB at I-195 WB Off-Ramp	Wilbur Ave at I-195 WB Ramps	Wilbur Ave at Brayton Point Rd	Brayton Point Rd at O'Neil Rd
Signalized?	No	No	Yes	No	No	No	No	No	Yes	No
MassDOT Average Crash Rate	0.57	0.57	0.75	0.57	0.57	0.57	0.57	0.57	0.75	0.57
Calculated Crash Rate	0.16	0.52	1.26	0.27	0.26	0.16	0.80	0.66	1.61	0.43
Year										
2015	1	4	8	3	1	1	12	4	11	0
2016	1	0	14	2	2	2	3	4	10	0
2017	0	3	11	0	7	1	2	4	9	1
2018	0	1	11	0	2	2	6	3	11	0
2019	1	2	10	0	0	1	5	5	13	0
Total	**3**	**10**	**54**	**5**	**12**	**7**	**28**	**20**	**54**	**1**
Collision Type										
Angle	0	6	21	0	4	1	1	2	32	0
Head-on	0	0	1	0	0	0	0	0	0	0
Rear-end	1	2	22	5	6	5	24	11	16	0
Rear-to-rear	0	0	0	0	0	0	0	0	1	0
Sideswipe, opposite direction	0	0	0	0	0	0	0	0	1	0
Sideswipe, same direction	0	0	4	0	1	0	1	1	3	0
Single Vehicle Crash	2	2	5	0	1	1	2	6	1	1
Unknown/Not reported	0	0	1	0	0	0	0	0	0	0
Severity										
Fatal Injury	0	0	0	0	0	0	0	0	0	0
Non-Fatal Injury	1	4	18	0	4	2	9	2	16	0
Property Damage Only	2	6	34	5	8	5	19	18	37	1
Unknown/Not Reported	0	0	2	0	0	0	0	0	1	0
Time of day										
Weekday, 7:00 AM - 9:00 AM	0	0	0	0	0	1	2	2	4	0
Weekday, 4:00 – 6:00 PM	0	2	6	2	5	2	8	6	6	0
Saturday, 11:00 AM – 2:00 PM	0	0	1	0	1	0	0	1	1	0
Weekday, other time	2	7	33	2	4	3	12	9	32	1
Weekend, other time	1	1	14	1	2	1	6	2	11	0
Pavement Conditions										
Dry	1	8	36	3	10	4	24	16	39	1
Wet	1	1	12	2	2	1	4	3	13	0
Snow/Ice/Slush	0	0	3	0	0	0	0	0	1	0
Other	0	0	0	0	0	1	0	0	0	0
Unknown/Not reported	1	1	3	0	0	1	0	1	1	0
Non-Motorist (Bike, Pedestrian)	0	1	1	0	0	0	0	0	0	0

Source: Crash data was obtained from MassDOT Crash portal (2015-2019) and crash reports received from MassDOT.

Table 2 2015-2019 Vehicle Crash Summary

3

Future Conditions

Traffic volumes in the study area were projected to a seven-year traffic-planning horizon. Independent of the Project, volumes on the roadway network under the future No-Build conditions were assumed to include existing traffic and new traffic resulting from background traffic growth. Under the Build condition, Project-generated traffic volumes were added to the No-Build volumes to reflect the Build conditions within the Project study area.

Background Traffic Growth

Traffic growth on area roadways is a function of the expected land development, economic activity, and changes in demographics. Several methods can be used to estimate this growth. A procedure frequently employed is to estimate an annual percentage increase and apply that increase to study area traffic volumes. An alternative procedure is to identify estimated traffic generated by planned new major developments that would be expected to impact the Project study area roadways. For the purpose of this assessment, both methods were considered.

Historic Traffic Growth

A March 2020 study (*I-195 Interchange 4 Transportation Study*) by VHB for the nearby interchange (new Exit 10) used 0.5%. This growth rate was based on historic data. It should be noted that the recent growth rates in 2020 and 2021 have been impacted by the effects of COVID. To provide a conservatively high growth rate and be consistent with the 2020 transportation study, a 0.5% percent per year annual growth rate was used to develop the 2029 baseline traffic volumes.

Site-specific Growth and Planned Roadway Projects

In addition to accounting for background growth, the traffic associated with other planned and/or approved developments in the area that could influence traffic at the study locations were considered. The I-195 Interchange 4 Transportation Study identified six planned development projects. These projects included the following:

- Brayton Point Commerce Center
- Solar Therapeutics
- Wilbur School Redevelopment
- Wilbur Avenue at Brayton Point Road
- Fairfield Commons Commercial Development
- Slade's Ferry Crossing

The Brayton Point Commerce Center includes the Prysmian Brayton Point project that is owned by the Commercial Development Corporation, Inc (CDC). It includes approximately 47 acres of the approximately 300-acre former power station site. Sometime in the future the remaining portion of the Project Site is proposed to be developed; however, the details of this development have not yet been identified. The traffic impacts of the remaining portion of the Project Site is therefore unknown and has not been included in the future No-Build site-specific traffic volumes.

The Solar Therapeutics project has been completed and a portion of the Fairfield Commons Commercial Development has been completed. These traffic volumes are therefore already included in the existing traffic counts. The remainder of the Fairfield Commons project is expected to have minimal impacts on traffic within the Project study area. The Slade's Ferry Crossing development is also not expected to have a large impact on traffic because traffic traveling to/from the east will use Route 79 and Route 6 to access the Project Site and some traffic traveling to/from the west will use Lees River Avenue and Route 6 to access the Project Site. There will also be minimal traffic impacts associated with the Wilbur School Redevelopment because it is not a significant development and will generate minimal traffic.

The most significant project that will have the greatest impact on traffic is the Wilbur Avenue at Brayton Point Road parcel. This is a 98-acre undeveloped corner lot that is owned by the Town of Somerset. No plans for the development of this parcel have been formally submitted and are therefore not included in the future No-Build site-specific traffic volumes. This project will require the implementation of improvements at the Wilbur Avenue (Route 103) intersection with Brayton Pint Road and along the study area roadways to mitigate the traffic impacts associated with the development.

Based on currently available information, there are no planned roadway improvement projects identified within the study area.

The 2029 No-Build traffic volumes were developed using the growth rate and adding in the background projects described above. As noted above, no site-specific traffic volumes were added. The resulting 2029 No-Build Condition weekday morning and weekday evening peak hour traffic volume networks are shown in Figure 6 and Figure 7, respectively.

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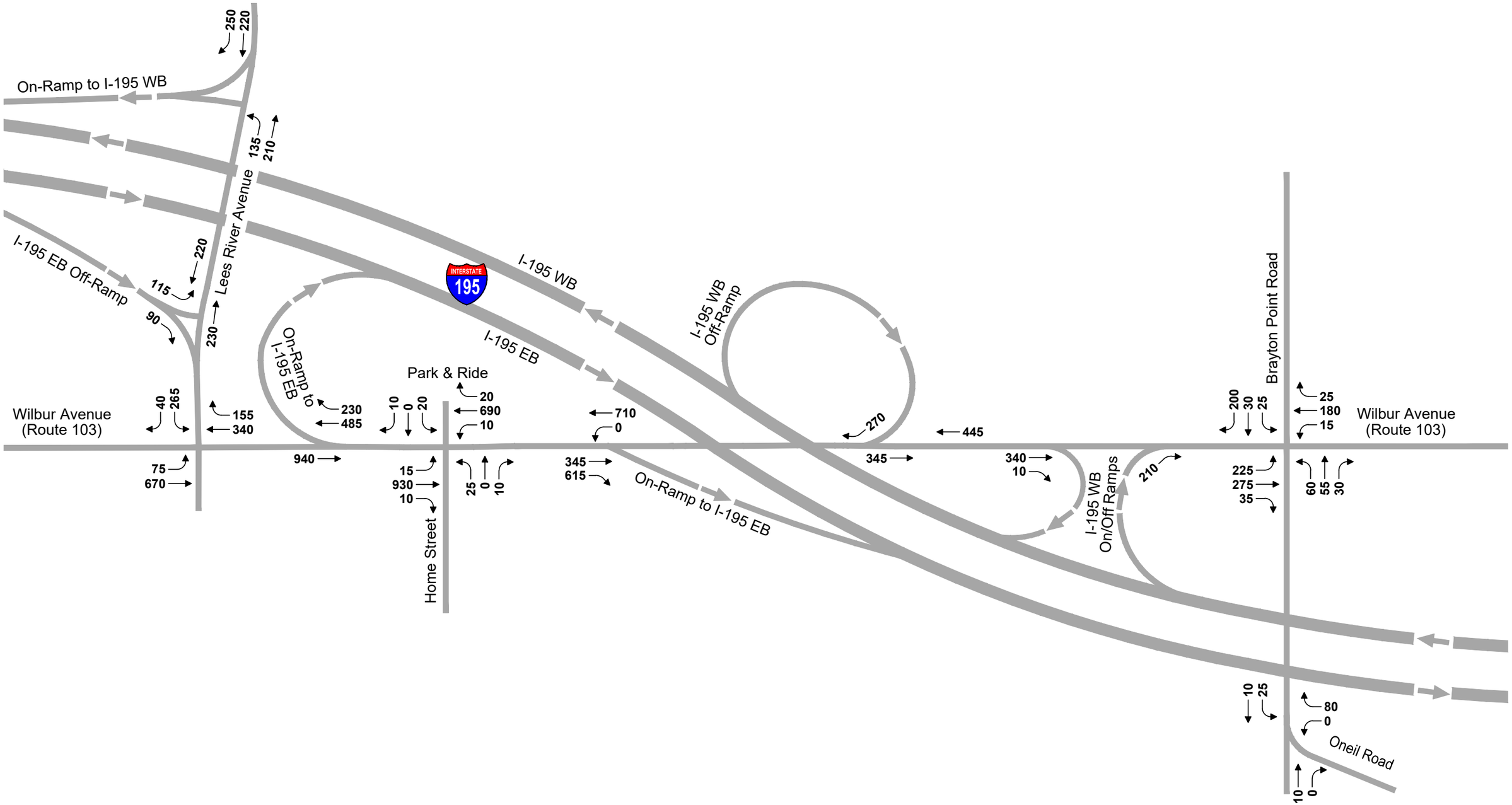

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Figure 6

2029 No-Build Condition:
Weekday Morning Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

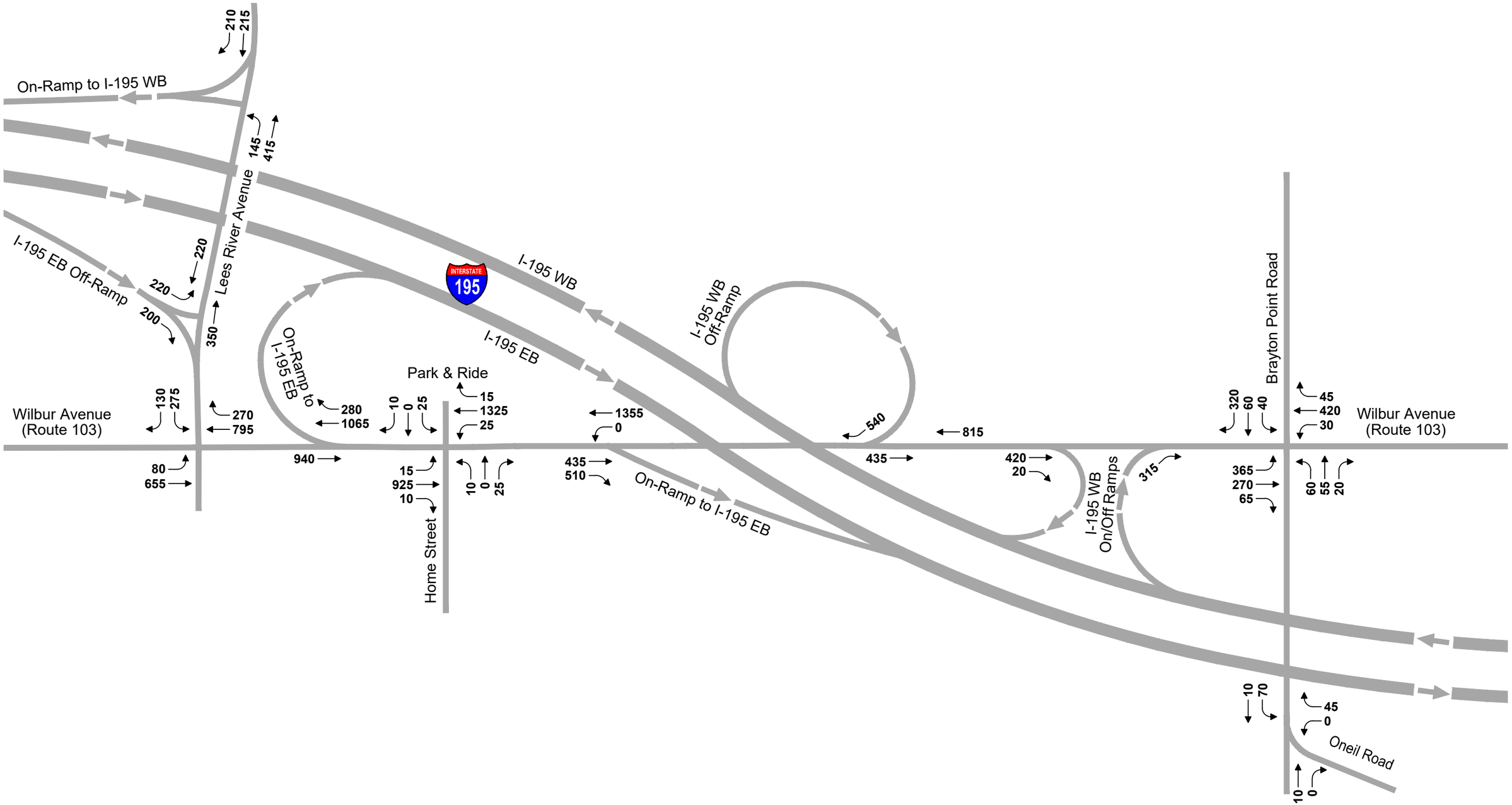

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Figure 7

2029 No-Build Condition:
Weekday Evening Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

Project-Generated Traffic Volumes

Design year 2029 Build traffic volumes for study area roadways were determined by estimating Project-generated traffic volumes and distributing these volumes over the study area roadways. The estimated Project-generated volumes were added to the 2029 No-Build traffic volumes to develop the year 2029 Build traffic volume networks. The following sections describe the procedures used to develop the Build condition traffic volume networks.

Trip Generation

The Project will employ approximately 360 highly skilled workers across a range of activities, including cable manufacture, testing, delivery, and management. During typical operations (at full build), there will be three shifts, as follows: 6 AM to 2 PM; 2 PM to 10 PM; and 10 PM to 6 AM. It is expected that approximately 115 employees will work each shift, along with another up to 16 office workers, depending on the shift. During periods when finished cable will be transferred to the cable-laying vessel, manufacturing staff will be reassigned from manufacturing to delivery.

Trip generation estimates for the Project have been based on data provided in the Institute of Transportation Engineers' (ITE) Trip Generation Manual. ITE Land Use Code (LUC) 140 – Manufacturing for 360 employees was used to develop the trip generation for the Project. Table 3 shows the ITE trip generation based on fitted curve rates. The projected truck trips are also shown based on ITE data. The trip generation worksheets are included in the Appendix.

Table 3 Preliminary Trip Generation Analysis Summary[1]

Time Period / Direction	Manufacturing LUC 140 Vehicles	Manufacturing LUC 140 Trucks
Weekday Daily		
Enter	505	61
Exit	505	61
Total	**1,010**	**122**
Weekday Morning Peak Hour		
Enter	85	6
Exit	31	5
Total	**116**	**11**
Weekday Evening Peak Hour		
Enter	40	3
Exit	69	4
Total	**109**	**7**

1. Based on ITE LUC 140 (Manufacturing) for 360 employees

It should be noted that the amount of traffic projected using the ITE data is conservative (overestimates the traffic generated by the Project) for the following reasons:

- This TIA uses the total number of employees (360 total employees); however, there are only approximately 246 employees that will be working between 6:00 AM and 10:00 PM (approximately 115 workers on the 6:00 AM first shift, approximately 115 workers on the 2:00 PM second shift and 16 office workers starting at 8:00 AM). The approximately 114 workers on the third shift will not have any impact on peak hour traffic at the study area intersections because their shift starts (10:00 PM) well after the evening peak (4:00 PM to 5:00 PM) of the study area intersections and ends (6:00 AM) prior to the morning peak (7:00 AM to 8:00 AM). It could therefore be assumed that there are only 246 employees for the purpose of projecting site-generated peak hour traffic.
- The three employee shifts (6:00 AM, 2:00 PM, and 10:00 PM) do not coincide with the study area intersection peak hours (7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM). No traffic from the shift changes are expected to be traveling through the study area during the interchange peak hours.
- As shown in Table 3, ITE projects 85 vehicles entering the Project Site during the morning peak hour of the intersections (7:00 AM to 8:00 AM); however, only the approximate 16 office workers that work from 8:00 AM to 4:30 PM are projected to be entering during that time period. The manufacturing shift change occurs at 6:00 AM (well before the morning peak hour of the intersections) and consists of approximately 115 vehicles entering and exiting during this off-peak period. Similarly, ITE projects 69 vehicles exiting the Project Site during the evening peak hour of the intersections (4:00 PM to 5:00 PM); however, only the 16 office workers that work from 8:00 AM to 4:30 PM are projected to be leaving during that time period. The manufacturing shift change occurs at 2:00 PM (well before the evening peak hour of the intersections) and consists of approximately 115 vehicles entering and exiting during this off-peak period.
- ITE Land Use Code 140 (Manufacturing) is described by ITE as a use code that covers facilities "where the primary activity is the conversion of raw materials or parts into finished products". i.e., the ITE code is not specifically intended for the proposed water access-based cable manufacturing use, but rather covers different types of manufacturing uses with different operational metrics and employment statistics. Most of the data in the ITE database is likely 100 percent land-based truck operations, whereas a big proportion of products manufactured at the proposed facility will be transported by water access. Based on a detailed review of their planned operations, the tenant expects that the Project Site would generate only 10 entering truck trips and 10 exiting truck trips (or a total of 20 one-way truck trips) per day at this site and the rest of the transportation would be via water access. However, since review agencies typically rely on ITE estimates for impact analysis, the traffic study for the Project is based on the higher ITE estimated truck and vehicle trips for analysis purposes rather than the lower tenant expected vehicular trip estimates. This results in conservatively, worst case analysis which ensures that the area transportation infrastructure can adequately support the higher volumes, while still recognizing that the actual traffic volumes would be much lower.

Trip Distribution

The directional distribution of the traffic approaching and departing the Project Site is a function of population densities, the location of employment opportunities, existing travel patterns, and the efficiency of the roadway system.

The trip distribution for the proposed Project has been derived based on the existing traffic patterns and 2020 U.S. Census Journey to Work data.

The regional trip distribution for the Project is illustrated in Figure 8.

The 2029 Build Condition traffic volumes were determined by estimating Project-generated traffic volumes associated with each phase, distributing these volumes over the study area roadways, and adding them to the 2029 No-Build traffic volumes. The Project-generated traffic volumes include new trips that are projected to be generated by the full buildout of the Project. The resulting 2029 Build Condition weekday morning and weekday evening peak hour traffic volume networks are shown in Figures 9 through 10. Figures showing the site-generated traffic volumes are included in the Appendix.



Source: 2022 NearMap Aerial

0 1000 Feet

Figure 8

Trip Distribution: Regional

Prysmian Brayton Point
Somerset, Massachusetts

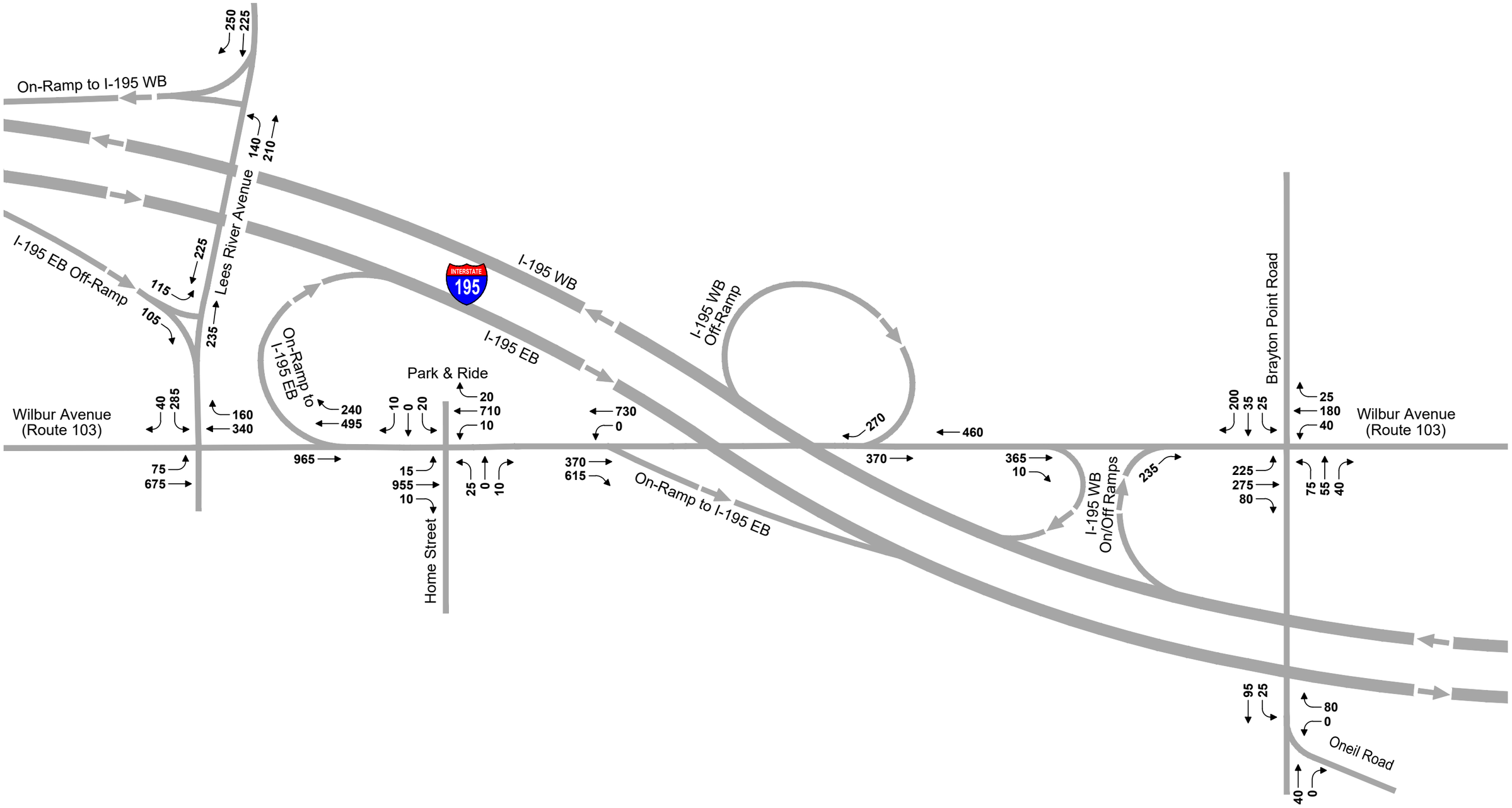

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Figure 9

2029 Build Condition:
Weekday Morning Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

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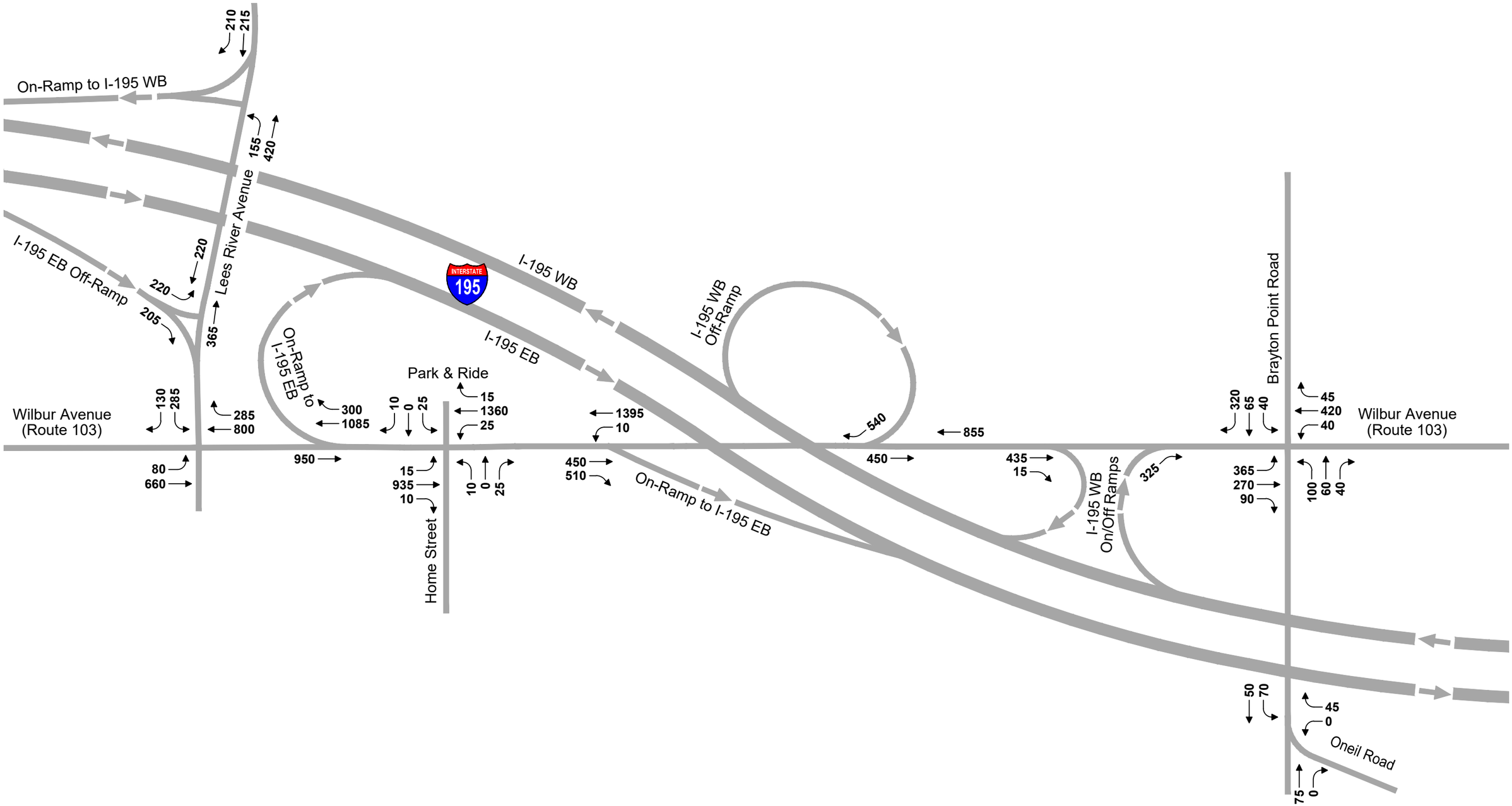

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Figure 10

2029 Build Condition:
Weekday Evening Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

4

Traffic Operation Analysis

Measuring existing traffic volumes and projecting future traffic volumes quantify traffic flow within the study area. To assess the quality of flow, intersection capacity analyses were conducted with respect to the 2022 Existing Conditions, 2029 No-Build Conditions, and 2029 Build Conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them.

Level-of-Service Criteria

The evaluation criteria used to analyze area intersections in this traffic study are based on the Highway Capacity Manual (HCM).[1] The term 'Level of Service' (LOS) is used to denote the different operating conditions that occur on a given roadway segment under various traffic volume loads. It is a qualitative measure that considers a number of factors including roadway geometry, speed, travel delay and freedom to maneuver. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing congested operations.

In addition to LOS, two other measures of effectiveness are typically used to quantify the traffic operations at intersections; volume-to-capacity ratio (v/c) and delay (expressed in seconds per vehicle). For example, an existing v/c ratio of 0.90 for an intersection indicates that the intersection is operating at 90 percent of its available capacity. A delay of 15 seconds for a particular vehicular movement or approach indicates that vehicles on the movement or approach will experience an average additional travel time of 15 seconds. For a given LOS letter designation there may be a wide range of values for both v/c ratios and delay. Comparison of intersection capacity results therefore requires that, in addition to the LOS, the other measures of effectiveness should also be considered.

1 Transportation Research Board, Highway Capacity Manual, 6th Edition, Washington, D.C., 2016

The LOS designations, which are based on delay, are reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection and the LOS designation is for overall conditions at the intersection. For unsignalized intersections, however, the analysis assumes that traffic on the mainline is not affected by traffic on the side streets. Thus, the LOS designation is for the critical movement exiting the side street and for the conflicting movement on the mainline, which is generally the left turn from the mainline into a side street or driveway. Table 4 shows the LOS criteria for both signalized intersections and unsignalized intersections.

Table 4 Level-of-Service Criteria

Level of Service	Unsignalized Intersections Delay	Signalized Intersections Delay
A	0 - 10 seconds	0 - 10 seconds
B	10 - 15 seconds	10 - 20 seconds
C	15 - 25 seconds	20 - 35 seconds
D	25 - 35 seconds	35 - 55 seconds
E	35 - 50 seconds	55 - 80 seconds
F	>50 seconds	>80 seconds

Source: Highway Capacity Manual 6

The analytical methodologies typically used for the analysis of unsignalized intersections use conservative analysis parameters, such as long critical gaps. Actual field observations indicate that drivers on minor streets generally accept shorter gaps in traffic than those used in the analysis procedures and therefore experience less delay than reported by the analysis software. The analysis methodologies also do not fully consider the beneficial grouping effects caused by nearby signalized intersections. The net effect of these analysis procedures is the over-estimation of calculated delays at unsignalized intersections in the study area. Cautious judgment should therefore be exercised when interpreting the capacity analysis results at unsignalized intersections.

Signalized Intersection Capacity Analysis

Signalized intersection capacity analyses were conducted at the study area intersections. Analyses were conducted for the 2022 Existing, 2029 No-Build, and 2029 Build conditions. **Error! Reference source not found.** and **Error! Reference source not found.** summarize the capacity analyses for the Wilbur Avenue (Route 103) signalized intersections with Lees River Avenue and Brayton Point Road, respectively. All capacity analysis worksheets as well as graphics illustrating the queue diagrams for the study area intersections are included in the Appendix.

The analysis of the signalized intersections shows that the Wilbur Avenue (Route 103) at Lees River Avenue operates at acceptable levels of service during the morning and evening peak hours under 2022 Existing and 2029 No-Build conditions (see **Error! Reference source not found.**). Under 2029 Build conditions the impacts of the Project generated traffic are

minimal with only minor increases in delays and queues. The Project is projected to have a negligible increase in traffic at this intersection.

The analysis shows that there is some congestion at the Wilbur Avenue (Route 103) at Brayton Point Road intersection during the weekday evening peak hour under existing conditions that will continue under future No-Build conditions (see **Error! Reference source not found.**). This is primarily due to the existing heavy left-turn traffic on the eastbound approach. The southbound right-turn volumes are also high. The Project is not adding any traffic to these movements and therefore not impacting this existing condition. Similar to the Wilbur Avenue (Route 103) at Lees River Avenue intersection, under 2029 Build conditions the impacts of the Project generated traffic are minimal with only minor increases in delays and queues.

It should be noted that the existing lane widths on all approaches to the Wilbur Avenue (Route 103) at Brayton Point Road intersection are wide enough to allow vehicles to bypass left-turning vehicles that are waiting for gaps in the opposing traffic; therefore, the SYNCHRO analysis has been modeled as two lanes.

It should be noted that the overall impacts of the Project are not projected to have any significant impact on the peak hour traffic operations of the study area intersections. The actual traffic impacts of the Project are projected to be even less than provided in in this TIAS. As noted in the Trip Generation section, the actual traffic volumes generated by the Project during the intersection peak hours are projected to be much less than the volumes projected based on ITE data. Only the approximate 16 office workers that work from 8:00 AM to 4:30 PM are projected to be entering and exiting the Project Site during peak hours (7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM). The approximately 115 manufacturing employees will enter during the off-peak shift changes (6:00 AM, 2:00 PM, and 10:00 PM) when traffic volumes on the study area roads are lower.

Table 5 Signalized Intersection Capacity Analysis – Wilbur Ave. (Route 103) at Lees River Ave

Lane Group	2022 Existing Condition				2029 No Build Condition				2029 Build Condition			
	v/c[1]	Del[2]	LOS[3]	Q[4]	v/c[1]	Del[2]	LOS[3]	Q[4]	v/c[1]	Del[2]	LOS[3]	Q[4]
Weekday Morning Peak												
EB L	0.16	8	A	44	0.17	8	A	47	0.17	9	A	47
EB T	0.70	14	B	408	0.72	15	B	434	0.74	16	B	440
WB T	0.38	9	A	164	0.39	9	A	174	0.40	10	B	174
WB R	0.10	1	A	0	0.10	1	A	0	0.11	1	A	0
SB L/R	0.66	25	C	208	0.70	27	C	220	0.71	28	C	236
Overall	**0.73**	**13**	**B**	-	**0.75**	**14**	**B**	-	**0.76**	**15**	**B**	-
Weekday Evening Peak												
EB L	0.56	18	B	#99	0.76	40	D	#126	0.83	56	E	#131
EB T	0.70	16	B	398	0.74	18	B	423	0.75	19	B	430
WB T	0.80	20	B	#525	0.84	23	C	#611	0.85	24	C	#618
WB R	0.15	1	A	0	0.16	1	A	0	0.17	1	A	0
SB L/R	0.78	32	C	288	0.79	32	C	302	0.79	32	C	312
Overall	**0.82**	**19**	**B**	-	**0.85**	**21**	**C**	-	**0.86**	**23**	**C**	-

Source: VHB using Synchro 11 software.
Note: Shaded cells denote LOS E/F conditions.
[1] v/c- volume to capacity ratio
[2] Del. - average delay in seconds per vehicle
[3] LOS - level of service
[4] Q – 95th percentile queue length, feet
– 95th percentile volume exceeds capacity queue may be longer
m – Volume for 95th percentile queue is metered by upstream signal
EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; R = right; T = thru; L= left

Table 6 Signalized Intersection Capacity Analysis – Wilbur Ave. (Route 103) at Brayton Point Road

Lane Group	2022 Existing Condition				2029 No Build Condition				2029 Build Condition			
	v/c[1]	Del[2]	LOS[3]	Q[4]	v/c[1]	Del[2]	LOS[3]	Q[4]	v/c[1]	Del[2]	LOS[3]	Q[4]
Weekday Morning Peak												
EB L	0.41	6	A	74	0.44	7	A	81	0.44	9	A	90
EB T/R	0.35	6	A	82	0.37	6	A	90	0.43	7	A	116
WB L	0.02	5	A	6	0.03	5	A	8	0.10	5	A	18
WB T/R	0.23	5	A	51	0.24	5	A	56	0.25	6	A	62
NB L	0.22	15	B	36	0.24	15	B	38	0.29	15	B	45
NB T/R	0.16	14	B	36	0.18	14	B	39	0.18	14	B	40
SB L/T	0.15	14	B	30	0.18	14	B	35	0.19	14	B	37
SB R	0.14	14	B	36	0.15	14	B	**36**	**0.15**	**14**	B	**35**
Overall	**0.40**	**9**	**A**	-	**0.43**	**9**	**A**	-	**0.44**	**9**	**A**	-
Weekday Evening Peak												
EB L	1.30	>120	F	#397	1.46	>120	F	#358	1.54	>120	F	#392
EB T/R	0.42	9	A	189	0.44	9	A	205	0.47	10	B	241
WB L	0.07	7	A	24	0.08	8	A	28	0.12	8	A	38
WB T/R	0.64	12	B	#335	0.67	13	B	#369	0.68	13	B	#400
NB L	0.25	18	B	51	0.28	18	B	55	0.42	19	B	83
NB T/R	0.17	17	B	49	0.19	17	B	53	0.21	17	B	59
SB L/T	0.29	18	B	72	0.32	18	B	79	0.30	18	B	81
SB R	0.22	18	B	59	0.23	18	B	60	0.21	17	B	57
Overall	**0.94**	**46**	**F**	-	**1.05**	**59**	**E**	-	**1.10**	**63**	**E**	-

Source: VHB using Synchro 11 software.
Note: Shaded cells denote LOS E/F conditions.
[1] v/c- volume to capacity ratio
[2] Del. - average delay in seconds per vehicle
[3] LOS - level of service
[4] Q – 95th percentile queue length, feet
– 95th percentile volume exceeds capacity; queue may be longer
m – Volume for 95th percentile queue is metered by upstream signal
EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; R = right; T = thru; L= left

Unsignalized Intersection Capacity Analysis

Error! Reference source not found. summarizes the capacity analyses for the unsignalized intersections. The analysis of the unsignalized intersections shows that there are some delays on the side streets that are under stop and yield conditions.

The Lees River Avenue at I-195 EB Off-Ramp eastbound approach was analyzed as a shared left-turn/right-turn lane; however, there is a short, channelized right-turn lane that allows some right turning vehicles to bypass vehicles that are queued an to take left turns. This channelized right turn reduces the queues and delays, especially those of right turning vehicles. There are also long delays on the I-195 WB Off-Ramp southbound approach onto Wilbur Avenue (Route 103) westbound during the weekday evening peak hour. The Project will not add any traffic to this movement and only minimal traffic is traveling westbound on Wilbur Avenue past this intersection.

Table 7 Unsignalized Intersection Capacity Analysis

	2022 Existing Condition				2029 No Build Condition				2029 Build Condition			
Lane Group	**Dem[1]**	**Del[2]**	**LOS[3]**	**Q[4]**	**Dem[1]**	**Del[2]**	**LOS[3]**	**Q[4]**	**Dem[1]**	**Del[2]**	**LOS[3]**	**Q[4]**
Lees River Avenue at I-195 EB Off-Ramp												
Weekday Morning Peak												
EB L	195	15	C	46	205	16	C	51	220	17	C	58
Weekday Evening Peak												
EB L	400	30	D	182	420	37	E	223	425	40	E	236
Wilbur Avenue at Home Street/Park & Ride												
Weekday Morning Peak												
NB L/T/R	25	>120	F	58	35	>120	F	94	35	>120	F	101
SB L/T/R	20	36	E	17	30	44	E	32	30	48	E	34
NB L/T/R	25	93	F	49	35	>120	F	125	35	>120	F	131
SB L/T/R	25	>120	F	123	35	>120	F	193	35	>120	F	199
Wilbur Avenue WB at I-195 WB Off-Ramp												
Weekday Morning Peak												
SB R	260	18	C	80	270	19	C	91	270	20	C	94
Weekday Evening Peak												
SB R	520	>120	F	792	540	>120	F	893	540	>120	F	945
Wilbur Avenue EB at I-195 WB On/Off-Ramp												
Weekday Morning Peak												
NB R	200	13	B	41	210	14	B	46	245	16	C	64
Weekday Evening Peak												
NB R	300	18	C	81	315	19	C	93	320	20	C	99
Brayton Point Road at O'Neill Road												
Weekday Morning Peak												
EB L/R	5	11	B	17	10	9	A	4	35	11	B	17
Weekday Evening Peak												
EB L/R	5	9	A	0	10	9	A	1	120	10	B	13

Source: VHB using Synchro 11 software.
Note: Shaded cells denote LOS E/F conditions.
[1] Dem- traffic volume by movement
[2] Del. - average delay in seconds per vehicle
[3] LOS - level of service
[4] Q – 95th percentile queue length, feet
– 95th percentile volume exceeds capacity, queue may be longer
m – Volume for 95th percentile queue is metered by upstream signal
EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; R = right; T = thru; L= left

Transportation Mitigation

Intersection Capacity Improvements

As previously stated, the ITE trip generation projections during the peak hours of the study area intersections are much higher than the actual traffic volumes expected, because the shift changes will occur at 6:00 AM and 2:00 PM, which are much earlier than the peak hour of the study area intersections (7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM). There will only be 16 office workers arriving and departing during the peak hours of the study area intersections. Although this is not a capacity improvement, it is important to understand that the analysis in this study overestimates the volume of traffic generated by the Project and overestimates the traffic impacts at study area intersections.

As previously discussed, the Project is projected to generate 20 truck trips per day (10 round trips) because the ability to transport products by water access reduces the number and impacts of truck traffic along study area intersections. The truck trips are projected to travel on Brayton Point Road to Wilbur Avenue (Route 103) and Lees River Avenue to access I-195 East and West. Most truck deliveries will occur during off-peak hours; therefore, only 1 to 2 truck trips are expected during the morning and evening peak hours. To make it easier for trucks to make the turning movements between I-195 and the Project Site, trucks traveling to/from the west on I-195 will be directed to use Lees River Avenue, Route 6, and Brayton Point Road in order to avoid making tight turning movements at the Wilbur Avenue (Route 103)/Brayton Point Road intersection. Rerouting the trucks will minimize the delays and queues at the Wilbur Avenue (Route 103)/Brayton Point Road intersection.

Transportation Demand Management

In addition to the items discussed above, the Proponent will actively pursue demand-oriented alternatives as part of the TDM plan to reduce the transportation impact of the Project. The goal of a TDM plan is to reduce the Project's overall traffic impact through the implementation of measures that are aimed at affecting the demand side of the transportation equation, rather than the supply side. By their nature, TDM programs are intended to change people's behavior, and to be successful, they must rely on incentives or disincentives to make these shifts in behavior attractive to the commuter.

Potential TDM measures that are considered as part of the Project are outlined below. The Proponent has committed to the following measures:

- Designation of a transportation coordinator to oversee transportation issues, including parking and deliveries;
- Dissemination of information on travel and commute options for employees and visitors to the Project Site, including orientation packets to new employees, an annual (or more frequent) newsletter or bulletin, or by posting material on the internet and in building lobbies;
- Joining a transportation management association (TMA);

- Administering carpooling and vanpooling programs and incentives for participation;
- Providing on-site amenities and conveniences that would reduce the need for automobile travel, such as lunchroom, showers and changing rooms, bike racks, etc.;
- Use direct deposit for employee paychecks;
- Providing preferential parking for carpools and vanpools, with potential to expand, based on actual demand for such spaces; Adjust shift changes to not coincide with the peak hours of the surrounding roadway network; and
- Providing electric vehicle (EV) charging stations.

5

Conclusion

The Project is projected to add minimal traffic volumes to the study area during the peak hours (7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM) because the shift changes of the Project will occur during off-peak hours (6:00 AM, 2:00 PM, and 10:00 PM). The only traffic projected to be entering and exiting during the study area peak periods are the 16 office employees and occasionally one to two trucks. This will result in negligible impacts to traffic operations during the morning and evening peak hours of the study area intersections.

The TIAS has been performed using the higher ITE trip generation rates. This conservative analysis still shows that the Project will not have a significant impact on traffic operations.

Overall, the analysis presented in the TIA indicates that the existing transportation infrastructure around the Project Site will support the traffic impacts of the Project with the Transportation Mitigation proposed and the TDM measures described in this report.

Submarine Cable Factory

Somerset, Massachusetts

PREPARED FOR

Prysmian Group

Prysmian Cables and Systems USA, LLC
4 Tesseneer Road
Highland Heights, Kentucky 41076

PREPARED BY

vhb

99 High Street, 10th Floor
Boston, Massachusetts 02110

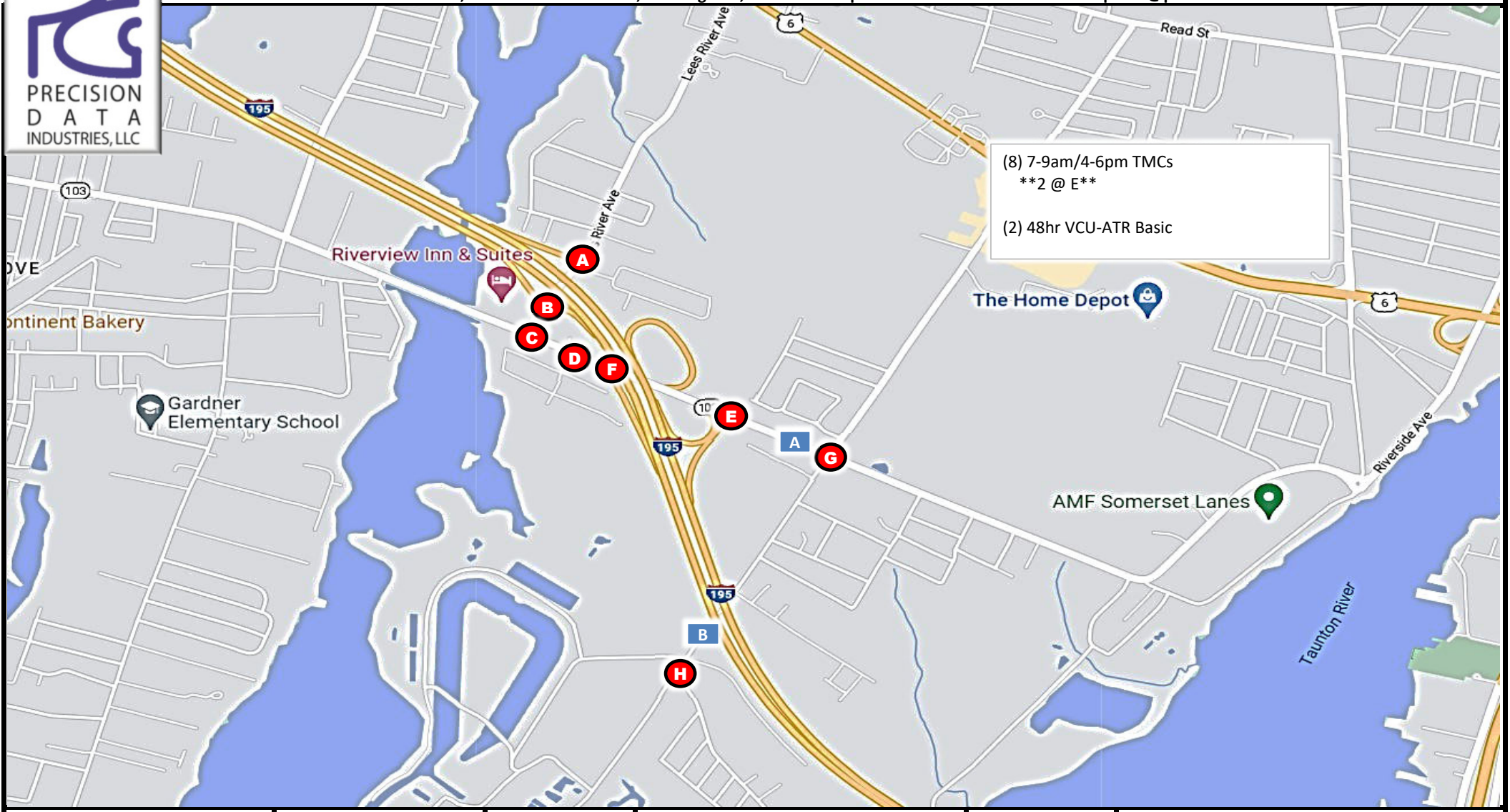
October 2022

APPENDIX:

Appendix 1 – Traffic Counts

Location Map: 228671 Somerset, MA

Precision Data Industries, LLC 46 Morton Street, Framingham, MA 01702 ph: 508-875-0100 email: datarequests@pdillc.com



Client:	Engineer:	Site Code:	Date:	PDI Job #	City, State:
VHB	Z. Tiang	15542.00	Wednesday 6/8/22-Thurs 6/9/22	228671	Somerset, MA

Wilbur Avenue
west of Brayton Point Road
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR A**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Wednesday, June 8, 2022**
Direction: **EB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	3	0	0	3
12:15 AM	7	0	0	7
12:30 AM	9	2	0	11
12:45 AM	5	0	1	6
1:00 AM	6	0	0	6
1:15 AM	2	0	0	2
1:30 AM	6	0	0	6
1:45 AM	2	0	0	2
2:00 AM	3	0	0	3
2:15 AM	2	1	0	3
2:30 AM	5	0	0	5
2:45 AM	4	0	0	4
3:00 AM	5	0	0	5
3:15 AM	3	0	0	3
3:30 AM	3	0	0	3
3:45 AM	3	0	0	3
4:00 AM	10	0	0	10
4:15 AM	9	0	0	9
4:30 AM	23	1	0	24
4:45 AM	45	0	0	45
5:00 AM	42	1	0	43
5:15 AM	48	0	1	49
5:30 AM	63	0	0	63
5:45 AM	93	1	0	94
6:00 AM	58	1	0	59
6:15 AM	76	1	0	77
6:30 AM	96	2	0	98
6:45 AM	127	1	0	128
7:00 AM	148	2	1	151
7:15 AM	118	4	1	123
7:30 AM	113	2	1	116
7:45 AM	104	3	1	108
8:00 AM	129	5	2	136
8:15 AM	134	7	1	142
8:30 AM	128	2	0	130
8:45 AM	128	3	2	133
9:00 AM	94	5	0	99
9:15 AM	96	4	1	101
9:30 AM	107	6	0	113
9:45 AM	102	4	1	107
10:00 AM	91	7	0	98
10:15 AM	88	2	0	90
10:30 AM	121	3	0	124
10:45 AM	117	4	0	121
11:00 AM	109	4	1	114
11:15 AM	108	6	1	115
11:30 AM	125	3	0	128
11:45 AM	117	7	0	124
AM Total	**3035**	**94**	**15**	**3144**
Percentage	**96.53%**	**2.99%**	**0.48%**	
AM Peak	**8:00 AM**	**9:15 AM**	**7:15 AM**	**8:00 AM**
Volume	**519**	**21**	**5**	**541**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	132	3	2	137
12:15 PM	130	2	2	134
12:30 PM	129	6	1	136
12:45 PM	93	2	0	95
1:00 PM	127	2	2	131
1:15 PM	126	5	2	133
1:30 PM	116	2	0	118
1:45 PM	128	1	0	129
2:00 PM	113	6	1	120
2:15 PM	150	4	0	154
2:30 PM	134	3	1	138
2:45 PM	145	3	1	149
3:00 PM	141	2	0	143
3:15 PM	162	2	1	165
3:30 PM	131	4	0	135
3:45 PM	173	2	0	175
4:00 PM	152	2	0	154
4:15 PM	160	0	0	160
4:30 PM	166	0	0	166
4:45 PM	162	1	3	166
5:00 PM	170	0	0	170
5:15 PM	174	1	0	175
5:30 PM	176	2	0	178
5:45 PM	167	2	0	169
6:00 PM	173	1	1	175
6:15 PM	119	0	0	119
6:30 PM	118	0	0	118
6:45 PM	110	2	0	112
7:00 PM	122	1	0	123
7:15 PM	140	0	0	140
7:30 PM	83	1	0	84
7:45 PM	75	1	0	76
8:00 PM	74	1	0	75
8:15 PM	79	0	0	79
8:30 PM	86	1	0	87
8:45 PM	51	0	0	51
9:00 PM	57	1	0	58
9:15 PM	43	0	0	43
9:30 PM	42	1	0	43
9:45 PM	27	0	0	27
10:00 PM	32	0	0	32
10:15 PM	25	2	0	27
10:30 PM	24	0	0	24
10:45 PM	20	0	1	21
11:00 PM	16	0	0	16
11:15 PM	12	0	0	12
11:30 PM	13	0	2	15
11:45 PM	19	0	0	19
PM Total	**5017**	**69**	**20**	**5106**
Percentage	**98.26%**	**1.35%**	**0.39%**	
PM Peak	**5:15 PM**	**2:00 PM**	**12:00 PM**	**5:15 PM**
Volume	**690**	**16**	**5**	**697**
Day Total	**8052**	**163**	**35**	**8250**
Percentage	**97.60%**	**1.98%**	**0.42%**	

Wilbur Avenue
west of Brayton Point Road
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR A**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Thursday, June 9, 2022**
Direction: **EB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	11	0	0	11
12:15 AM	7	0	0	7
12:30 AM	9	0	0	9
12:45 AM	10	0	0	10
1:00 AM	8	0	0	8
1:15 AM	1	0	0	1
1:30 AM	5	0	0	5
1:45 AM	4	0	0	4
2:00 AM	9	0	0	9
2:15 AM	4	0	0	4
2:30 AM	5	0	0	5
2:45 AM	4	0	1	5
3:00 AM	2	0	1	3
3:15 AM	2	0	0	2
3:30 AM	3	1	0	4
3:45 AM	2	0	1	3
4:00 AM	4	0	0	4
4:15 AM	14	1	1	16
4:30 AM	25	0	0	25
4:45 AM	29	0	1	30
5:00 AM	31	0	0	31
5:15 AM	44	1	0	45
5:30 AM	61	1	1	63
5:45 AM	93	1	0	94
6:00 AM	69	0	0	69
6:15 AM	76	2	1	79
6:30 AM	84	2	0	86
6:45 AM	145	3	0	148
7:00 AM	132	2	0	134
7:15 AM	135	3	1	139
7:30 AM	106	4	2	112
7:45 AM	115	3	1	119
8:00 AM	126	1	2	129
8:15 AM	123	9	2	134
8:30 AM	98	6	0	104
8:45 AM	128	1	1	130
9:00 AM	102	5	1	108
9:15 AM	90	2	0	92
9:30 AM	95	2	1	98
9:45 AM	115	7	1	123
10:00 AM	90	3	0	93
10:15 AM	108	2	0	110
10:30 AM	94	5	1	100
10:45 AM	106	1	1	108
11:00 AM	113	2	1	116
11:15 AM	89	3	0	92
11:30 AM	118	6	1	125
11:45 AM	109	4	1	114
AM Total	**2953**	**83**	**24**	**3060**
Percentage	**96.50%**	**2.71%**	**0.78%**	
AM Peak	**6:45 AM**	**8:15 AM**	**7:30 AM**	**6:45 AM**
Volume	**518**	**21**	**7**	**533**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	106	3	1	110
12:15 PM	107	3	0	110
12:30 PM	133	3	0	136
12:45 PM	115	3	1	119
1:00 PM	118	3	1	122
1:15 PM	121	3	0	124
1:30 PM	136	3	0	139
1:45 PM	119	3	1	123
2:00 PM	110	3	4	117
2:15 PM	130	4	0	134
2:30 PM	128	5	3	136
2:45 PM	155	5	0	160
3:00 PM	157	3	1	161
3:15 PM	157	5	0	162
3:30 PM	151	5	1	157
3:45 PM	184	2	0	186
4:00 PM	147	6	0	153
4:15 PM	167	0	0	167
4:30 PM	166	2	0	168
4:45 PM	173	1	0	174
5:00 PM	151	2	1	154
5:15 PM	151	2	0	153
5:30 PM	151	3	1	155
5:45 PM	151	0	1	152
6:00 PM	116	2	1	119
6:15 PM	120	2	0	122
6:30 PM	113	3	0	116
6:45 PM	139	0	0	139
7:00 PM	93	0	1	94
7:15 PM	92	0	0	92
7:30 PM	82	1	0	83
7:45 PM	80	2	0	82
8:00 PM	71	0	0	71
8:15 PM	92	3	0	95
8:30 PM	70	0	0	70
8:45 PM	58	0	0	58
9:00 PM	71	0	0	71
9:15 PM	51	0	0	51
9:30 PM	42	0	0	42
9:45 PM	48	0	0	48
10:00 PM	25	0	0	25
10:15 PM	42	0	0	42
10:30 PM	29	0	0	29
10:45 PM	20	0	0	20
11:00 PM	26	0	0	26
11:15 PM	19	0	0	19
11:30 PM	12	0	0	12
11:45 PM	13	0	0	13
PM Total	**4908**	**85**	**18**	**5011**
Percentage	**97.94%**	**1.70%**	**0.36%**	
PM Peak	**3:45 PM**	**2:30 PM**	**1:45 PM**	**3:45 PM**
Volume	**664**	**18**	**8**	**674**
Day Total	**7861**	**168**	**42**	**8071**
Percentage	**97.40%**	**2.08%**	**0.52%**	

Wilbur Avenue
west of Brayton Point Road
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR A**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Wednesday, June 8, 2022**
Direction: **WB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	10	0	0	10
12:15 AM	5	0	0	5
12:30 AM	6	0	0	6
12:45 AM	3	0	1	4
1:00 AM	4	0	0	4
1:15 AM	7	1	0	8
1:30 AM	2	0	0	2
1:45 AM	1	0	0	1
2:00 AM	1	0	0	1
2:15 AM	0	0	0	0
2:30 AM	1	0	0	1
2:45 AM	0	0	0	0
3:00 AM	2	0	0	2
3:15 AM	3	0	0	3
3:30 AM	1	0	0	1
3:45 AM	2	0	0	2
4:00 AM	5	1	0	6
4:15 AM	10	0	0	10
4:30 AM	8	0	0	8
4:45 AM	18	0	0	18
5:00 AM	17	0	0	17
5:15 AM	29	1	0	30
5:30 AM	30	0	0	30
5:45 AM	25	0	0	25
6:00 AM	36	4	0	40
6:15 AM	61	0	1	62
6:30 AM	67	2	2	71
6:45 AM	58	4	0	62
7:00 AM	96	2	0	98
7:15 AM	102	2	0	104
7:30 AM	127	2	0	129
7:45 AM	87	5	0	92
8:00 AM	99	5	0	104
8:15 AM	82	4	0	86
8:30 AM	105	5	1	111
8:45 AM	95	0	0	95
9:00 AM	93	3	2	98
9:15 AM	80	6	0	86
9:30 AM	77	6	0	83
9:45 AM	93	2	0	95
10:00 AM	81	4	1	86
10:15 AM	108	3	1	112
10:30 AM	98	3	2	103
10:45 AM	88	6	0	94
11:00 AM	99	5	0	104
11:15 AM	107	6	0	113
11:30 AM	110	1	1	112
11:45 AM	105	1	0	106
AM Total	**2344**	**84**	**12**	**2440**
Percentage	**96.07%**	**3.44%**	**0.49%**	
AM Peak	**11:00 AM**	**10:30 AM**	**9:45 AM**	**11:00 AM**
Volume	**421**	**20**	**4**	**435**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	118	5	3	126
12:15 PM	119	1	0	120
12:30 PM	118	5	0	123
12:45 PM	120	5	1	126
1:00 PM	128	3	2	133
1:15 PM	102	5	0	107
1:30 PM	133	1	0	134
1:45 PM	116	2	0	118
2:00 PM	128	8	1	137
2:15 PM	119	4	2	125
2:30 PM	178	1	1	180
2:45 PM	128	2	0	130
3:00 PM	173	5	3	181
3:15 PM	163	6	1	170
3:30 PM	197	5	0	202
3:45 PM	181	4	1	186
4:00 PM	209	0	0	209
4:15 PM	196	2	0	198
4:30 PM	188	1	2	191
4:45 PM	160	1	0	161
5:00 PM	190	2	1	193
5:15 PM	174	2	0	176
5:30 PM	158	0	2	160
5:45 PM	147	1	0	148
6:00 PM	116	2	0	118
6:15 PM	121	0	0	121
6:30 PM	126	1	1	128
6:45 PM	91	4	0	95
7:00 PM	120	1	0	121
7:15 PM	111	0	0	111
7:30 PM	115	0	0	115
7:45 PM	70	0	0	70
8:00 PM	79	0	0	79
8:15 PM	73	0	0	73
8:30 PM	92	0	0	92
8:45 PM	57	0	0	57
9:00 PM	60	0	0	60
9:15 PM	59	0	0	59
9:30 PM	37	0	0	37
9:45 PM	32	0	0	32
10:00 PM	41	0	0	41
10:15 PM	23	0	0	23
10:30 PM	22	0	0	22
10:45 PM	21	0	0	21
11:00 PM	17	1	0	18
11:15 PM	17	0	0	17
11:30 PM	13	0	0	13
11:45 PM	24	0	0	24
PM Total	**5180**	**80**	**21**	**5281**
Percentage	**98.09%**	**1.51%**	**0.40%**	
PM Peak	**3:30 PM**	**3:00 PM**	**2:15 PM**	**3:30 PM**
Volume	**783**	**20**	**6**	**795**
Day Total	**7524**	**164**	**33**	**7721**
Percentage	**97.45%**	**2.12%**	**0.43%**	

Wilbur Avenue
west of Brayton Point Road
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR A**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Thursday, June 9, 2022**
Direction: **WB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	10	1	0	11
12:15 AM	4	0	0	4
12:30 AM	7	0	0	7
12:45 AM	6	0	0	6
1:00 AM	7	0	0	7
1:15 AM	5	0	0	5
1:30 AM	2	0	0	2
1:45 AM	4	0	0	4
2:00 AM	4	0	0	4
2:15 AM	3	0	0	3
2:30 AM	2	1	0	3
2:45 AM	4	0	0	4
3:00 AM	2	0	0	2
3:15 AM	1	0	0	1
3:30 AM	1	0	0	1
3:45 AM	3	0	0	3
4:00 AM	4	0	0	4
4:15 AM	12	0	0	12
4:30 AM	11	1	0	12
4:45 AM	15	1	0	16
5:00 AM	6	0	2	8
5:15 AM	24	3	0	27
5:30 AM	31	0	0	31
5:45 AM	27	1	0	28
6:00 AM	42	1	0	43
6:15 AM	49	0	2	51
6:30 AM	65	2	0	67
6:45 AM	53	3	1	57
7:00 AM	104	2	1	107
7:15 AM	105	4	0	109
7:30 AM	106	3	0	109
7:45 AM	83	5	0	88
8:00 AM	101	7	0	108
8:15 AM	97	4	0	101
8:30 AM	84	7	0	91
8:45 AM	76	2	0	78
9:00 AM	80	4	0	84
9:15 AM	73	9	0	82
9:30 AM	83	6	1	90
9:45 AM	82	2	0	84
10:00 AM	82	3	0	85
10:15 AM	92	4	1	97
10:30 AM	90	3	0	93
10:45 AM	89	6	1	96
11:00 AM	86	5	0	91
11:15 AM	95	1	1	97
11:30 AM	113	3	0	116
11:45 AM	107	4	0	111
AM Total	**2232**	**98**	**10**	**2340**
Percentage	**95.38%**	**4.19%**	**0.43%**	
AM Peak	**11:00 AM**	**7:45 AM**	**6:15 AM**	**11:00 AM**
Volume	**401**	**23**	**4**	**415**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	122	1	1	124
12:15 PM	123	2	3	128
12:30 PM	107	6	1	114
12:45 PM	104	4	2	110
1:00 PM	107	1	1	109
1:15 PM	134	4	1	139
1:30 PM	106	6	0	112
1:45 PM	117	3	0	120
2:00 PM	143	3	0	146
2:15 PM	142	3	0	145
2:30 PM	194	0	0	194
2:45 PM	151	2	0	153
3:00 PM	176	4	2	182
3:15 PM	170	2	0	172
3:30 PM	198	2	0	200
3:45 PM	173	4	2	179
4:00 PM	208	2	0	210
4:15 PM	185	2	0	187
4:30 PM	160	3	1	164
4:45 PM	201	0	1	202
5:00 PM	221	2	1	224
5:15 PM	179	6	0	185
5:30 PM	150	0	0	150
5:45 PM	148	1	1	150
6:00 PM	157	2	0	159
6:15 PM	135	1	1	137
6:30 PM	117	0	0	117
6:45 PM	119	1	0	120
7:00 PM	101	0	1	102
7:15 PM	97	1	0	98
7:30 PM	102	0	0	102
7:45 PM	74	0	0	74
8:00 PM	90	0	0	90
8:15 PM	74	1	0	75
8:30 PM	72	2	0	74
8:45 PM	52	0	0	52
9:00 PM	55	0	0	55
9:15 PM	43	0	0	43
9:30 PM	35	0	0	35
9:45 PM	32	0	0	32
10:00 PM	31	0	0	31
10:15 PM	17	0	0	17
10:30 PM	25	0	0	25
10:45 PM	13	0	0	13
11:00 PM	24	1	0	25
11:15 PM	15	0	0	15
11:30 PM	11	0	0	11
11:45 PM	15	0	0	15
PM Total	**5225**	**72**	**19**	**5316**
Percentage	**98.29%**	**1.35%**	**0.36%**	
PM Peak	**4:15 PM**	**1:15 PM**	**12:00 PM**	**4:15 PM**
Volume	**767**	**16**	**7**	**777**
Day Total	**7457**	**170**	**29**	**7656**
Percentage	**97.40%**	**2.22%**	**0.38%**	

Wilbur Avenue
west of Brayton Point Road
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File # **228671 ATR A**

Direction: **EB**

Weekly Report

Day	Wednesday		Thursday												Week	
Date	06/08/22		06/09/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	3	137	11	110	0	0	0	0	0	0	0	0	0	0	7	124
12:15	7	134	7	110	0	0	0	0	0	0	0	0	0	0	7	122
12:30	11	136	9	136	0	0	0	0	0	0	0	0	0	0	10	136
12:45	6	95	10	119	0	0	0	0	0	0	0	0	0	0	8	107
1:00	6	131	8	122	0	0	0	0	0	0	0	0	0	0	7	127
1:15	2	133	1	124	0	0	0	0	0	0	0	0	0	0	2	129
1:30	6	118	5	139	0	0	0	0	0	0	0	0	0	0	6	129
1:45	2	129	4	123	0	0	0	0	0	0	0	0	0	0	3	126
2:00	3	120	9	117	0	0	0	0	0	0	0	0	0	0	6	119
2:15	3	154	4	134	0	0	0	0	0	0	0	0	0	0	4	144
2:30	5	138	5	136	0	0	0	0	0	0	0	0	0	0	5	137
2:45	4	149	5	160	0	0	0	0	0	0	0	0	0	0	5	155
3:00	5	143	3	161	0	0	0	0	0	0	0	0	0	0	4	152
3:15	3	165	2	162	0	0	0	0	0	0	0	0	0	0	3	164
3:30	3	135	4	157	0	0	0	0	0	0	0	0	0	0	4	146
3:45	3	175	3	186	0	0	0	0	0	0	0	0	0	0	3	181
4:00	10	154	4	153	0	0	0	0	0	0	0	0	0	0	7	154
4:15	9	160	16	167	0	0	0	0	0	0	0	0	0	0	13	164
4:30	24	166	25	168	0	0	0	0	0	0	0	0	0	0	25	167
4:45	45	166	30	174	0	0	0	0	0	0	0	0	0	0	38	170
5:00	43	170	31	154	0	0	0	0	0	0	0	0	0	0	37	162
5:15	49	175	45	153	0	0	0	0	0	0	0	0	0	0	47	164
5:30	63	178	63	155	0	0	0	0	0	0	0	0	0	0	63	167
5:45	94	169	94	152	0	0	0	0	0	0	0	0	0	0	94	161
6:00	59	175	69	119	0	0	0	0	0	0	0	0	0	0	64	147
6:15	77	119	79	122	0	0	0	0	0	0	0	0	0	0	78	121
6:30	98	118	86	116	0	0	0	0	0	0	0	0	0	0	92	117
6:45	128	112	148	139	0	0	0	0	0	0	0	0	0	0	138	126
7:00	151	123	134	94	0	0	0	0	0	0	0	0	0	0	143	109
7:15	123	140	139	92	0	0	0	0	0	0	0	0	0	0	131	116
7:30	116	84	112	83	0	0	0	0	0	0	0	0	0	0	114	84
7:45	108	76	119	82	0	0	0	0	0	0	0	0	0	0	114	79
8:00	136	75	129	71	0	0	0	0	0	0	0	0	0	0	133	73
8:15	142	79	134	95	0	0	0	0	0	0	0	0	0	0	138	87
8:30	130	87	104	70	0	0	0	0	0	0	0	0	0	0	117	79
8:45	133	51	130	58	0	0	0	0	0	0	0	0	0	0	132	55
9:00	99	58	108	71	0	0	0	0	0	0	0	0	0	0	104	65
9:15	101	43	92	51	0	0	0	0	0	0	0	0	0	0	97	47
9:30	113	43	98	42	0	0	0	0	0	0	0	0	0	0	106	43
9:45	107	27	123	48	0	0	0	0	0	0	0	0	0	0	115	38
10:00	98	32	93	25	0	0	0	0	0	0	0	0	0	0	96	29
10:15	90	27	110	42	0	0	0	0	0	0	0	0	0	0	100	35
10:30	124	24	100	29	0	0	0	0	0	0	0	0	0	0	112	27
10:45	121	21	108	20	0	0	0	0	0	0	0	0	0	0	115	21
11:00	114	16	116	26	0	0	0	0	0	0	0	0	0	0	115	21
11:15	115	12	92	19	0	0	0	0	0	0	0	0	0	0	104	16
11:30	128	15	125	12	0	0	0	0	0	0	0	0	0	0	127	14
11:45	124	19	114	13	0	0	0	0	0	0	0	0	0	0	119	16
Total	**3144**	**5106**	**3060**	**5011**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3102**	**5059**
Day Total	**8250**		**8071**		**0**		**0**		**0**		**0**		**0**		**8161**	
Peak HR	**8:00 AM**	**5:15 PM**	**6:45 AM**	**3:45 PM**											**6:45 AM**	**3:45 PM**
Volume	**541**	**697**	**533**	**674**											**526**	**665**

Wilbur Avenue
west of Brayton Point Road
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File # **228671 ATR A**

Direction: **WB**

Weekly Report

Day	Wednesday		Thursday												Week Ave	
Date	06/08/22		06/09/22													
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	10	126	11	124	0	0	0	0	0	0	0	0	0	0	11	125
12:15	5	120	4	128	0	0	0	0	0	0	0	0	0	0	5	124
12:30	6	123	7	114	0	0	0	0	0	0	0	0	0	0	7	119
12:45	4	126	6	110	0	0	0	0	0	0	0	0	0	0	5	118
1:00	4	133	7	109	0	0	0	0	0	0	0	0	0	0	6	121
1:15	8	107	5	139	0	0	0	0	0	0	0	0	0	0	7	123
1:30	2	134	2	112	0	0	0	0	0	0	0	0	0	0	2	123
1:45	1	118	4	120	0	0	0	0	0	0	0	0	0	0	3	119
2:00	1	137	4	146	0	0	0	0	0	0	0	0	0	0	3	142
2:15	0	125	3	145	0	0	0	0	0	0	0	0	0	0	2	135
2:30	1	180	3	194	0	0	0	0	0	0	0	0	0	0	2	187
2:45	0	130	4	153	0	0	0	0	0	0	0	0	0	0	2	142
3:00	2	181	2	182	0	0	0	0	0	0	0	0	0	0	2	182
3:15	3	170	1	172	0	0	0	0	0	0	0	0	0	0	2	171
3:30	1	202	1	200	0	0	0	0	0	0	0	0	0	0	1	201
3:45	2	186	3	179	0	0	0	0	0	0	0	0	0	0	3	183
4:00	6	209	4	210	0	0	0	0	0	0	0	0	0	0	5	210
4:15	10	198	12	187	0	0	0	0	0	0	0	0	0	0	11	193
4:30	8	191	12	164	0	0	0	0	0	0	0	0	0	0	10	178
4:45	18	161	16	202	0	0	0	0	0	0	0	0	0	0	17	182
5:00	17	193	8	224	0	0	0	0	0	0	0	0	0	0	13	209
5:15	30	176	27	185	0	0	0	0	0	0	0	0	0	0	29	181
5:30	30	160	31	150	0	0	0	0	0	0	0	0	0	0	31	155
5:45	25	148	28	150	0	0	0	0	0	0	0	0	0	0	27	149
6:00	40	118	43	159	0	0	0	0	0	0	0	0	0	0	42	139
6:15	62	121	51	137	0	0	0	0	0	0	0	0	0	0	57	129
6:30	71	128	67	117	0	0	0	0	0	0	0	0	0	0	69	123
6:45	62	95	57	120	0	0	0	0	0	0	0	0	0	0	60	108
7:00	98	121	107	102	0	0	0	0	0	0	0	0	0	0	103	112
7:15	104	111	109	98	0	0	0	0	0	0	0	0	0	0	107	105
7:30	129	115	109	102	0	0	0	0	0	0	0	0	0	0	119	109
7:45	92	70	88	74	0	0	0	0	0	0	0	0	0	0	90	72
8:00	104	79	108	90	0	0	0	0	0	0	0	0	0	0	106	85
8:15	86	73	101	75	0	0	0	0	0	0	0	0	0	0	94	74
8:30	111	92	91	74	0	0	0	0	0	0	0	0	0	0	101	83
8:45	95	57	78	52	0	0	0	0	0	0	0	0	0	0	87	55
9:00	98	60	84	55	0	0	0	0	0	0	0	0	0	0	91	58
9:15	86	59	82	43	0	0	0	0	0	0	0	0	0	0	84	51
9:30	83	37	90	35	0	0	0	0	0	0	0	0	0	0	87	36
9:45	95	32	84	32	0	0	0	0	0	0	0	0	0	0	90	32
10:00	86	41	85	31	0	0	0	0	0	0	0	0	0	0	86	36
10:15	112	23	97	17	0	0	0	0	0	0	0	0	0	0	105	20
10:30	103	22	93	25	0	0	0	0	0	0	0	0	0	0	98	24
10:45	94	21	96	13	0	0	0	0	0	0	0	0	0	0	95	17
11:00	104	18	91	25	0	0	0	0	0	0	0	0	0	0	98	22
11:15	113	17	97	15	0	0	0	0	0	0	0	0	0	0	105	16
11:30	112	13	116	11	0	0	0	0	0	0	0	0	0	0	114	12
11:45	106	24	111	15	0	0	0	0	0	0	0	0	0	0	109	20
Total	**2440**	**5281**	**2340**	**5316**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2390**	**5299**
Day Total	**7721**		**7656**		**0**		**0**		**0**		**0**		**0**		**7689**	
Peak HR	**11:00 AM**	**3:30 PM**	**11:00 AM**	**4:15 PM**											**11:00 AM**	**3:30 PM**
Volume	**435**	**795**	**415**	**777**											**425**	**786**

Brayton Point Road
south of I-195
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR B**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Wednesday, June 8, 2022**
Direction: **NB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	1	0	0	1
12:30 AM	1	0	0	1
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	1	0	0	1
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	1	0	0	1
2:15 AM	0	0	0	0
2:30 AM	2	0	0	2
2:45 AM	0	0	0	0
3:00 AM	1	0	0	1
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	5	0	0	5
4:45 AM	4	0	0	4
5:00 AM	3	0	0	3
5:15 AM	7	0	0	7
5:30 AM	3	0	0	3
5:45 AM	3	0	0	3
6:00 AM	5	0	0	5
6:15 AM	6	0	0	6
6:30 AM	11	0	0	11
6:45 AM	11	2	0	13
7:00 AM	23	0	0	23
7:15 AM	18	3	0	21
7:30 AM	17	0	0	17
7:45 AM	17	0	0	17
8:00 AM	7	1	0	8
8:15 AM	15	0	0	15
8:30 AM	14	1	0	15
8:45 AM	11	0	0	11
9:00 AM	9	0	0	9
9:15 AM	12	1	0	13
9:30 AM	10	1	0	11
9:45 AM	11	0	0	11
10:00 AM	11	0	0	11
10:15 AM	9	0	0	9
10:30 AM	5	0	0	5
10:45 AM	9	0	0	9
11:00 AM	14	1	0	15
11:15 AM	8	0	0	8
11:30 AM	7	0	0	7
11:45 AM	11	0	1	12
AM Total	**303**	**10**	**1**	**314**
Percentage	**96.50%**	**3.18%**	**0.32%**	
AM Peak	**7:00 AM**	**6:30 AM**	**11:00 AM**	**7:00 AM**
Volume	**75**	**5**	**1**	**78**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	7	1	0	8
12:15 PM	9	0	0	9
12:30 PM	13	1	0	14
12:45 PM	7	0	0	7
1:00 PM	6	0	0	6
1:15 PM	5	0	0	5
1:30 PM	11	0	0	11
1:45 PM	5	1	0	6
2:00 PM	10	1	0	11
2:15 PM	14	2	0	16
2:30 PM	12	1	0	13
2:45 PM	4	3	0	7
3:00 PM	10	0	0	10
3:15 PM	10	0	0	10
3:30 PM	14	1	0	15
3:45 PM	8	0	0	8
4:00 PM	7	1	0	8
4:15 PM	11	0	0	11
4:30 PM	9	0	0	9
4:45 PM	9	0	0	9
5:00 PM	19	2	0	21
5:15 PM	11	0	0	11
5:30 PM	8	0	0	8
5:45 PM	14	0	0	14
6:00 PM	8	0	0	8
6:15 PM	7	0	0	7
6:30 PM	10	0	0	10
6:45 PM	10	0	0	10
7:00 PM	3	0	0	3
7:15 PM	5	0	0	5
7:30 PM	10	0	0	10
7:45 PM	8	0	0	8
8:00 PM	9	0	0	9
8:15 PM	6	0	0	6
8:30 PM	6	0	0	6
8:45 PM	7	0	0	7
9:00 PM	3	0	0	3
9:15 PM	3	0	0	3
9:30 PM	2	0	0	2
9:45 PM	2	0	0	2
10:00 PM	2	0	0	2
10:15 PM	3	0	0	3
10:30 PM	1	0	0	1
10:45 PM	3	0	0	3
11:00 PM	4	0	0	4
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	3	0	0	3
PM Total	**348**	**14**	**0**	**362**
Percentage	**96.13%**	**3.87%**	**0.00%**	
PM Peak	**5:00 PM**	**2:00 PM**	**12:00 PM**	**5:00 PM**
Volume	**52**	**7**	**0**	**54**
Day Total	**651**	**24**	**1**	**676**
Percentage	**96.30%**	**3.55%**	**0.15%**	

Brayton Point Road
south of I-195
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR B**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Thursday, June 9, 2022**
Direction: **NB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	1	0	0	1
1:15 AM	0	0	0	0
1:30 AM	1	0	0	1
1:45 AM	0	0	0	0
2:00 AM	1	0	0	1
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	1	0	0	1
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	1	0	0	1
4:30 AM	1	0	0	1
4:45 AM	4	0	0	4
5:00 AM	4	0	0	4
5:15 AM	6	0	0	6
5:30 AM	4	0	0	4
5:45 AM	9	0	0	9
6:00 AM	10	0	0	10
6:15 AM	9	0	0	9
6:30 AM	9	0	0	9
6:45 AM	11	2	0	13
7:00 AM	19	1	0	20
7:15 AM	23	1	0	24
7:30 AM	18	0	0	18
7:45 AM	10	0	0	10
8:00 AM	12	0	0	12
8:15 AM	12	3	0	15
8:30 AM	11	0	0	11
8:45 AM	10	0	0	10
9:00 AM	7	0	0	7
9:15 AM	4	0	0	4
9:30 AM	13	0	0	13
9:45 AM	12	0	0	12
10:00 AM	10	0	0	10
10:15 AM	7	0	0	7
10:30 AM	7	1	0	8
10:45 AM	15	0	0	15
11:00 AM	4	0	0	4
11:15 AM	8	0	0	8
11:30 AM	4	0	0	4
11:45 AM	9	0	0	9
AM Total	**287**	**8**	**0**	**295**
Percentage	**97.29%**	**2.71%**	**0.00%**	
AM Peak	**6:45 AM**	**6:30 AM**	**12:00 AM**	**6:45 AM**
Volume	**71**	**4**	**0**	**75**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	4	0	0	4
12:15 PM	9	0	0	9
12:30 PM	7	3	0	10
12:45 PM	8	0	0	8
1:00 PM	11	0	0	11
1:15 PM	10	0	0	10
1:30 PM	5	0	0	5
1:45 PM	7	0	0	7
2:00 PM	10	0	0	10
2:15 PM	6	1	0	7
2:30 PM	8	0	0	8
2:45 PM	8	1	0	9
3:00 PM	15	1	0	16
3:15 PM	10	0	0	10
3:30 PM	8	0	0	8
3:45 PM	16	2	0	18
4:00 PM	8	0	0	8
4:15 PM	8	0	0	8
4:30 PM	15	0	0	15
4:45 PM	12	0	0	12
5:00 PM	14	1	0	15
5:15 PM	12	1	0	13
5:30 PM	13	0	0	13
5:45 PM	16	0	0	16
6:00 PM	11	0	0	11
6:15 PM	16	0	0	16
6:30 PM	9	0	0	9
6:45 PM	4	0	0	4
7:00 PM	13	0	0	13
7:15 PM	5	0	0	5
7:30 PM	8	0	0	8
7:45 PM	10	0	0	10
8:00 PM	9	0	0	9
8:15 PM	6	0	0	6
8:30 PM	8	0	0	8
8:45 PM	5	0	0	5
9:00 PM	3	0	0	3
9:15 PM	2	0	0	2
9:30 PM	1	0	0	1
9:45 PM	6	0	0	6
10:00 PM	3	0	0	3
10:15 PM	3	0	0	3
10:30 PM	2	0	0	2
10:45 PM	3	0	0	3
11:00 PM	1	0	0	1
11:15 PM	1	0	0	1
11:30 PM	3	0	0	3
11:45 PM	0	0	0	0
PM Total	**372**	**10**	**0**	**382**
Percentage	**97.38%**	**2.62%**	**0.00%**	
PM Peak	**5:30 PM**	**12:00 PM**	**12:00 PM**	**5:00 PM**
Volume	**56**	**3**	**0**	**57**
Day Total	**659**	**18**	**0**	**677**
Percentage	**97.34%**	**2.66%**	**0.00%**	

Brayton Point Road
south of I-195
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR B**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Wednesday, June 8, 2022**
Direction: **SB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0
12:15 AM	1	0	0	1
12:30 AM	1	0	0	1
12:45 AM	3	0	0	3
1:00 AM	0	0	0	0
1:15 AM	1	0	0	1
1:30 AM	1	0	0	1
1:45 AM	0	0	0	0
2:00 AM	2	0	0	2
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	1	0	0	1
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	1	0	0	1
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	1	0	0	1
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	4	1	0	5
7:00 AM	6	0	0	6
7:15 AM	6	1	0	7
7:30 AM	5	1	0	6
7:45 AM	5	0	0	5
8:00 AM	5	3	0	8
8:15 AM	8	0	0	8
8:30 AM	6	0	0	6
8:45 AM	12	0	0	12
9:00 AM	7	0	0	7
9:15 AM	8	1	0	9
9:30 AM	7	0	0	7
9:45 AM	9	0	0	9
10:00 AM	7	0	0	7
10:15 AM	5	0	1	6
10:30 AM	5	1	0	6
10:45 AM	4	0	0	4
11:00 AM	7	0	0	7
11:15 AM	8	0	0	8
11:30 AM	7	2	0	9
11:45 AM	11	0	0	11
AM Total	**154**	**10**	**1**	**165**
Percentage	**93.33%**	**6.06%**	**0.61%**	
AM Peak	**8:45 AM**	**7:15 AM**	**9:30 AM**	**8:45 AM**
Volume	**34**	**5**	**1**	**35**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	13	0	0	13
12:15 PM	11	1	1	13
12:30 PM	10	0	0	10
12:45 PM	12	0	0	12
1:00 PM	7	0	0	7
1:15 PM	6	1	0	7
1:30 PM	10	0	0	10
1:45 PM	15	0	0	15
2:00 PM	7	1	0	8
2:15 PM	14	2	0	16
2:30 PM	12	1	1	14
2:45 PM	10	2	0	12
3:00 PM	9	1	0	10
3:15 PM	20	0	0	20
3:30 PM	23	0	0	23
3:45 PM	17	2	0	19
4:00 PM	19	0	0	19
4:15 PM	13	0	0	13
4:30 PM	17	0	0	17
4:45 PM	24	1	0	25
5:00 PM	20	0	0	20
5:15 PM	18	0	0	18
5:30 PM	16	0	0	16
5:45 PM	13	0	0	13
6:00 PM	10	0	0	10
6:15 PM	18	0	0	18
6:30 PM	12	0	0	12
6:45 PM	10	0	0	10
7:00 PM	9	0	0	9
7:15 PM	13	0	0	13
7:30 PM	7	0	0	7
7:45 PM	15	0	0	15
8:00 PM	8	0	0	8
8:15 PM	2	0	0	2
8:30 PM	7	0	0	7
8:45 PM	8	0	0	8
9:00 PM	7	0	0	7
9:15 PM	6	0	0	6
9:30 PM	2	0	0	2
9:45 PM	5	0	0	5
10:00 PM	6	0	0	6
10:15 PM	3	0	0	3
10:30 PM	3	0	0	3
10:45 PM	1	0	0	1
11:00 PM	4	0	0	4
11:15 PM	2	0	0	2
11:30 PM	3	0	0	3
11:45 PM	2	0	0	2
PM Total	**499**	**12**	**2**	**513**
Percentage	**97.27%**	**2.34%**	**0.39%**	
PM Peak	**3:15 PM**	**2:00 PM**	**12:00 PM**	**3:15 PM**
Volume	**79**	**6**	**1**	**81**
Day Total	**653**	**22**	**3**	**678**
Percentage	**96.31%**	**3.24%**	**0.44%**	

Brayton Point Road
south of I-195
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PDI File # **228671 ATR B**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Thursday, June 9, 2022**
Direction: **SB**

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	1	0	0	1
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	1	0	0	1
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	1	0	0	1
2:00 AM	2	0	0	2
2:15 AM	0	0	0	0
2:30 AM	1	0	0	1
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	1	0	0	1
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	1	0	0	1
6:00 AM	3	0	0	3
6:15 AM	3	0	0	3
6:30 AM	0	1	0	1
6:45 AM	4	1	0	5
7:00 AM	6	1	0	7
7:15 AM	5	2	0	7
7:30 AM	5	0	0	5
7:45 AM	4	0	0	4
8:00 AM	8	3	0	11
8:15 AM	6	0	0	6
8:30 AM	2	0	0	2
8:45 AM	8	0	0	8
9:00 AM	8	0	0	8
9:15 AM	8	0	0	8
9:30 AM	3	0	0	3
9:45 AM	7	1	0	8
10:00 AM	3	0	0	3
10:15 AM	6	1	0	7
10:30 AM	6	0	0	6
10:45 AM	6	0	0	6
11:00 AM	7	0	0	7
11:15 AM	6	0	0	6
11:30 AM	8	0	0	8
11:45 AM	12	0	0	12
AM Total	**142**	**10**	**0**	**152**
Percentage	**93.42%**	**6.58%**	**0.00%**	
AM Peak	**11:00 AM**	**6:30 AM**	**12:00 AM**	**11:00 AM**
Volume	**33**	**5**	**0**	**33**

PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	5	0	0	5
12:15 PM	11	1	0	12
12:30 PM	9	1	0	10
12:45 PM	6	0	0	6
1:00 PM	10	0	0	10
1:15 PM	9	0	0	9
1:30 PM	7	0	0	7
1:45 PM	7	0	0	7
2:00 PM	8	0	0	8
2:15 PM	14	1	0	15
2:30 PM	10	0	0	10
2:45 PM	14	2	0	16
3:00 PM	18	0	0	18
3:15 PM	14	0	0	14
3:30 PM	20	0	0	20
3:45 PM	15	1	0	16
4:00 PM	14	0	0	14
4:15 PM	15	0	0	15
4:30 PM	17	1	0	18
4:45 PM	17	0	0	17
5:00 PM	30	0	0	30
5:15 PM	26	0	0	26
5:30 PM	10	0	0	10
5:45 PM	16	0	0	16
6:00 PM	9	0	0	9
6:15 PM	13	0	0	13
6:30 PM	13	0	0	13
6:45 PM	20	0	0	20
7:00 PM	13	0	0	13
7:15 PM	10	0	0	10
7:30 PM	16	0	0	16
7:45 PM	14	0	0	14
8:00 PM	11	0	0	11
8:15 PM	11	0	0	11
8:30 PM	12	0	0	12
8:45 PM	5	0	0	5
9:00 PM	6	0	0	6
9:15 PM	3	0	0	3
9:30 PM	5	0	0	5
9:45 PM	2	0	0	2
10:00 PM	3	0	0	3
10:15 PM	4	0	0	4
10:30 PM	3	0	0	3
10:45 PM	3	0	0	3
11:00 PM	4	0	0	4
11:15 PM	6	0	0	6
11:30 PM	3	0	0	3
11:45 PM	1	0	0	1
PM Total	**512**	**7**	**0**	**519**
Percentage	**98.65%**	**1.35%**	**0.00%**	
PM Peak	**4:30 PM**	**2:00 PM**	**12:00 PM**	**4:30 PM**
Volume	**90**	**3**	**0**	**91**
Day Total	**654**	**17**	**0**	**671**
Percentage	**97.47%**	**2.53%**	**0.00%**	

Brayton Point Road
south of I-195
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File # **228671 ATR B**

Direction: **NB**

Weekly Report

Day	Wednesday		Thursday												Week	
Date	06/08/22		06/09/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	8	0	4	0	0	0	0	0	0	0	0	0	0	0	6
12:15	1	9	0	9	0	0	0	0	0	0	0	0	0	0	1	9
12:30	1	14	0	10	0	0	0	0	0	0	0	0	0	0	1	12
12:45	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0	8
1:00	0	6	1	11	0	0	0	0	0	0	0	0	0	0	1	9
1:15	1	5	0	10	0	0	0	0	0	0	0	0	0	0	1	8
1:30	0	11	1	5	0	0	0	0	0	0	0	0	0	0	1	8
1:45	0	6	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00	1	11	1	10	0	0	0	0	0	0	0	0	0	0	1	11
2:15	0	16	0	7	0	0	0	0	0	0	0	0	0	0	0	12
2:30	2	13	0	8	0	0	0	0	0	0	0	0	0	0	1	11
2:45	0	7	1	9	0	0	0	0	0	0	0	0	0	0	1	8
3:00	1	10	0	16	0	0	0	0	0	0	0	0	0	0	1	13
3:15	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	10
3:30	0	15	0	8	0	0	0	0	0	0	0	0	0	0	0	12
3:45	0	8	0	18	0	0	0	0	0	0	0	0	0	0	0	13
4:00	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	8
4:15	0	11	1	8	0	0	0	0	0	0	0	0	0	0	1	10
4:30	5	9	1	15	0	0	0	0	0	0	0	0	0	0	3	12
4:45	4	9	4	12	0	0	0	0	0	0	0	0	0	0	4	11
5:00	3	21	4	15	0	0	0	0	0	0	0	0	0	0	4	18
5:15	7	11	6	13	0	0	0	0	0	0	0	0	0	0	7	12
5:30	3	8	4	13	0	0	0	0	0	0	0	0	0	0	4	11
5:45	3	14	9	16	0	0	0	0	0	0	0	0	0	0	6	15
6:00	5	8	10	11	0	0	0	0	0	0	0	0	0	0	8	10
6:15	6	7	9	16	0	0	0	0	0	0	0	0	0	0	8	12
6:30	11	10	9	9	0	0	0	0	0	0	0	0	0	0	10	10
6:45	13	10	13	4	0	0	0	0	0	0	0	0	0	0	13	7
7:00	23	3	20	13	0	0	0	0	0	0	0	0	0	0	22	8
7:15	21	5	24	5	0	0	0	0	0	0	0	0	0	0	23	5
7:30	17	10	18	8	0	0	0	0	0	0	0	0	0	0	18	9
7:45	17	8	10	10	0	0	0	0	0	0	0	0	0	0	14	9
8:00	8	9	12	9	0	0	0	0	0	0	0	0	0	0	10	9
8:15	15	6	15	6	0	0	0	0	0	0	0	0	0	0	15	6
8:30	15	6	11	8	0	0	0	0	0	0	0	0	0	0	13	7
8:45	11	7	10	5	0	0	0	0	0	0	0	0	0	0	11	6
9:00	9	3	7	3	0	0	0	0	0	0	0	0	0	0	8	3
9:15	13	3	4	2	0	0	0	0	0	0	0	0	0	0	9	3
9:30	11	2	13	1	0	0	0	0	0	0	0	0	0	0	12	2
9:45	11	2	12	6	0	0	0	0	0	0	0	0	0	0	12	4
10:00	11	2	10	3	0	0	0	0	0	0	0	0	0	0	11	3
10:15	9	3	7	3	0	0	0	0	0	0	0	0	0	0	8	3
10:30	5	1	8	2	0	0	0	0	0	0	0	0	0	0	7	2
10:45	9	3	15	3	0	0	0	0	0	0	0	0	0	0	12	3
11:00	15	4	4	1	0	0	0	0	0	0	0	0	0	0	10	3
11:15	8	0	8	1	0	0	0	0	0	0	0	0	0	0	8	1
11:30	7	0	4	3	0	0	0	0	0	0	0	0	0	0	6	2
11:45	12	3	9	0	0	0	0	0	0	0	0	0	0	0	11	2
Total	**314**	**362**	**295**	**382**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**305**	**372**
Day Total	**676**		**677**		**0**		**0**		**0**		**0**		**0**		**677**	
Peak HR	**7:00 AM**	**5:00 PM**	**6:45 AM**	**5:00 PM**											**7:00 AM**	**5:00 PM**
Volume	**78**	**54**	**75**	**57**											**75**	**56**

Brayton Point Road
south of I-195
City, State: Somerset, MA
Client: VHB/Z. Tiang
Site Code: 15542

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File # **228671 ATR B**

Direction: **SB**

Weekly Report

Day	Wednesday		Thursday												Week	
Date	06/08/22		06/09/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	13	1	5	0	0	0	0	0	0	0	0	0	0	1	9
12:15	1	13	0	12	0	0	0	0	0	0	0	0	0	0	1	13
12:30	1	10	0	10	0	0	0	0	0	0	0	0	0	0	1	10
12:45	3	12	1	6	0	0	0	0	0	0	0	0	0	0	2	9
1:00	0	7	0	10	0	0	0	0	0	0	0	0	0	0	0	9
1:15	1	7	0	9	0	0	0	0	0	0	0	0	0	0	1	8
1:30	1	10	0	7	0	0	0	0	0	0	0	0	0	0	1	9
1:45	0	15	1	7	0	0	0	0	0	0	0	0	0	0	1	11
2:00	2	8	2	8	0	0	0	0	0	0	0	0	0	0	2	8
2:15	0	16	0	15	0	0	0	0	0	0	0	0	0	0	0	16
2:30	0	14	1	10	0	0	0	0	0	0	0	0	0	0	1	12
2:45	1	12	0	16	0	0	0	0	0	0	0	0	0	0	1	14
3:00	0	10	0	18	0	0	0	0	0	0	0	0	0	0	0	14
3:15	0	20	0	14	0	0	0	0	0	0	0	0	0	0	0	17
3:30	0	23	0	20	0	0	0	0	0	0	0	0	0	0	0	22
3:45	0	19	0	16	0	0	0	0	0	0	0	0	0	0	0	18
4:00	1	19	0	14	0	0	0	0	0	0	0	0	0	0	1	17
4:15	0	13	0	15	0	0	0	0	0	0	0	0	0	0	0	14
4:30	0	17	0	18	0	0	0	0	0	0	0	0	0	0	0	18
4:45	0	25	1	17	0	0	0	0	0	0	0	0	0	0	1	21
5:00	0	20	0	30	0	0	0	0	0	0	0	0	0	0	0	25
5:15	0	18	0	26	0	0	0	0	0	0	0	0	0	0	0	22
5:30	1	16	0	10	0	0	0	0	0	0	0	0	0	0	1	13
5:45	0	13	1	16	0	0	0	0	0	0	0	0	0	0	1	15
6:00	0	10	3	9	0	0	0	0	0	0	0	0	0	0	2	10
6:15	0	18	3	13	0	0	0	0	0	0	0	0	0	0	2	16
6:30	0	12	1	13	0	0	0	0	0	0	0	0	0	0	1	13
6:45	5	10	5	20	0	0	0	0	0	0	0	0	0	0	5	15
7:00	6	9	7	13	0	0	0	0	0	0	0	0	0	0	7	11
7:15	7	13	7	10	0	0	0	0	0	0	0	0	0	0	7	12
7:30	6	7	5	16	0	0	0	0	0	0	0	0	0	0	6	12
7:45	5	15	4	14	0	0	0	0	0	0	0	0	0	0	5	15
8:00	8	8	11	11	0	0	0	0	0	0	0	0	0	0	10	10
8:15	8	2	6	11	0	0	0	0	0	0	0	0	0	0	7	7
8:30	6	7	2	12	0	0	0	0	0	0	0	0	0	0	4	10
8:45	12	8	8	5	0	0	0	0	0	0	0	0	0	0	10	7
9:00	7	7	8	6	0	0	0	0	0	0	0	0	0	0	8	7
9:15	9	6	8	3	0	0	0	0	0	0	0	0	0	0	9	5
9:30	7	2	3	5	0	0	0	0	0	0	0	0	0	0	5	4
9:45	9	5	8	2	0	0	0	0	0	0	0	0	0	0	9	4
10:00	7	6	3	3	0	0	0	0	0	0	0	0	0	0	5	5
10:15	6	3	7	4	0	0	0	0	0	0	0	0	0	0	7	4
10:30	6	3	6	3	0	0	0	0	0	0	0	0	0	0	6	3
10:45	4	1	6	3	0	0	0	0	0	0	0	0	0	0	5	2
11:00	7	4	7	4	0	0	0	0	0	0	0	0	0	0	7	4
11:15	8	2	6	6	0	0	0	0	0	0	0	0	0	0	7	4
11:30	9	3	8	3	0	0	0	0	0	0	0	0	0	0	9	3
11:45	11	2	12	1	0	0	0	0	0	0	0	0	0	0	12	2
Total	**165**	**513**	**152**	**519**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**159**	**516**
Day Total	**678**		**671**		**0**		**0**		**0**		**0**		**0**		**675**	
Peak HR	**8:45 AM**	**3:15 PM**	**11:00 AM**	**4:30 PM**											**11:00 AM**	**4:30 PM**
Volume	**35**	**81**	**33**	**91**											**34**	**86**

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars and Heavy Vehicles (Combined)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	66	42	0	108	44	36	0	80	0	0	0	0	188
7:15 AM	66	44	0	110	54	38	0	92	0	0	0	0	202
7:30 AM	62	72	0	134	42	31	0	73	0	0	0	0	207
7:45 AM	46	52	0	98	56	21	0	77	0	0	0	0	175
Total	240	210	0	450	196	126	0	322	0	0	0	0	772
8:00 AM	48	53	0	101	45	26	0	71	0	0	0	0	172
8:15 AM	39	48	0	87	42	26	0	68	0	0	0	0	155
8:30 AM	42	39	0	81	48	28	0	76	0	0	0	0	157
8:45 AM	27	40	0	67	32	15	0	47	0	0	0	0	114
Total	156	180	0	336	167	95	0	262	0	0	0	0	598
Grand Total	396	390	0	786	363	221	0	584	0	0	0	0	1370
Approach %	50.4	49.6	0.0		62.2	37.8	0.0		0.0	0.0	0.0		
Total %	28.9	28.5	0.0	57.4	26.5	16.1	0.0	42.6	0.0	0.0	0.0	0.0	
Exiting Leg Total				363				390				617	1370
Cars	383	380	0	763	353	217	0	570	0	0	0	0	1333
% Cars	96.7	97.4	0.0	97.1	97.2	98.2	0.0	97.6	0.0	0.0	0.0	0.0	97.3
Exiting Leg Total				353				380				600	1333
Heavy Vehicles	13	10	0	23	10	4	0	14	0	0	0	0	37
% Heavy Vehicles	3.3	2.6	0.0	2.9	2.8	1.8	0.0	2.4	0.0	0.0	0.0	0.0	2.7
Exiting Leg Total				10				10				17	37

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	66	42	0	108	44	36	0	80	0	0	0	0	188
7:15 AM	66	44	0	110	54	38	0	92	0	0	0	0	202
7:30 AM	62	72	0	134	42	31	0	73	0	0	0	0	207
7:45 AM	46	52	0	98	56	21	0	77	0	0	0	0	175
Total Volume	240	210	0	450	196	126	0	322	0	0	0	0	772
% Approach Total	53.3	46.7	0.0		60.9	39.1	0.0		0.0	0.0	0.0		
PHF	0.909	0.729	0.000	0.840	0.875	0.829	0.000	0.875	0.000	0.000	0.000	0.000	0.932
Cars	229	207	0	436	190	124	0	314	0	0	0	0	750
Cars %	95.4	98.6	0.0	96.9	96.9	98.4	0.0	97.5	0.0	0.0	0.0	0.0	97.2
Heavy Vehicles	11	3	0	14	6	2	0	8	0	0	0	0	22
Heavy Vehicles %	4.6	1.4	0.0	3.1	3.1	1.6	0.0	2.5	0.0	0.0	0.0	0.0	2.8
Cars Enter Leg	229	207	0	436	190	124	0	314	0	0	0	0	750
Heavy Enter Leg	11	3	0	14	6	2	0	8	0	0	0	0	22
Total Entering Leg	240	210	0	450	196	126	0	322	0	0	0	0	772
Cars Exiting Leg				190				207				353	750
Heavy Exiting Leg				6				3				13	22
Total Exiting Leg				196				210				366	772

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	64	42	0	106	42	35	0	77	0	0	0	0	183
7:15 AM	63	43	0	106	53	37	0	90	0	0	0	0	196
7:30 AM	58	70	0	128	40	31	0	71	0	0	0	0	199
7:45 AM	44	52	0	96	55	21	0	76	0	0	0	0	172
Total	229	207	0	436	190	124	0	314	0	0	0	0	750
8:00 AM	48	52	0	100	44	26	0	70	0	0	0	0	170
8:15 AM	39	45	0	84	41	25	0	66	0	0	0	0	150
8:30 AM	42	38	0	80	46	27	0	73	0	0	0	0	153
8:45 AM	25	38	0	63	32	15	0	47	0	0	0	0	110
Total	154	173	0	327	163	93	0	256	0	0	0	0	583
Grand Total	383	380	0	763	353	217	0	570	0	0	0	0	1333
Approach %	50.2	49.8	0.0		61.9	38.1	0.0		0.0	0.0	0.0		
Total %	28.7	28.5	0.0	57.2	26.5	16.3	0.0	42.8	0.0	0.0	0.0	0.0	
Exiting Leg Total				353				380				600	1333

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	64	42	0	106	42	35	0	77	0	0	0	0	183
7:15 AM	63	43	0	106	53	37	0	90	0	0	0	0	196
7:30 AM	58	70	0	128	40	31	0	71	0	0	0	0	199
7:45 AM	44	52	0	96	55	21	0	76	0	0	0	0	172
Total Volume	229	207	0	436	190	124	0	314	0	0	0	0	750
% Approach Total	52.5	47.5	0.0		60.5	39.5	0.0		0.0	0.0	0.0		
PHF	0.895	0.739	0.000	0.852	0.864	0.838	0.000	0.872	0.000	0.000	0.000	0.000	0.942
Entering Leg	229	207	0	436	190	124	0	314	0	0	0	0	750
Exiting Leg				190				207				353	750
Total				626				521				353	1500

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	2	0	0	2	2	1	0	3	0	0	0	0	5
7:15 AM	3	1	0	4	1	1	0	2	0	0	0	0	6
7:30 AM	4	2	0	6	2	0	0	2	0	0	0	0	8
7:45 AM	2	0	0	2	1	0	0	1	0	0	0	0	3
Total	11	3	0	14	6	2	0	8	0	0	0	0	22
8:00 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
8:15 AM	0	3	0	3	1	1	0	2	0	0	0	0	5
8:30 AM	0	1	0	1	2	1	0	3	0	0	0	0	4
8:45 AM	2	2	0	4	0	0	0	0	0	0	0	0	4
Total	2	7	0	9	4	2	0	6	0	0	0	0	15
Grand Total	13	10	0	23	10	4	0	14	0	0	0	0	37
Approach %	56.5	43.5	0.0		71.4	28.6	0.0		0.0	0.0	0.0		
Total %	35.1	27.0	0.0	62.2	27.0	10.8	0.0	37.8	0.0	0.0	0.0	0.0	
Exiting Leg Total				10				10				17	37
Buses	1	2	0	3	2	2	0	4	0	0	0	0	7
% Buses	7.7	20.0	0.0	13.0	20.0	50.0	0.0	28.6	0.0	0.0	0.0	0.0	18.9
Exiting Leg Total				2				2				3	7
Single-Unit Trucks	9	6	0	15	8	1	0	9	0	0	0	0	24
% Single-Unit	69.2	60.0	0.0	65.2	80.0	25.0	0.0	64.3	0.0	0.0	0.0	0.0	64.9
Exiting Leg Total				8				6				10	24
Articulated Trucks	3	2	0	5	0	1	0	1	0	0	0	0	6
% Articulated	23.1	20.0	0.0	21.7	0.0	25.0	0.0	7.1	0.0	0.0	0.0	0.0	16.2
Exiting Leg Total				0				2				4	6

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	2	0	0	2	2	1	0	3	0	0	0	0	5
7:15 AM	3	1	0	4	1	1	0	2	0	0	0	0	6
7:30 AM	4	2	0	6	2	0	0	2	0	0	0	0	8
7:45 AM	2	0	0	2	1	0	0	1	0	0	0	0	3
Total Volume	11	3	0	14	6	2	0	8	0	0	0	0	22
% Approach Total	78.6	21.4	0.0		75.0	25.0	0.0		0.0	0.0	0.0		
PHF	0.688	0.375	0.000	0.583	0.750	0.500	0.000	0.667	0.000	0.000	0.000	0.000	0.688
Buses	0	1	0	1	1	1	0	2	0	0	0	0	3
Buses %	0.0	33.3	0.0	7.1	16.7	50.0	0.0	25.0	0.0	0.0	0.0	0.0	13.6
Single-Unit Trucks	8	1	0	9	5	0	0	5	0	0	0	0	14
Single-Unit %	72.7	33.3	0.0	64.3	83.3	0.0	0.0	62.5	0.0	0.0	0.0	0.0	63.6
Articulated Trucks	3	1	0	4	0	1	0	1	0	0	0	0	5
Articulated %	27.3	33.3	0.0	28.6	0.0	50.0	0.0	12.5	0.0	0.0	0.0	0.0	22.7
Buses	0	1	0	1	1	1	0	2	0	0	0	0	3
Single-Unit Trucks	8	1	0	9	5	0	0	5	0	0	0	0	14
Articulated Trucks	3	1	0	4	0	1	0	1	0	0	0	0	5
Total Entering Leg	11	3	0	14	6	2	0	8	0	0	0	0	22
Buses				1				1				1	3
Single-Unit Trucks				5				1				8	14
Articulated Trucks				0				1				4	5
Total Exiting Leg				6				3				13	22

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
7:15 AM	0	1	0	1	0	1	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	1	1	0	2	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	0	1	0	1	0	0	0	0	2
8:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	1	1	0	2	1	1	0	2	0	0	0	0	4
Grand Total	1	2	0	3	2	2	0	4	0	0	0	0	7
Approach %	33.3	66.7	0.0		50.0	50.0	0.0		0.0	0.0	0.0		
Total %	14.3	28.6	0.0	42.9	28.6	28.6	0.0	57.1	0.0	0.0	0.0	0.0	
Exiting Leg Total				2				2				3	7

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	0	1	0	1	0	0	0	0	2
8:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	1	1	0	2	1	1	0	2	0	0	0	0	4
% Approach Total	50.0	50.0	0.0		50.0	50.0	0.0		0.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.500	0.250	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.500
Entering Leg	1	1	0	2	1	1	0	2	0	0	0	0	4
Exiting Leg				1				1				2	4
Total				3				3				2	8

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	2	0	0	2	1	0	0	1	0	0	0	0	3
7:15 AM	3	0	0	3	1	0	0	1	0	0	0	0	4
7:30 AM	2	1	0	3	2	0	0	2	0	0	0	0	5
7:45 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
Total	8	1	0	9	5	0	0	5	0	0	0	0	14
8:00 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
8:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
8:30 AM	0	1	0	1	1	1	0	2	0	0	0	0	3
8:45 AM	1	2	0	3	0	0	0	0	0	0	0	0	3
Total	1	5	0	6	3	1	0	4	0	0	0	0	10
Grand Total	9	6	0	15	8	1	0	9	0	0	0	0	24
Approach %	60.0	40.0	0.0		88.9	11.1	0.0		0.0	0.0	0.0		
Total %	37.5	25.0	0.0	62.5	33.3	4.2	0.0	37.5	0.0	0.0	0.0	0.0	
Exiting Leg Total				8				6				10	24

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	2	0	0	2	1	0	0	1	0	0	0	0	3
7:15 AM	3	0	0	3	1	0	0	1	0	0	0	0	4
7:30 AM	2	1	0	3	2	0	0	2	0	0	0	0	5
7:45 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
Total Volume	8	1	0	9	5	0	0	5	0	0	0	0	14
% Approach Total	88.9	11.1	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.667	0.250	0.000	0.750	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.700
Entering Leg	8	1	0	9	5	0	0	5	0	0	0	0	14
Exiting Leg				5				1				8	14
Total				14				6				8	28

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Lees River Avenue				Lees River Avenue				I-195 Westbound Ramp				
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	1	0	3	0	0	0	0	0	0	0	0	3
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	1	0	4	0	1	0	1	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	3	2	0	5	0	1	0	1	0	0	0	0	6
Approach %	60.0	40.0	0.0		0.0	100.0	0.0		0.0	0.0	0.0		
Total %	50.0	33.3	0.0	83.3	0.0	16.7	0.0	16.7	0.0	0.0	0.0	0.0	
Exiting Leg Total				0				2				4	6

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue				Lees River Avenue				I-195 Westbound Ramp				
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	1	0	3	0	0	0	0	0	0	0	0	3
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	3	1	0	4	0	1	0	1	0	0	0	0	5
% Approach Total	75.0	25.0	0.0		0.0	100.0	0.0		0.0	0.0	0.0		
PHF	0.375	0.250	0.000	0.333	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.417
Entering Leg	3	1	0	4	0	1	0	1	0	0	0	0	5
Exiting Leg				0				1				4	5
Total				4				2				4	10

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Bicycles (on Roadway and Crosswalks)**

	Lees River Avenue						Lees River Avenue						I-195 Westbound Ramp						
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue						Lees River Avenue						I-195 Westbound Ramp						
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Lees River Avenue from North						Lees River Avenue from South						I-195 Westbound Ramp from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North						Lees River Avenue from South						I-195 Westbound Ramp from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars and Heavy Vehicles (Combined)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	47	53	0	100	108	46	0	154	0	0	0	0	254
4:15 PM	52	52	0	104	115	25	0	140	0	0	0	0	244
4:30 PM	44	46	0	90	93	25	0	118	0	0	0	0	208
4:45 PM	53	51	0	104	84	41	0	125	0	0	0	0	229
Total	196	202	0	398	400	137	0	537	0	0	0	0	935
5:00 PM	48	50	0	98	106	36	0	142	0	0	0	0	240
5:15 PM	48	49	0	97	100	38	0	138	0	0	0	0	235
5:30 PM	49	45	0	94	97	34	0	131	0	0	0	0	225
5:45 PM	51	56	0	107	87	19	0	106	0	0	0	0	213
Total	196	200	0	396	390	127	0	517	0	0	0	0	913
Grand Total	392	402	0	794	790	264	0	1054	0	0	0	0	1848
Approach %	49.4	50.6	0.0		75.0	25.0	0.0		0.0	0.0	0.0		
Total %	21.2	21.8	0.0	43.0	42.7	14.3	0.0	57.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				790				402				656	1848
Cars	387	398	0	785	779	255	0	1034	0	0	0	0	1819
% Cars	98.7	99.0	0.0	98.9	98.6	96.6	0.0	98.1	0.0	0.0	0.0	0.0	98.4
Exiting Leg Total				779				398				642	1819
Heavy Vehicles	5	4	0	9	11	9	0	20	0	0	0	0	29
% Heavy Vehicles	1.3	1.0	0.0	1.1	1.4	3.4	0.0	1.9	0.0	0.0	0.0	0.0	1.6
Exiting Leg Total				11				4				14	29

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	47	53	0	100	108	46	0	154	0	0	0	0	254
4:15 PM	52	52	0	104	115	25	0	140	0	0	0	0	244
4:30 PM	44	46	0	90	93	25	0	118	0	0	0	0	208
4:45 PM	53	51	0	104	84	41	0	125	0	0	0	0	229
Total Volume	196	202	0	398	400	137	0	537	0	0	0	0	935
% Approach Total	49.2	50.8	0.0		74.5	25.5	0.0		0.0	0.0	0.0		
PHF	0.925	0.953	0.000	0.957	0.870	0.745	0.000	0.872	0.000	0.000	0.000	0.000	0.920
Cars	194	199	0	393	394	132	0	526	0	0	0	0	919
Cars %	99.0	98.5	0.0	98.7	98.5	96.4	0.0	98.0	0.0	0.0	0.0	0.0	98.3
Heavy Vehicles	2	3	0	5	6	5	0	11	0	0	0	0	16
Heavy Vehicles %	1.0	1.5	0.0	1.3	1.5	3.6	0.0	2.0	0.0	0.0	0.0	0.0	1.7
Cars Enter Leg	194	199	0	393	394	132	0	526	0	0	0	0	919
Heavy Enter Leg	2	3	0	5	6	5	0	11	0	0	0	0	16
Total Entering Leg	196	202	0	398	400	137	0	537	0	0	0	0	935
Cars Exiting Leg				394				199				326	919
Heavy Exiting Leg				6				3				7	16
Total Exiting Leg				400				202				333	935

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	46	52	0	98	104	45	0	149	0	0	0	0	247
4:15 PM	51	52	0	103	114	25	0	139	0	0	0	0	242
4:30 PM	44	44	0	88	92	23	0	115	0	0	0	0	203
4:45 PM	53	51	0	104	84	39	0	123	0	0	0	0	227
Total	194	199	0	393	394	132	0	526	0	0	0	0	919
5:00 PM	47	49	0	96	104	35	0	139	0	0	0	0	235
5:15 PM	48	49	0	97	98	37	0	135	0	0	0	0	232
5:30 PM	49	45	0	94	96	33	0	129	0	0	0	0	223
5:45 PM	49	56	0	105	87	18	0	105	0	0	0	0	210
Total	193	199	0	392	385	123	0	508	0	0	0	0	900
Grand Total	387	398	0	785	779	255	0	1034	0	0	0	0	1819
Approach %	49.3	50.7	0.0		75.3	24.7	0.0		0.0	0.0	0.0		
Total %	21.3	21.9	0.0	43.2	42.8	14.0	0.0	56.8	0.0	0.0	0.0	0.0	
Exiting Leg Total				779				398				642	1819

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	46	52	0	98	104	45	0	149	0	0	0	0	247
4:15 PM	51	52	0	103	114	25	0	139	0	0	0	0	242
4:30 PM	44	44	0	88	92	23	0	115	0	0	0	0	203
4:45 PM	53	51	0	104	84	39	0	123	0	0	0	0	227
Total Volume	194	199	0	393	394	132	0	526	0	0	0	0	919
% Approach Total	49.4	50.6	0.0		74.9	25.1	0.0		0.0	0.0	0.0		
PHF	0.915	0.957	0.000	0.945	0.864	0.733	0.000	0.883	0.000	0.000	0.000	0.000	0.930
Entering Leg	194	199	0	393	394	132	0	526	0	0	0	0	919
Exiting Leg				394				199				326	919
Total				787				725				326	1838

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	1	0	2	4	1	0	5	0	0	0	0	7
4:15 PM	1	0	0	1	1	0	0	1	0	0	0	0	2
4:30 PM	0	2	0	2	1	2	0	3	0	0	0	0	5
4:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	2	3	0	5	6	5	0	11	0	0	0	0	16
5:00 PM	1	1	0	2	2	1	0	3	0	0	0	0	5
5:15 PM	0	0	0	0	2	1	0	3	0	0	0	0	3
5:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	2
5:45 PM	2	0	0	2	0	1	0	1	0	0	0	0	3
Total	3	1	0	4	5	4	0	9	0	0	0	0	13
Grand Total	5	4	0	9	11	9	0	20	0	0	0	0	29
Approach %	55.6	44.4	0.0		55.0	45.0	0.0		0.0	0.0	0.0		
Total %	17.2	13.8	0.0	31.0	37.9	31.0	0.0	69.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				11				4				14	29
Buses	0	0	0	0	1	0	0	1	0	0	0	0	1
% Buses	0.0	0.0	0.0	0.0	9.1	0.0	0.0	5.0	0.0	0.0	0.0	0.0	3.4
Exiting Leg Total				1				0				0	1
Single-Unit Trucks	4	4	0	8	8	6	0	14	0	0	0	0	22
% Single-Unit	80.0	100.0	0.0	88.9	72.7	66.7	0.0	70.0	0.0	0.0	0.0	0.0	75.9
Exiting Leg Total				8				4				10	22
Articulated Trucks	1	0	0	1	2	3	0	5	0	0	0	0	6
% Articulated	20.0	0.0	0.0	11.1	18.2	33.3	0.0	25.0	0.0	0.0	0.0	0.0	20.7
Exiting Leg Total				2				0				4	6

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	1	0	2	4	1	0	5	0	0	0	0	7
4:15 PM	1	0	0	1	1	0	0	1	0	0	0	0	2
4:30 PM	0	2	0	2	1	2	0	3	0	0	0	0	5
4:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	2	3	0	5	6	5	0	11	0	0	0	0	16
% Approach Total	40.0	60.0	0.0		54.5	45.5	0.0		0.0	0.0	0.0		
PHF	0.500	0.375	0.000	0.625	0.375	0.625	0.000	0.550	0.000	0.000	0.000	0.000	0.571
Buses	0	0	0	0	1	0	0	1	0	0	0	0	1
Buses %	0.0	0.0	0.0	0.0	16.7	0.0	0.0	9.1	0.0	0.0	0.0	0.0	6.3
Single-Unit Trucks	1	3	0	4	3	3	0	6	0	0	0	0	10
Single-Unit %	50.0	100.0	0.0	80.0	50.0	60.0	0.0	54.5	0.0	0.0	0.0	0.0	62.5
Articulated Trucks	1	0	0	1	2	2	0	4	0	0	0	0	5
Articulated %	50.0	0.0	0.0	20.0	33.3	40.0	0.0	36.4	0.0	0.0	0.0	0.0	31.3
Buses	0	0	0	0	1	0	0	1	0	0	0	0	1
Single-Unit Trucks	1	3	0	4	3	3	0	6	0	0	0	0	10
Articulated Trucks	1	0	0	1	2	2	0	4	0	0	0	0	5
Total Entering Leg	2	3	0	5	6	5	0	11	0	0	0	0	16
Buses				1				0				0	1
Single-Unit Trucks				3				3				4	10
Articulated Trucks				2				0				3	5
Total Exiting Leg				6				3				7	16

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	0	0	1	0	0	0	0	1
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				1				0				0	1

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	1
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	1	0	0	1	0	0	0	0	1
Exiting Leg				1				0				0	1
Total				1				1				0	2

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	1	0	2	1	1	0	2	0	0	0	0	4
4:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:30 PM	0	2	0	2	1	2	0	3	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	3	0	4	3	3	0	6	0	0	0	0	10
5:00 PM	1	1	0	2	2	1	0	3	0	0	0	0	5
5:15 PM	0	0	0	0	2	1	0	3	0	0	0	0	3
5:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	2
5:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	3	1	0	4	5	3	0	8	0	0	0	0	12
Grand Total	4	4	0	8	8	6	0	14	0	0	0	0	22
Approach %	50.0	50.0	0.0		57.1	42.9	0.0		0.0	0.0	0.0		
Total %	18.2	18.2	0.0	36.4	36.4	27.3	0.0	63.6	0.0	0.0	0.0	0.0	
Exiting Leg Total				8				4				10	22

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:30 PM	0	2	0	2	1	2	0	3	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	1	0	2	2	1	0	3	0	0	0	0	5
5:15 PM	0	0	0	0	2	1	0	3	0	0	0	0	3
Total Volume	1	3	0	4	5	4	0	9	0	0	0	0	13
% Approach Total	25.0	75.0	0.0		55.6	44.4	0.0		0.0	0.0	0.0		
PHF	0.250	0.375	0.000	0.500	0.625	0.500	0.000	0.750	0.000	0.000	0.000	0.000	0.650
Entering Leg	1	3	0	4	5	4	0	9	0	0	0	0	13
Exiting Leg				5				3				5	13
Total				9				12				5	26

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	1	0	0	1	2	2	0	4	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	1	0	0	1	2	3	0	5	0	0	0	0	6
Approach %	100.0	0.0	0.0		40.0	60.0	0.0		0.0	0.0	0.0		
Total %	16.7	0.0	0.0	16.7	33.3	50.0	0.0	83.3	0.0	0.0	0.0	0.0	
Exiting Leg Total				2				0				4	6

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Westbound Ramp from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	1	0	0	1	2	2	0	4	0	0	0	0	5
% Approach Total	100.0	0.0	0.0		50.0	50.0	0.0		0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.250	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.625
Entering Leg	1	0	0	1	2	2	0	4	0	0	0	0	5
Exiting Leg				2				0				3	5
Total				3				4				3	10

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Bicycles (on Roadway and Crosswalks)**

	Lees River Avenue from North						Lees River Avenue from South						I-195 Westbound Ramp from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North						Lees River Avenue from South						I-195 Westbound Ramp from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 A**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Westbound Ramp**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Pedestrians

	Lees River Avenue						Lees River Avenue						I-195 Westbound Ramp						
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue						Lees River Avenue						I-195 Westbound Ramp						
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	42	0	42	53	0	0	53	26	28	0	54	149
7:15 AM	0	43	0	43	61	0	0	61	22	32	0	54	158
7:30 AM	0	75	0	75	47	0	0	47	16	25	0	41	163
7:45 AM	0	50	0	50	51	0	0	51	17	25	0	42	143
Total	0	210	0	210	212	0	0	212	81	110	0	191	613
8:00 AM	0	53	0	53	52	0	0	52	13	18	0	31	136
8:15 AM	0	48	0	48	48	0	0	48	31	22	0	53	149
8:30 AM	0	39	0	39	53	0	0	53	20	22	0	42	134
8:45 AM	0	39	0	39	34	0	0	34	25	14	0	39	112
Total	0	179	0	179	187	0	0	187	89	76	0	165	531
Grand Total	0	389	0	389	399	0	0	399	170	186	0	356	1144
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		47.8	52.2	0.0		
Total %	0.0	34.0	0.0	34.0	34.9	0.0	0.0	34.9	14.9	16.3	0.0	31.1	
Exiting Leg Total				585				559				0	1144
Cars	0	378	0	378	388	0	0	388	157	181	0	338	1104
% Cars	0.0	97.2	0.0	97.2	97.2	0.0	0.0	97.2	92.4	97.3	0.0	94.9	96.5
Exiting Leg Total				569				535				0	1104
Heavy Vehicles	0	11	0	11	11	0	0	11	13	5	0	18	40
% Heavy Vehicles	0.0	2.8	0.0	2.8	2.8	0.0	0.0	2.8	7.6	2.7	0.0	5.1	3.5
Exiting Leg Total				16				24				0	40

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	42	0	42	53	0	0	53	26	28	0	54	149
7:15 AM	0	43	0	43	61	0	0	61	22	32	0	54	158
7:30 AM	0	75	0	75	47	0	0	47	16	25	0	41	163
7:45 AM	0	50	0	50	51	0	0	51	17	25	0	42	143
Total Volume	0	210	0	210	212	0	0	212	81	110	0	191	613
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		42.4	57.6	0.0		
PHF	0.000	0.700	0.000	0.700	0.869	0.000	0.000	0.869	0.779	0.859	0.000	0.884	0.940
Cars	0	206	0	206	206	0	0	206	73	108	0	181	593
Cars %	0.0	98.1	0.0	98.1	97.2	0.0	0.0	97.2	90.1	98.2	0.0	94.8	96.7
Heavy Vehicles	0	4	0	4	6	0	0	6	8	2	0	10	20
Heavy Vehicles %	0.0	1.9	0.0	1.9	2.8	0.0	0.0	2.8	9.9	1.8	0.0	5.2	3.3
Cars Enter Leg	0	206	0	206	206	0	0	206	73	108	0	181	593
Heavy Enter Leg	0	4	0	4	6	0	0	6	8	2	0	10	20
Total Entering Leg	0	210	0	210	212	0	0	212	81	110	0	191	613
Cars Exiting Leg				314				279				0	593
Heavy Exiting Leg				8				12				0	20
Total Exiting Leg				322				291				0	613

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	42	0	42	50	0	0	50	25	28	0	53	145
7:15 AM	0	41	0	41	60	0	0	60	19	30	0	49	150
7:30 AM	0	73	0	73	46	0	0	46	14	25	0	39	158
7:45 AM	0	50	0	50	50	0	0	50	15	25	0	40	140
Total	0	206	0	206	206	0	0	206	73	108	0	181	593
8:00 AM	0	52	0	52	52	0	0	52	13	16	0	29	133
8:15 AM	0	45	0	45	46	0	0	46	28	22	0	50	141
8:30 AM	0	38	0	38	50	0	0	50	19	22	0	41	129
8:45 AM	0	37	0	37	34	0	0	34	24	13	0	37	108
Total	0	172	0	172	182	0	0	182	84	73	0	157	511
Grand Total	0	378	0	378	388	0	0	388	157	181	0	338	1104
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		46.4	53.6	0.0		
Total %	0.0	34.2	0.0	34.2	35.1	0.0	0.0	35.1	14.2	16.4	0.0	30.6	
Exiting Leg Total				569				535				0	1104

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	42	0	42	50	0	0	50	25	28	0	53	145
7:15 AM	0	41	0	41	60	0	0	60	19	30	0	49	150
7:30 AM	0	73	0	73	46	0	0	46	14	25	0	39	158
7:45 AM	0	50	0	50	50	0	0	50	15	25	0	40	140
Total Volume	0	206	0	206	206	0	0	206	73	108	0	181	593
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		40.3	59.7	0.0		
PHF	0.000	0.705	0.000	0.705	0.858	0.000	0.000	0.858	0.730	0.900	0.000	0.854	0.938
Entering Leg	0	206	0	206	206	0	0	206	73	108	0	181	593
Exiting Leg				314				279				0	593
Total				520				485				181	1186

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	3	0	0	3	1	0	0	1	4
7:15 AM	0	2	0	2	1	0	0	1	3	2	0	5	8
7:30 AM	0	2	0	2	1	0	0	1	2	0	0	2	5
7:45 AM	0	0	0	0	1	0	0	1	2	0	0	2	3
Total	0	4	0	4	6	0	0	6	8	2	0	10	20
8:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	3
8:15 AM	0	3	0	3	2	0	0	2	3	0	0	3	8
8:30 AM	0	1	0	1	3	0	0	3	1	0	0	1	5
8:45 AM	0	2	0	2	0	0	0	0	1	1	0	2	4
Total	0	7	0	7	5	0	0	5	5	3	0	8	20
Grand Total	0	11	0	11	11	0	0	11	13	5	0	18	40
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		72.2	27.8	0.0		
Total %	0.0	27.5	0.0	27.5	27.5	0.0	0.0	27.5	32.5	12.5	0.0	45.0	
Exiting Leg Total				16				24				0	40
Buses	0	2	0	2	4	0	0	4	3	1	0	4	10
% Buses	0.0	18.2	0.0	18.2	36.4	0.0	0.0	36.4	23.1	20.0	0.0	22.2	25.0
Exiting Leg Total				5				5				0	10
Single-Unit Trucks	0	7	0	7	6	0	0	6	7	3	0	10	23
% Single-Unit	0.0	63.6	0.0	63.6	54.5	0.0	0.0	54.5	53.8	60.0	0.0	55.6	57.5
Exiting Leg Total				9				14				0	23
Articulated Trucks	0	2	0	2	1	0	0	1	3	1	0	4	7
% Articulated	0.0	18.2	0.0	18.2	9.1	0.0	0.0	9.1	23.1	20.0	0.0	22.2	17.5
Exiting Leg Total				2				5				0	7

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	3	0	0	3	1	0	0	1	4
7:15 AM	0	2	0	2	1	0	0	1	3	2	0	5	8
7:30 AM	0	2	0	2	1	0	0	1	2	0	0	2	5
7:45 AM	0	0	0	0	1	0	0	1	2	0	0	2	3
Total Volume	0	4	0	4	6	0	0	6	8	2	0	10	20
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		80.0	20.0	0.0		
PHF	0.000	0.500	0.000	0.500	0.500	0.000	0.000	0.500	0.667	0.250	0.000	0.500	0.625
Buses	0	1	0	1	2	0	0	2	2	0	0	2	5
Buses %	0.0	25.0	0.0	25.0	33.3	0.0	0.0	33.3	25.0	0.0	0.0	20.0	25.0
Single-Unit Trucks	0	2	0	2	3	0	0	3	5	2	0	7	12
Single-Unit %	0.0	50.0	0.0	50.0	50.0	0.0	0.0	50.0	62.5	100.0	0.0	70.0	60.0
Articulated Trucks	0	1	0	1	1	0	0	1	1	0	0	1	3
Articulated %	0.0	25.0	0.0	25.0	16.7	0.0	0.0	16.7	12.5	0.0	0.0	10.0	15.0
Buses	0	1	0	1	2	0	0	2	2	0	0	2	5
Single-Unit Trucks	0	2	0	2	3	0	0	3	5	2	0	7	12
Articulated Trucks	0	1	0	1	1	0	0	1	1	0	0	1	3
Total Entering Leg	0	4	0	4	6	0	0	6	8	2	0	10	20
Buses				2				3				0	5
Single-Unit Trucks				5				7				0	12
Articulated Trucks				1				2				0	3
Total Exiting Leg				8				12				0	20

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
7:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	1	2	0	0	2	2	0	0	2	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	1	0	0	1	1	0	0	1	3
8:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	1	0	1	2	0	0	2	1	1	0	2	5
Grand Total	0	2	0	2	4	0	0	4	3	1	0	4	10
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		75.0	25.0	0.0		
Total %	0.0	20.0	0.0	20.0	40.0	0.0	0.0	40.0	30.0	10.0	0.0	40.0	
Exiting Leg Total				5				5				0	10

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
7:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	1	0	1	2	0	0	2	2	0	0	2	5
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.250	0.500	0.000	0.000	0.500	0.500	0.000	0.000	0.500	0.625
Entering Leg	0	1	0	1	2	0	0	2	2	0	0	2	5
Exiting Leg				2				3				0	5
Total				3				5				2	10

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	1	0	0	1	2
7:15 AM	0	1	0	1	0	0	0	0	2	2	0	4	5
7:30 AM	0	1	0	1	1	0	0	1	1	0	0	1	3
7:45 AM	0	0	0	0	1	0	0	1	1	0	0	1	2
Total	0	2	0	2	3	0	0	3	5	2	0	7	12
8:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	2
8:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
8:30 AM	0	1	0	1	2	0	0	2	1	0	0	1	4
8:45 AM	0	2	0	2	0	0	0	0	1	0	0	1	3
Total	0	5	0	5	3	0	0	3	2	1	0	3	11
Grand Total	0	7	0	7	6	0	0	6	7	3	0	10	23
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		70.0	30.0	0.0		
Total %	0.0	30.4	0.0	30.4	26.1	0.0	0.0	26.1	30.4	13.0	0.0	43.5	
Exiting Leg Total				9				14				0	23

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	1	0	0	1	2
7:15 AM	0	1	0	1	0	0	0	0	2	2	0	4	5
7:30 AM	0	1	0	1	1	0	0	1	1	0	0	1	3
7:45 AM	0	0	0	0	1	0	0	1	1	0	0	1	2
Total Volume	0	2	0	2	3	0	0	3	5	2	0	7	12
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		71.4	28.6	0.0		
PHF	0.000	0.500	0.000	0.500	0.750	0.000	0.000	0.750	0.625	0.250	0.000	0.438	0.600
Entering Leg	0	2	0	2	3	0	0	3	5	2	0	7	12
Exiting Leg				5				7				0	12
Total				7				10				7	24

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Articulated Trucks**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	1	0	0	1	1	0	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
8:15 AM	0	1	0	1	0	0	0	0	2	0	0	2	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	2	1	0	3	4
Grand Total	0	2	0	2	1	0	0	1	3	1	0	4	7
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		75.0	25.0	0.0		
Total %	0.0	28.6	0.0	28.6	14.3	0.0	0.0	14.3	42.9	14.3	0.0	57.1	
Exiting Leg Total				2				5				0	7

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
8:15 AM	0	1	0	1	0	0	0	0	2	0	0	2	3
Total Volume	0	2	0	2	0	0	0	0	2	1	0	3	5
% Approach Total	0.0	100.0	0.0		0.0	0.0	0.0		66.7	33.3	0.0		
PHF	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.375	0.417
Entering Leg	0	2	0	2	0	0	0	0	2	1	0	3	5
Exiting Leg				1				4				0	5
Total				3				4				3	10

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Bicycles (on Roadway and Crosswalks)**

	Lees River Avenue from North						Lees River Avenue from South						I-195 Eastbound Ramps from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North						Lees River Avenue from South						I-195 Eastbound Ramps from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Lees River Avenue from North						Lees River Avenue from South						I-195 Eastbound Ramps from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue from North						Lees River Avenue from South						I-195 Eastbound Ramps from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars and Heavy Vehicles (Combined)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	54	1	55	98	0	0	98	35	59	0	94	247
4:15 PM	0	55	0	55	80	0	0	80	52	59	0	111	246
4:30 PM	0	45	0	45	65	0	0	65	41	52	0	93	203
4:45 PM	0	54	0	54	90	0	0	90	58	38	0	96	240
Total	0	208	1	209	333	0	0	333	186	208	0	394	936
5:00 PM	0	51	0	51	86	0	0	86	40	57	0	97	234
5:15 PM	0	48	0	48	76	0	0	76	40	59	0	99	223
5:30 PM	0	47	0	47	80	0	0	80	43	53	0	96	223
5:45 PM	0	55	0	55	72	0	0	72	36	35	0	71	198
Total	0	201	0	201	314	0	0	314	159	204	0	363	878
Grand Total	0	409	1	410	647	0	0	647	345	412	0	757	1814
Approach %	0.0	99.8	0.2		100.0	0.0	0.0		45.6	54.4	0.0		
Total %	0.0	22.5	0.1	22.6	35.7	0.0	0.0	35.7	19.0	22.7	0.0	41.7	
Exiting Leg Total				1060				754				0	1814
Cars	0	405	1	406	635	0	0	635	336	405	0	741	1782
% Cars	0.0	99.0	100.0	99.0	98.1	0.0	0.0	98.1	97.4	98.3	0.0	97.9	98.2
Exiting Leg Total				1041				741				0	1782
Heavy Vehicles	0	4	0	4	12	0	0	12	9	7	0	16	32
% Heavy Vehicles	0.0	1.0	0.0	1.0	1.9	0.0	0.0	1.9	2.6	1.7	0.0	2.1	1.8
Exiting Leg Total				19				13				0	32

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	54	1	55	98	0	0	98	35	59	0	94	247
4:15 PM	0	55	0	55	80	0	0	80	52	59	0	111	246
4:30 PM	0	45	0	45	65	0	0	65	41	52	0	93	203
4:45 PM	0	54	0	54	90	0	0	90	58	38	0	96	240
Total Volume	0	208	1	209	333	0	0	333	186	208	0	394	936
% Approach Total	0.0	99.5	0.5		100.0	0.0	0.0		47.2	52.8	0.0		
PHF	0.000	0.945	0.250	0.950	0.849	0.000	0.000	0.849	0.802	0.881	0.000	0.887	0.947
Cars	0	205	1	206	325	0	0	325	182	204	0	386	917
Cars %	0.0	98.6	100.0	98.6	97.6	0.0	0.0	97.6	97.8	98.1	0.0	98.0	98.0
Heavy Vehicles	0	3	0	3	8	0	0	8	4	4	0	8	19
Heavy Vehicles %	0.0	1.4	0.0	1.4	2.4	0.0	0.0	2.4	2.2	1.9	0.0	2.0	2.0
Cars Enter Leg	0	205	1	206	325	0	0	325	182	204	0	386	917
Heavy Enter Leg	0	3	0	3	8	0	0	8	4	4	0	8	19
Total Entering Leg	0	208	1	209	333	0	0	333	186	208	0	394	936
Cars Exiting Leg				530				387				0	917
Heavy Exiting Leg				12				7				0	19
Total Exiting Leg				542				394				0	936

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	53	1	54	95	0	0	95	34	57	0	91	240
4:15 PM	0	55	0	55	80	0	0	80	52	58	0	110	245
4:30 PM	0	43	0	43	62	0	0	62	39	51	0	90	195
4:45 PM	0	54	0	54	88	0	0	88	57	38	0	95	237
Total	0	205	1	206	325	0	0	325	182	204	0	386	917
5:00 PM	0	50	0	50	85	0	0	85	39	55	0	94	229
5:15 PM	0	48	0	48	76	0	0	76	40	58	0	98	222
5:30 PM	0	47	0	47	78	0	0	78	40	53	0	93	218
5:45 PM	0	55	0	55	71	0	0	71	35	35	0	70	196
Total	0	200	0	200	310	0	0	310	154	201	0	355	865
Grand Total	0	405	1	406	635	0	0	635	336	405	0	741	1782
Approach %	0.0	99.8	0.2		100.0	0.0	0.0		45.3	54.7	0.0		
Total %	0.0	22.7	0.1	22.8	35.6	0.0	0.0	35.6	18.9	22.7	0.0	41.6	
Exiting Leg Total				1041				741				0	1782

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	53	1	54	95	0	0	95	34	57	0	91	240
4:15 PM	0	55	0	55	80	0	0	80	52	58	0	110	245
4:30 PM	0	43	0	43	62	0	0	62	39	51	0	90	195
4:45 PM	0	54	0	54	88	0	0	88	57	38	0	95	237
Total Volume	0	205	1	206	325	0	0	325	182	204	0	386	917
% Approach Total	0.0	99.5	0.5		100.0	0.0	0.0		47.2	52.8	0.0		
PHF	0.000	0.932	0.250	0.936	0.855	0.000	0.000	0.855	0.798	0.879	0.000	0.877	0.936
Entering Leg	0	205	1	206	325	0	0	325	182	204	0	386	917
Exiting Leg				530				387				0	917
Total				736				712				386	1834

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	1	0	1	3	0	0	3	1	2	0	3	7
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	2	0	2	3	0	0	3	2	1	0	3	8
4:45 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
Total	0	3	0	3	8	0	0	8	4	4	0	8	19
5:00 PM	0	1	0	1	1	0	0	1	1	2	0	3	5
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	2	0	0	2	3	0	0	3	5
5:45 PM	0	0	0	0	1	0	0	1	1	0	0	1	2
Total	0	1	0	1	4	0	0	4	5	3	0	8	13
Grand Total	0	4	0	4	12	0	0	12	9	7	0	16	32
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		56.3	43.8	0.0		
Total %	0.0	12.5	0.0	12.5	37.5	0.0	0.0	37.5	28.1	21.9	0.0	50.0	
Exiting Leg Total				19				13				0	32
Buses	0	0	0	0	1	0	0	1	4	0	0	4	5
% Buses	0.0	0.0	0.0	0.0	8.3	0.0	0.0	8.3	44.4	0.0	0.0	25.0	15.6
Exiting Leg Total				1				4				0	5
Single-Unit Trucks	0	4	0	4	7	0	0	7	2	7	0	9	20
% Single-Unit	0.0	100.0	0.0	100.0	58.3	0.0	0.0	58.3	22.2	100.0	0.0	56.3	62.5
Exiting Leg Total				14				6				0	20
Articulated Trucks	0	0	0	0	4	0	0	4	3	0	0	3	7
% Articulated	0.0	0.0	0.0	0.0	33.3	0.0	0.0	33.3	33.3	0.0	0.0	18.8	21.9
Exiting Leg Total				4				3				0	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	1	0	1	3	0	0	3	1	2	0	3	7
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	2	0	2	3	0	0	3	2	1	0	3	8
4:45 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
Total Volume	0	3	0	3	8	0	0	8	4	4	0	8	19
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		50.0	50.0	0.0		
PHF	0.000	0.375	0.000	0.375	0.667	0.000	0.000	0.667	0.500	0.500	0.000	0.667	0.594
Buses	0	0	0	0	1	0	0	1	2	0	0	2	3
Buses %	0.0	0.0	0.0	0.0	12.5	0.0	0.0	12.5	50.0	0.0	0.0	25.0	15.8
Single-Unit Trucks	0	3	0	3	4	0	0	4	1	4	0	5	12
Single-Unit %	0.0	100.0	0.0	100.0	50.0	0.0	0.0	50.0	25.0	100.0	0.0	62.5	63.2
Articulated Trucks	0	0	0	0	3	0	0	3	1	0	0	1	4
Articulated %	0.0	0.0	0.0	0.0	37.5	0.0	0.0	37.5	25.0	0.0	0.0	12.5	21.1
Buses	0	0	0	0	1	0	0	1	2	0	0	2	3
Single-Unit Trucks	0	3	0	3	4	0	0	4	1	4	0	5	12
Articulated Trucks	0	0	0	0	3	0	0	3	1	0	0	1	4
Total Entering Leg	0	3	0	3	8	0	0	8	4	4	0	8	19
Buses				1				2				0	3
Single-Unit Trucks				8				4				0	12
Articulated Trucks				3				1				0	4
Total Exiting Leg				12				7				0	19

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Buses

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	2	0	0	2	3
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	2	0	0	2	2
Grand Total	0	0	0	0	1	0	0	1	4	0	0	4	5
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	20.0	0.0	0.0	20.0	80.0	0.0	0.0	80.0	
Exiting Leg Total				1				4				0	5

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	2	0	0	2	3
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.375
Entering Leg	0	0	0	0	1	0	0	1	2	0	0	2	3
Exiting Leg				1				2				0	3
Total				1				3				2	6

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	1	0	1	1	0	0	1	1	2	0	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	2	0	2	3	0	0	3	0	1	0	1	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	4	0	0	4	1	4	0	5	12
5:00 PM	0	1	0	1	1	0	0	1	0	2	0	2	4
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	3	0	0	3	1	3	0	4	8
Grand Total	0	4	0	4	7	0	0	7	2	7	0	9	20
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		22.2	77.8	0.0		
Total %	0.0	20.0	0.0	20.0	35.0	0.0	0.0	35.0	10.0	35.0	0.0	45.0	
Exiting Leg Total				14				6				0	20

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	1	0	1	1	0	0	1	1	2	0	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	2	0	2	3	0	0	3	0	1	0	1	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	4	0	0	4	1	4	0	5	12
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		20.0	80.0	0.0		
PHF	0.000	0.375	0.000	0.375	0.333	0.000	0.000	0.333	0.250	0.500	0.000	0.417	0.500
Entering Leg	0	3	0	3	4	0	0	4	1	4	0	5	12
Exiting Leg				8				4				0	12
Total				11				8				5	24

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
Total	0	0	0	0	3	0	0	3	1	0	0	1	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	1	0	0	1	2	0	0	2	3
Grand Total	0	0	0	0	4	0	0	4	3	0	0	3	7
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	57.1	0.0	0.0	57.1	42.9	0.0	0.0	42.9	
Exiting Leg Total				4				3				0	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Lees River Avenue from North				Lees River Avenue from South				I-195 Eastbound Ramps from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:45 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
Total Volume	0	0	0	0	2	0	0	2	3	0	0	3	5
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.375	0.000	0.000	0.375	0.417
Entering Leg	0	0	0	0	2	0	0	2	3	0	0	3	5
Exiting Leg				2				3				0	5
Total				2				5				3	10

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Bicycles (on Roadway and Crosswalks)**

	Lees River Avenue from North						Lees River Avenue from South						I-195 Eastbound Ramps from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North						Lees River Avenue from South						I-195 Eastbound Ramps from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 B**
Location: **N: Lees River Avenue S: Lees River Avenue**
Location: **W: I-195 Eastbound Ramps**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Pedestrians

	Lees River Avenue						Lees River Avenue						I-195 Eastbound Ramps						
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue						Lees River Avenue						I-195 Eastbound Ramps						
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Lees River Avenue					Wilbur Avenue (Route 103)					Gas Station Driveway					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	7	0	55	0	62	36	63	0	0	99	1	1	1	0	3	1	162	16	0	179	343
7:15 AM	11	1	58	0	70	42	72	0	0	114	0	1	0	0	1	0	147	19	0	166	351
7:30 AM	8	0	79	0	87	29	87	0	0	116	4	0	0	0	4	1	184	17	0	202	409
7:45 AM	7	0	62	0	69	35	101	0	0	136	1	0	0	0	1	0	152	16	0	168	374
Total	33	1	254	0	288	142	323	0	0	465	6	2	1	0	9	2	645	68	0	715	1477
8:00 AM	10	0	55	0	65	35	94	3	0	132	2	0	0	0	2	0	148	17	0	165	364
8:15 AM	15	0	60	0	75	29	97	0	0	126	4	0	0	0	4	1	150	19	0	170	375
8:30 AM	14	1	45	0	60	32	92	0	0	124	3	0	1	0	4	0	143	22	0	165	353
8:45 AM	15	0	46	0	61	25	81	0	0	106	2	0	0	0	2	0	118	7	0	125	294
Total	54	1	206	0	261	121	364	3	0	488	11	0	1	0	12	1	559	65	0	625	1386
Grand Total	87	2	460	0	549	263	687	3	0	953	17	2	2	0	21	3	1204	133	0	1340	2863
Approach %	15.8	0.4	83.8	0.0		27.6	72.1	0.3	0.0		81.0	9.5	9.5	0.0		0.2	89.9	9.9	0.0		
Total %	3.0	0.1	16.1	0.0	19.2	9.2	24.0	0.1	0.0	33.3	0.6	0.1	0.1	0.0	0.7	0.1	42.1	4.6	0.0	46.8	
Exiting Leg Total					398					1681					8					776	2863
Cars	82	2	441	0	525	251	655	3	0	909	17	2	2	0	21	3	1181	133	0	1317	2772
% Cars	94.3	100.0	95.9	0.0	95.6	95.4	95.3	100.0	0.0	95.4	100.0	100.0	100.0	0.0	100.0	100.0	98.1	100.0	0.0	98.3	96.8
Exiting Leg Total					386					1639					8					739	2772
Heavy Vehicles	5	0	19	0	24	12	32	0	0	44	0	0	0	0	0	0	23	0	0	23	91
% Heavy Vehicles	5.7	0.0	4.1	0.0	4.4	4.6	4.7	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	1.7	3.2
Exiting Leg Total					12					42					0					37	91

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Lees River Avenue					Wilbur Avenue (Route 103)					Gas Station Driveway					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	8	0	79	0	87	29	87	0	0	116	4	0	0	0	4	1	184	17	0	202	409
7:45 AM	7	0	62	0	69	35	101	0	0	136	1	0	0	0	1	0	152	16	0	168	374
8:00 AM	10	0	55	0	65	35	94	3	0	132	2	0	0	0	2	0	148	17	0	165	364
8:15 AM	15	0	60	0	75	29	97	0	0	126	4	0	0	0	4	1	150	19	0	170	375
Total Volume	40	0	256	0	296	128	379	3	0	510	11	0	0	0	11	2	634	69	0	705	1522
% Approach Total	13.5	0.0	86.5	0.0		25.1	74.3	0.6	0.0		100.0	0.0	0.0	0.0		0.3	89.9	9.8	0.0		
PHF	0.667	0.000	0.810	0.000	0.851	0.914	0.938	0.250	0.000	0.938	0.688	0.000	0.000	0.000	0.688	0.500	0.861	0.908	0.000	0.873	0.930
Cars	38	0	245	0	283	124	363	3	0	490	11	0	0	0	11	2	621	69	0	692	1476
Cars %	95.0	0.0	95.7	0.0	95.6	96.9	95.8	100.0	0.0	96.1	100.0	0.0	0.0	0.0	100.0	100.0	97.9	100.0	0.0	98.2	97.0
Heavy Vehicles	2	0	11	0	13	4	16	0	0	20	0	0	0	0	0	0	13	0	0	13	46
Heavy Vehicles %	5.0	0.0	4.3	0.0	4.4	3.1	4.2	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	1.8	3.0
Cars Enter Leg	38	0	245	0	283	124	363	3	0	490	11	0	0	0	11	2	621	69	0	692	1476
Heavy Enter Leg	2	0	11	0	13	4	16	0	0	20	0	0	0	0	0	0	13	0	0	13	46
Total Entering Leg	40	0	256	0	296	128	379	3	0	510	11	0	0	0	11	2	634	69	0	705	1522
Cars Exiting Leg					193					877					5					401	1476
Heavy Exiting Leg					4					24					0					18	46
Total Exiting Leg					197					901					5					419	1522

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	7	0	54	0	61	33	59	0	0	92	1	1	1	0	3	1	159	16	0	176	332
7:15 AM	10	1	54	0	65	40	69	0	0	109	0	1	0	0	1	0	146	19	0	165	340
7:30 AM	7	0	76	0	83	27	85	0	0	112	4	0	0	0	4	1	182	17	0	200	399
7:45 AM	7	0	60	0	67	34	96	0	0	130	1	0	0	0	1	0	150	16	0	166	364
Total	31	1	244	0	276	134	309	0	0	443	6	2	1	0	9	2	637	68	0	707	1435
8:00 AM	10	0	54	0	64	35	90	3	0	128	2	0	0	0	2	0	147	17	0	164	358
8:15 AM	14	0	55	0	69	28	92	0	0	120	4	0	0	0	4	1	142	19	0	162	355
8:30 AM	13	1	43	0	57	29	87	0	0	116	3	0	1	0	4	0	138	22	0	160	337
8:45 AM	14	0	45	0	59	25	77	0	0	102	2	0	0	0	2	0	117	7	0	124	287
Total	51	1	197	0	249	117	346	3	0	466	11	0	1	0	12	1	544	65	0	610	1337
Grand Total	82	2	441	0	525	251	655	3	0	909	17	2	2	0	21	3	1181	133	0	1317	2772
Approach %	15.6	0.4	84.0	0.0		27.6	72.1	0.3	0.0		81.0	9.5	9.5	0.0		0.2	89.7	10.1	0.0		
Total %	3.0	0.1	15.9	0.0	18.9	9.1	23.6	0.1	0.0	32.8	0.6	0.1	0.1	0.0	0.8	0.1	42.6	4.8	0.0	47.5	
Exiting Leg Total					386					1639					8					739	2772

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	7	0	76	0	83	27	85	0	0	112	4	0	0	0	4	1	182	17	0	200	399
7:45 AM	7	0	60	0	67	34	96	0	0	130	1	0	0	0	1	0	150	16	0	166	364
8:00 AM	10	0	54	0	64	35	90	3	0	128	2	0	0	0	2	0	147	17	0	164	358
8:15 AM	14	0	55	0	69	28	92	0	0	120	4	0	0	0	4	1	142	19	0	162	355
Total Volume	38	0	245	0	283	124	363	3	0	490	11	0	0	0	11	2	621	69	0	692	1476
% Approach Total	13.4	0.0	86.6	0.0		25.3	74.1	0.6	0.0		100.0	0.0	0.0	0.0		0.3	89.7	10.0	0.0		
PHF	0.679	0.000	0.806	0.000	0.852	0.886	0.945	0.250	0.000	0.942	0.688	0.000	0.000	0.000	0.688	0.500	0.853	0.908	0.000	0.865	0.925
Entering Leg	38	0	245	0	283	124	363	3	0	490	11	0	0	0	11	2	621	69	0	692	1476
Exiting Leg					193					877					5					401	1476
Total					476					1367					16					1093	2952

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	1	0	1	3	4	0	0	7	0	0	0	0	0	0	3	0	0	3	11
7:15 AM	1	0	4	0	5	2	3	0	0	5	0	0	0	0	0	0	1	0	0	1	11
7:30 AM	1	0	3	0	4	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	10
7:45 AM	0	0	2	0	2	1	5	0	0	6	0	0	0	0	0	0	2	0	0	2	10
Total	2	0	10	0	12	8	14	0	0	22	0	0	0	0	0	0	8	0	0	8	42
8:00 AM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	6
8:15 AM	1	0	5	0	6	1	5	0	0	6	0	0	0	0	0	0	8	0	0	8	20
8:30 AM	1	0	2	0	3	3	5	0	0	8	0	0	0	0	0	0	5	0	0	5	16
8:45 AM	1	0	1	0	2	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	7
Total	3	0	9	0	12	4	18	0	0	22	0	0	0	0	0	0	15	0	0	15	49
Grand Total	5	0	19	0	24	12	32	0	0	44	0	0	0	0	0	0	23	0	0	23	91
Approach %	20.8	0.0	79.2	0.0		27.3	72.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	5.5	0.0	20.9	0.0	26.4	13.2	35.2	0.0	0.0	48.4	0.0	0.0	0.0	0.0	0.0	0.0	25.3	0.0	0.0	25.3	
Exiting Leg Total					12					42					0					37	91
Buses	0	0	5	0	5	6	3	0	0	9	0	0	0	0	0	0	4	0	0	4	18
% Buses	0.0	0.0	26.3	0.0	20.8	50.0	9.4	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	17.4	19.8
Exiting Leg Total					6					9					0					3	18
Single-Unit Trucks	3	0	11	0	14	5	24	0	0	29	0	0	0	0	0	0	17	0	0	17	60
% Single-Unit	60.0	0.0	57.9	0.0	58.3	41.7	75.0	0.0	0.0	65.9	0.0	0.0	0.0	0.0	0.0	0.0	73.9	0.0	0.0	73.9	65.9
Exiting Leg Total					5					28					0					27	60
Articulated Trucks	2	0	3	0	5	1	5	0	0	6	0	0	0	0	0	0	2	0	0	2	13
% Articulated	40.0	0.0	15.8	0.0	20.8	8.3	15.6	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0	8.7	14.3
Exiting Leg Total					1					5					0					7	13

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	2	0	2	1	5	0	0	6	0	0	0	0	0	0	2	0	0	2	10
8:00 AM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	6
8:15 AM	1	0	5	0	6	1	5	0	0	6	0	0	0	0	0	0	8	0	0	8	20
8:30 AM	1	0	2	0	3	3	5	0	0	8	0	0	0	0	0	0	5	0	0	5	16
Total Volume	2	0	10	0	12	5	19	0	0	24	0	0	0	0	0	0	16	0	0	16	52
% Approach Total	16.7	0.0	83.3	0.0		20.8	79.2	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.500	0.000	0.500	0.000	0.500	0.417	0.950	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.650
Buses	0	0	3	0	3	2	3	0	0	5	0	0	0	0	0	0	3	0	0	3	11
Buses %	0.0	0.0	30.0	0.0	25.0	40.0	15.8	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0	18.8	21.2
Single-Unit Trucks	1	0	5	0	6	3	14	0	0	17	0	0	0	0	0	0	12	0	0	12	35
Single-Unit %	50.0	0.0	50.0	0.0	50.0	60.0	73.7	0.0	0.0	70.8	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	75.0	67.3
Articulated Trucks	1	0	2	0	3	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	6
Articulated %	50.0	0.0	20.0	0.0	25.0	0.0	10.5	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	6.3	11.5
Buses	0	0	3	0	3	2	3	0	0	5	0	0	0	0	0	0	3	0	0	3	11
Single-Unit Trucks	1	0	5	0	6	3	14	0	0	17	0	0	0	0	0	0	12	0	0	12	35
Articulated Trucks	1	0	2	0	3	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	6
Total Entering Leg	2	0	10	0	12	5	19	0	0	24	0	0	0	0	0	0	16	0	0	16	52
Buses					2					6					0					3	11
Single-Unit Trucks					3					17					0					15	35
Articulated Trucks					0					3					0					3	6
Total Exiting Leg					5					26					0					21	52

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Lees River Avenue					Wilbur Avenue (Route 103)					Gas Station Driveway					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:15 AM	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	3	0	3	4	1	0	0	5	0	0	0	0	0	0	1	0	0	1	9
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	2	0	2	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	7
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	2	2	2	0	0	4	0	0	0	0	0	0	3	0	0	3	9
Grand Total	0	0	5	0	5	6	3	0	0	9	0	0	0	0	0	0	4	0	0	4	18
Approach %	0.0	0.0	100.0	0.0		66.7	33.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	27.8	0.0	27.8	33.3	16.7	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	22.2	
Exiting Leg Total					6					9					0					3	18

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Lees River Avenue					Wilbur Avenue (Route 103)					Gas Station Driveway					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	2	0	2	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	7
Total Volume	0	0	4	0	4	2	3	0	0	5	0	0	0	0	0	0	3	0	0	3	12
% Approach Total	0.0	0.0	100.0	0.0		40.0	60.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.500	0.500	0.750	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.429
Entering Leg	0	0	4	0	4	2	3	0	0	5	0	0	0	0	0	0	3	0	0	3	12
Exiting Leg					2					7					0					3	12
Total					6					12					0					6	24

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	6
7:15 AM	1	0	2	0	3	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	6
7:30 AM	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	7
7:45 AM	0	0	1	0	1	1	4	0	0	5	0	0	0	0	0	0	2	0	0	2	8
Total	1	0	6	0	7	3	11	0	0	14	0	0	0	0	0	0	6	0	0	6	27
8:00 AM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	1	0	1	0	2	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	11
8:30 AM	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	5	0	0	5	13
8:45 AM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	6
Total	2	0	5	0	7	2	13	0	0	15	0	0	0	0	0	0	11	0	0	11	33
Grand Total	3	0	11	0	14	5	24	0	0	29	0	0	0	0	0	0	17	0	0	17	60
Approach %	21.4	0.0	78.6	0.0		17.2	82.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	5.0	0.0	18.3	0.0	23.3	8.3	40.0	0.0	0.0	48.3	0.0	0.0	0.0	0.0	0.0	0.0	28.3	0.0	0.0	28.3	
Exiting Leg Total					5					28					0					27	60

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	1	0	1	1	4	0	0	5	0	0	0	0	0	0	2	0	0	2	8
8:00 AM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	1	0	1	0	2	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	11
8:30 AM	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	5	0	0	5	13
Total Volume	1	0	5	0	6	3	14	0	0	17	0	0	0	0	0	0	12	0	0	12	35
% Approach Total	16.7	0.0	83.3	0.0		17.6	82.4	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.250	0.000	0.625	0.000	0.750	0.375	0.875	0.000	0.000	0.708	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.000	0.000	0.600	0.673
Entering Leg	1	0	5	0	6	3	14	0	0	17	0	0	0	0	0	0	12	0	0	12	35
Exiting Leg					3					17					0					15	35
Total					9					34					0					27	70

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	3
7:15 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	6
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	2	0	3	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	7
Grand Total	2	0	3	0	5	1	5	0	0	6	0	0	0	0	0	0	2	0	0	2	13
Approach %	40.0	0.0	60.0	0.0		16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	15.4	0.0	23.1	0.0	38.5	7.7	38.5	0.0	0.0	46.2	0.0	0.0	0.0	0.0	0.0	0.0	15.4	0.0	0.0	15.4	
Exiting Leg Total					1					5					0					7	13

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	2	0	3	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	7
% Approach Total	33.3	0.0	66.7	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.250	0.000	0.250	0.000	0.375	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.875
Entering Leg	1	0	2	0	3	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	7
Exiting Leg					0					3					0					4	7
Total					3					6					0					5	14

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Bicycles (on Roadway and Crosswalks)

	Lees River Avenue							Wilbur Avenue (Route 103)							Gas Station Driveway							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	
Exiting Leg Total							0							1							0							0	1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue							Wilbur Avenue (Route 103)							Gas Station Driveway							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Exiting Leg							0							1							0							0	1
Total							0							1							0							1	2

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Lees River Avenue (from North)							Wilbur Avenue (Route 103) (from East)							Gas Station Driveway (from South)							Wilbur Avenue (Route 103) (from West)							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Lees River Avenue (from North)							Wilbur Avenue (Route 103) (from East)							Gas Station Driveway (from South)							Wilbur Avenue (Route 103) (from West)							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	19	0	67	0	86	75	185	1	0	261	5	3	0	0	8	0	155	21	0	176	531
4:15 PM	32	1	72	0	105	65	199	1	0	265	2	0	0	0	2	0	140	15	0	155	527
4:30 PM	30	0	52	0	82	47	179	0	0	226	4	1	0	0	5	0	178	18	0	196	509
4:45 PM	41	0	74	0	115	71	201	1	0	273	1	0	1	0	2	0	153	17	0	170	560
Total	122	1	265	0	388	258	764	3	0	1025	12	4	1	0	17	0	626	71	0	697	2127
5:00 PM	39	0	51	0	90	70	236	2	0	308	3	0	0	0	3	0	125	15	0	140	541
5:15 PM	31	3	55	0	89	57	236	2	0	295	3	0	0	0	3	0	146	19	0	165	552
5:30 PM	37	0	54	0	91	58	203	1	0	262	2	1	0	0	3	0	141	19	0	160	516
5:45 PM	33	0	61	0	94	57	156	2	0	215	6	2	0	0	8	0	121	13	0	134	451
Total	140	3	221	0	364	242	831	7	0	1080	14	3	0	0	17	0	533	66	0	599	2060
Grand Total	262	4	486	0	752	500	1595	10	0	2105	26	7	1	0	34	0	1159	137	0	1296	4187
Approach %	34.8	0.5	64.6	0.0		23.8	75.8	0.5	0.0		76.5	20.6	2.9	0.0		0.0	89.4	10.6	0.0		
Total %	6.3	0.1	11.6	0.0	18.0	11.9	38.1	0.2	0.0	50.3	0.6	0.2	0.0	0.0	0.8	0.0	27.7	3.3	0.0	31.0	
Exiting Leg Total					644					1671					14					1858	4187
Cars	260	4	475	0	739	491	1580	10	0	2081	26	6	1	0	33	0	1141	135	0	1276	4129
% Cars	99.2	100.0	97.7	0.0	98.3	98.2	99.1	100.0	0.0	98.9	100.0	85.7	100.0	0.0	97.1	0.0	98.4	98.5	0.0	98.5	98.6
Exiting Leg Total					632					1642					14					1841	4129
Heavy Vehicles	2	0	11	0	13	9	15	0	0	24	0	1	0	0	1	0	18	2	0	20	58
% Heavy Vehicles	0.8	0.0	2.3	0.0	1.7	1.8	0.9	0.0	0.0	1.1	0.0	14.3	0.0	0.0	2.9	0.0	1.6	1.5	0.0	1.5	1.4
Exiting Leg Total					12					29					0					17	58

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:45 PM	41	0	74	0	115	71	201	1	0	273	1	0	1	0	2	0	153	17	0	170	560
5:00 PM	39	0	51	0	90	70	236	2	0	308	3	0	0	0	3	0	125	15	0	140	541
5:15 PM	31	3	55	0	89	57	236	2	0	295	3	0	0	0	3	0	146	19	0	165	552
5:30 PM	37	0	54	0	91	58	203	1	0	262	2	1	0	0	3	0	141	19	0	160	516
Total Volume	148	3	234	0	385	256	876	6	0	1138	9	1	1	0	11	0	565	70	0	635	2169
% Approach Total	38.4	0.8	60.8	0.0		22.5	77.0	0.5	0.0		81.8	9.1	9.1	0.0		0.0	89.0	11.0	0.0		
PHF	0.902	0.250	0.791	0.000	0.837	0.901	0.928	0.750	0.000	0.924	0.750	0.250	0.250	0.000	0.917	0.000	0.923	0.921	0.000	0.934	0.968
Cars	146	3	230	0	379	252	869	6	0	1127	9	1	1	0	11	0	559	69	0	628	2145
Cars %	98.6	100.0	98.3	0.0	98.4	98.4	99.2	100.0	0.0	99.0	100.0	100.0	100.0	0.0	100.0	0.0	98.9	98.6	0.0	98.9	98.9
Heavy Vehicles	2	0	4	0	6	4	7	0	0	11	0	0	0	0	0	0	6	1	0	7	24
Heavy Vehicles %	1.4	0.0	1.7	0.0	1.6	1.6	0.8	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.4	0.0	1.1	1.1
Cars Enter Leg	146	3	230	0	379	252	869	6	0	1127	9	1	1	0	11	0	559	69	0	628	2145
Heavy Enter Leg	2	0	4	0	6	4	7	0	0	11	0	0	0	0	0	0	6	1	0	7	24
Total Entering Leg	148	3	234	0	385	256	876	6	0	1138	9	1	1	0	11	0	565	70	0	635	2169
Cars Exiting Leg					322					798					9					1016	2145
Heavy Exiting Leg					5					10					0					9	24
Total Exiting Leg					327					808					9					1025	2169

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	19	0	66	0	85	73	183	1	0	257	5	3	0	0	8	0	149	20	0	169	519
4:15 PM	32	1	71	0	104	65	198	1	0	264	2	0	0	0	2	0	139	15	0	154	524
4:30 PM	30	0	48	0	78	45	175	0	0	220	4	0	0	0	4	0	176	18	0	194	496
4:45 PM	41	0	74	0	115	69	199	1	0	269	1	0	1	0	2	0	151	17	0	168	554
Total	122	1	259	0	382	252	755	3	0	1010	12	3	1	0	16	0	615	70	0	685	2093
5:00 PM	38	0	49	0	87	69	235	2	0	306	3	0	0	0	3	0	123	15	0	138	534
5:15 PM	31	3	55	0	89	56	232	2	0	290	3	0	0	0	3	0	144	19	0	163	545
5:30 PM	36	0	52	0	88	58	203	1	0	262	2	1	0	0	3	0	141	18	0	159	512
5:45 PM	33	0	60	0	93	56	155	2	0	213	6	2	0	0	8	0	118	13	0	131	445
Total	138	3	216	0	357	239	825	7	0	1071	14	3	0	0	17	0	526	65	0	591	2036
Grand Total	260	4	475	0	739	491	1580	10	0	2081	26	6	1	0	33	0	1141	135	0	1276	4129
Approach %	35.2	0.5	64.3	0.0		23.6	75.9	0.5	0.0		78.8	18.2	3.0	0.0		0.0	89.4	10.6	0.0		
Total %	6.3	0.1	11.5	0.0	17.9	11.9	38.3	0.2	0.0	50.4	0.6	0.1	0.0	0.0	0.8	0.0	27.6	3.3	0.0	30.9	
Exiting Leg Total					632					1642					14					1841	4129

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:45 PM	41	0	74	0	115	69	199	1	0	269	1	0	1	0	2	0	151	17	0	168	554
5:00 PM	38	0	49	0	87	69	235	2	0	306	3	0	0	0	3	0	123	15	0	138	534
5:15 PM	31	3	55	0	89	56	232	2	0	290	3	0	0	0	3	0	144	19	0	163	545
5:30 PM	36	0	52	0	88	58	203	1	0	262	2	1	0	0	3	0	141	18	0	159	512
Total Volume	146	3	230	0	379	252	869	6	0	1127	9	1	1	0	11	0	559	69	0	628	2145
% Approach Total	38.5	0.8	60.7	0.0		22.4	77.1	0.5	0.0		81.8	9.1	9.1	0.0		0.0	89.0	11.0	0.0		
PHF	0.890	0.250	0.777	0.000	0.824	0.913	0.924	0.750	0.000	0.921	0.750	0.250	0.250	0.000	0.917	0.000	0.925	0.908	0.000	0.935	0.968
Entering Leg	146	3	230	0	379	252	869	6	0	1127	9	1	1	0	11	0	559	69	0	628	2145
Exiting Leg					322					798					9					1016	2145
Total					701					1925					20					1644	4290

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	6	1	0	7	12
4:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
4:30 PM	0	0	4	0	4	2	4	0	0	6	0	1	0	0	1	0	2	0	0	2	13
4:45 PM	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	6
Total	0	0	6	0	6	6	9	0	0	15	0	1	0	0	1	0	11	1	0	12	34
5:00 PM	1	0	2	0	3	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	7
5:15 PM	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	2	0	0	2	7
5:30 PM	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
5:45 PM	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	6
Total	2	0	5	0	7	3	6	0	0	9	0	0	0	0	0	0	7	1	0	8	24
Grand Total	2	0	11	0	13	9	15	0	0	24	0	1	0	0	1	0	18	2	0	20	58
Approach %	15.4	0.0	84.6	0.0		37.5	62.5	0.0	0.0		0.0	100.0	0.0	0.0		0.0	90.0	10.0	0.0		
Total %	3.4	0.0	19.0	0.0	22.4	15.5	25.9	0.0	0.0	41.4	0.0	1.7	0.0	0.0	1.7	0.0	31.0	3.4	0.0	34.5	
Exiting Leg Total					12					29					0					17	58
Buses	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	5	0	0	5	9
% Buses	0.0	0.0	27.3	0.0	23.1	11.1	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	27.8	0.0	0.0	25.0	15.5
Exiting Leg Total					1					8					0					0	9
Single-Unit Trucks	1	0	6	0	7	5	14	0	0	19	0	1	0	0	1	0	10	1	0	11	38
% Single-Unit	50.0	0.0	54.5	0.0	53.8	55.6	93.3	0.0	0.0	79.2	0.0	100.0	0.0	0.0	100.0	0.0	55.6	50.0	0.0	55.0	65.5
Exiting Leg Total					7					16					0					15	38
Articulated Trucks	1	0	2	0	3	3	1	0	0	4	0	0	0	0	0	0	3	1	0	4	11
% Articulated	50.0	0.0	18.2	0.0	23.1	33.3	6.7	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	16.7	50.0	0.0	20.0	19.0
Exiting Leg Total					4					5					0					2	11

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	6	1	0	7	12
4:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
4:30 PM	0	0	4	0	4	2	4	0	0	6	0	1	0	0	1	0	2	0	0	2	13
4:45 PM	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	6
Total Volume	0	0	6	0	6	6	9	0	0	15	0	1	0	0	1	0	11	1	0	12	34
% Approach Total	0.0	0.0	100.0	0.0		40.0	60.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	91.7	8.3	0.0		
PHF	0.000	0.000	0.375	0.000	0.375	0.750	0.563	0.000	0.000	0.625	0.000	0.250	0.000	0.000	0.250	0.000	0.458	0.250	0.000	0.429	0.654
Buses	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	5
Buses %	0.0	0.0	16.7	0.0	16.7	16.7	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	27.3	0.0	0.0	25.0	14.7
Single-Unit Trucks	0	0	5	0	5	3	8	0	0	11	0	1	0	0	1	0	7	0	0	7	24
Single-Unit %	0.0	0.0	83.3	0.0	83.3	50.0	88.9	0.0	0.0	73.3	0.0	100.0	0.0	0.0	100.0	0.0	63.6	0.0	0.0	58.3	70.6
Articulated Trucks	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	1	1	0	2	5
Articulated %	0.0	0.0	0.0	0.0	0.0	33.3	11.1	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	100.0	0.0	16.7	14.7
Buses	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	5
Single-Unit Trucks	0	0	5	0	5	3	8	0	0	11	0	1	0	0	1	0	7	0	0	7	24
Articulated Trucks	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	1	1	0	2	5
Total Entering Leg	0	0	6	0	6	6	9	0	0	15	0	1	0	0	1	0	11	1	0	12	34
Buses					1					4					0					0	5
Single-Unit Trucks					4					12					0					8	24
Articulated Trucks					3					1					0					1	5
Total Exiting Leg					8					17					0					9	34

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Lees River Avenue					Wilbur Avenue (Route 103)					Gas Station Driveway					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	5
5:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4
Grand Total	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	5	0	0	5	9
Approach %	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	33.3	0.0	33.3	11.1	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	55.6	0.0	0.0	55.6	
Exiting Leg Total					1					8					0					0	9

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue					Wilbur Avenue (Route 103)					Gas Station Driveway					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	5
% Approach Total	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.375	0.417
Entering Leg	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	5
Exiting Leg					1					4					0					0	5
Total					2					5					0					3	10

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	8
4:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	3	0	3	2	3	0	0	5	0	1	0	0	1	0	2	0	0	2	11
4:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total	0	0	5	0	5	3	8	0	0	11	0	1	0	0	1	0	7	0	0	7	24
5:00 PM	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	4
5:15 PM	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	1	0	0	1	6
5:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	1	0	1	0	2	2	6	0	0	8	0	0	0	0	0	0	3	1	0	4	14
Grand Total	1	0	6	0	7	5	14	0	0	19	0	1	0	0	1	0	10	1	0	11	38
Approach %	14.3	0.0	85.7	0.0		26.3	73.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	90.9	9.1	0.0		
Total %	2.6	0.0	15.8	0.0	18.4	13.2	36.8	0.0	0.0	50.0	0.0	2.6	0.0	0.0	2.6	0.0	26.3	2.6	0.0	28.9	
Exiting Leg Total					7					16					0					15	38

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	8
4:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	3	0	3	2	3	0	0	5	0	1	0	0	1	0	2	0	0	2	11
4:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total Volume	0	0	5	0	5	3	8	0	0	11	0	1	0	0	1	0	7	0	0	7	24
% Approach Total	0.0	0.0	100.0	0.0		27.3	72.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.417	0.000	0.417	0.375	0.667	0.000	0.000	0.550	0.000	0.250	0.000	0.000	0.250	0.000	0.438	0.000	0.000	0.438	0.545
Entering Leg	0	0	5	0	5	3	8	0	0	11	0	1	0	0	1	0	7	0	0	7	24
Exiting Leg					4					12					0					8	24
Total					9					23					1					15	48

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	1	1	0	2	5
5:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	1	0	2	0	3	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	6
Grand Total	1	0	2	0	3	3	1	0	0	4	0	0	0	0	0	0	3	1	0	4	11
Approach %	33.3	0.0	66.7	0.0		75.0	25.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		
Total %	9.1	0.0	18.2	0.0	27.3	27.3	9.1	0.0	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	27.3	9.1	0.0	36.4	
Exiting Leg Total					4					5					0					2	11

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Lees River Avenue from North					Wilbur Avenue (Route 103) from East					Gas Station Driveway from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total Volume	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	2	0	0	2	6
% Approach Total	0.0	0.0	100.0	0.0		66.7	33.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.250	0.250	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.750
Entering Leg	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	2	0	0	2	6
Exiting Leg					2					3					0					1	6
Total					3					6					0					3	12

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Bicycles (on Roadway and Crosswalks)

	Lees River Avenue							Wilbur Avenue (Route 103)							Gas Station Driveway							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Lees River Avenue							Wilbur Avenue (Route 103)							Gas Station Driveway							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 C**
Location: **N: Lees River Avenue S: Gas Station Driveway**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Lees River Avenue (from North)							Wilbur Avenue (Route 103) (from East)							Gas Station Driveway (from South)							Wilbur Avenue (Route 103) (from West)							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
Grand Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
Approach %	0	0	0	0	100	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	50	50		
Total %	0	0	0	0	33.3	0	33.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33.3	33.3	66.7	
Exiting Leg Total							1							0							0							2	3

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Lees River Avenue (from North)							Wilbur Avenue (Route 103) (from East)							Gas Station Driveway (from South)							Wilbur Avenue (Route 103) (from West)							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
Total Volume	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.250
Entering Leg	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
Exiting Leg							1							0							0							2	3
Total							2							0							0							4	6

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	4	0	1	0	5	4	151	1	0	156	7	0	1	0	8	0	215	4	0	219	388
7:15 AM	3	0	0	0	3	4	168	1	0	173	2	0	2	0	4	1	206	0	0	207	387
7:30 AM	5	0	0	0	5	3	174	2	0	179	5	0	2	0	7	0	267	1	0	268	459
7:45 AM	1	0	0	0	1	1	170	1	0	172	5	0	0	0	5	3	214	1	0	218	396
Total	13	0	1	0	14	12	663	5	0	680	19	0	5	0	24	4	902	6	0	912	1630
8:00 AM	2	0	0	0	2	2	176	1	0	179	1	0	0	0	1	0	203	0	0	203	385
8:15 AM	4	0	3	0	7	4	165	2	0	171	4	0	0	0	4	2	213	1	0	216	398
8:30 AM	1	0	0	0	1	1	159	2	0	162	2	0	3	0	5	0	192	0	0	192	360
8:45 AM	2	0	0	0	2	1	143	0	0	144	4	0	0	0	4	2	164	1	0	167	317
Total	9	0	3	0	12	8	643	5	0	656	11	0	3	0	14	4	772	2	0	778	1460
Grand Total	22	0	4	0	26	20	1306	10	0	1336	30	0	8	0	38	8	1674	8	0	1690	3090
Approach %	84.6	0.0	15.4	0.0		1.5	97.8	0.7	0.0		78.9	0.0	21.1	0.0		0.5	99.1	0.5	0.0		
Total %	0.7	0.0	0.1	0.0	0.8	0.6	42.3	0.3	0.0	43.2	1.0	0.0	0.3	0.0	1.2	0.3	54.2	0.3	0.0	54.7	
Exiting Leg Total					28					1708					18					1336	3090
Cars	17	0	3	0	20	16	1258	9	0	1283	29	0	6	0	35	6	1635	6	0	1647	2985
% Cars	77.3	0.0	75.0	0.0	76.9	80.0	96.3	90.0	0.0	96.0	96.7	0.0	75.0	0.0	92.1	75.0	97.7	75.0	0.0	97.5	96.6
Exiting Leg Total					22					1667					15					1281	2985
Heavy Vehicles	5	0	1	0	6	4	48	1	0	53	1	0	2	0	3	2	39	2	0	43	105
% Heavy Vehicles	22.7	0.0	25.0	0.0	23.1	20.0	3.7	10.0	0.0	4.0	3.3	0.0	25.0	0.0	7.9	25.0	2.3	25.0	0.0	2.5	3.4
Exiting Leg Total					6					41					3					55	105

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	5	0	0	0	5	3	174	2	0	179	5	0	2	0	7	0	267	1	0	268	459
7:45 AM	1	0	0	0	1	1	170	1	0	172	5	0	0	0	5	3	214	1	0	218	396
8:00 AM	2	0	0	0	2	2	176	1	0	179	1	0	0	0	1	0	203	0	0	203	385
8:15 AM	4	0	3	0	7	4	165	2	0	171	4	0	0	0	4	2	213	1	0	216	398
Total Volume	12	0	3	0	15	10	685	6	0	701	15	0	2	0	17	5	897	3	0	905	1638
% Approach Total	80.0	0.0	20.0	0.0		1.4	97.7	0.9	0.0		88.2	0.0	11.8	0.0		0.6	99.1	0.3	0.0		
PHF	0.600	0.000	0.250	0.000	0.536	0.625	0.973	0.750	0.000	0.979	0.750	0.000	0.250	0.000	0.607	0.417	0.840	0.750	0.000	0.844	0.892
Cars	9	0	2	0	11	7	660	6	0	673	15	0	2	0	17	4	875	1	0	880	1581
Cars %	75.0	0.0	66.7	0.0	73.3	70.0	96.4	100.0	0.0	96.0	100.0	0.0	100.0	0.0	100.0	80.0	97.5	33.3	0.0	97.2	96.5
Heavy Vehicles	3	0	1	0	4	3	25	0	0	28	0	0	0	0	0	1	22	2	0	25	57
Heavy Vehicles %	25.0	0.0	33.3	0.0	26.7	30.0	3.6	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20.0	2.5	66.7	0.0	2.8	3.5
Cars Enter Leg	9	0	2	0	11	7	660	6	0	673	15	0	2	0	17	4	875	1	0	880	1581
Heavy Enter Leg	3	0	1	0	4	3	25	0	0	28	0	0	0	0	0	1	22	2	0	25	57
Total Entering Leg	12	0	3	0	15	10	685	6	0	701	15	0	2	0	17	5	897	3	0	905	1638
Cars Exiting Leg					8					892					10					671	1581
Heavy Exiting Leg					5					23					1					28	57
Total Exiting Leg					13					915					11					699	1638

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	4	0	1	0	5	4	145	0	0	149	7	0	0	0	7	0	211	4	0	215	376
7:15 AM	2	0	0	0	2	3	163	1	0	167	1	0	2	0	3	0	202	0	0	202	374
7:30 AM	4	0	0	0	4	3	169	2	0	174	5	0	2	0	7	0	263	0	0	263	448
7:45 AM	1	0	0	0	1	1	160	1	0	162	5	0	0	0	5	3	209	1	0	213	381
Total	11	0	1	0	12	11	637	4	0	652	18	0	4	0	22	3	885	5	0	893	1579
8:00 AM	2	0	0	0	2	2	172	1	0	175	1	0	0	0	1	0	201	0	0	201	379
8:15 AM	2	0	2	0	4	1	159	2	0	162	4	0	0	0	4	1	202	0	0	203	373
8:30 AM	1	0	0	0	1	1	151	2	0	154	2	0	2	0	4	0	185	0	0	185	344
8:45 AM	1	0	0	0	1	1	139	0	0	140	4	0	0	0	4	2	162	1	0	165	310
Total	6	0	2	0	8	5	621	5	0	631	11	0	2	0	13	3	750	1	0	754	1406
Grand Total	17	0	3	0	20	16	1258	9	0	1283	29	0	6	0	35	6	1635	6	0	1647	2985
Approach %	85.0	0.0	15.0	0.0		1.2	98.1	0.7	0.0		82.9	0.0	17.1	0.0		0.4	99.3	0.4	0.0		
Total %	0.6	0.0	0.1	0.0	0.7	0.5	42.1	0.3	0.0	43.0	1.0	0.0	0.2	0.0	1.2	0.2	54.8	0.2	0.0	55.2	
Exiting Leg Total					22					1667					15					1281	2985

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	2	0	0	0	2	3	163	1	0	167	1	0	2	0	3	0	202	0	0	202	374
7:30 AM	4	0	0	0	4	3	169	2	0	174	5	0	2	0	7	0	263	0	0	263	448
7:45 AM	1	0	0	0	1	1	160	1	0	162	5	0	0	0	5	3	209	1	0	213	381
8:00 AM	2	0	0	0	2	2	172	1	0	175	1	0	0	0	1	0	201	0	0	201	379
Total Volume	9	0	0	0	9	9	664	5	0	678	12	0	4	0	16	3	875	1	0	879	1582
% Approach Total	100.0	0.0	0.0	0.0		1.3	97.9	0.7	0.0		75.0	0.0	25.0	0.0		0.3	99.5	0.1	0.0		
PHF	0.563	0.000	0.000	0.000	0.563	0.750	0.965	0.625	0.000	0.969	0.600	0.000	0.500	0.000	0.571	0.250	0.832	0.250	0.000	0.836	0.883
Entering Leg	9	0	0	0	9	9	664	5	0	678	12	0	4	0	16	3	875	1	0	879	1582
Exiting Leg					10					887					8					677	1582
Total					19					1565					24					1556	3164

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	6	1	0	7	0	0	1	0	1	0	4	0	0	4	12
7:15 AM	1	0	0	0	1	1	5	0	0	6	1	0	0	0	1	1	4	0	0	5	13
7:30 AM	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	4	1	0	5	11
7:45 AM	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	15
Total	2	0	0	0	2	1	26	1	0	28	1	0	1	0	2	1	17	1	0	19	51
8:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
8:15 AM	2	0	1	0	3	3	6	0	0	9	0	0	0	0	0	1	11	1	0	13	25
8:30 AM	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	0	7	0	0	7	16
8:45 AM	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	7
Total	3	0	1	0	4	3	22	0	0	25	0	0	1	0	1	1	22	1	0	24	54
Grand Total	5	0	1	0	6	4	48	1	0	53	1	0	2	0	3	2	39	2	0	43	105
Approach %	83.3	0.0	16.7	0.0		7.5	90.6	1.9	0.0		33.3	0.0	66.7	0.0		4.7	90.7	4.7	0.0		
Total %	4.8	0.0	1.0	0.0	5.7	3.8	45.7	1.0	0.0	50.5	1.0	0.0	1.9	0.0	2.9	1.9	37.1	1.9	0.0	41.0	
Exiting Leg Total					6					41					3					55	105
Buses	5	0	1	0	6	4	4	1	0	9	1	0	2	0	3	2	6	2	0	10	28
% Buses	100.0	0.0	100.0	0.0	100.0	100.0	8.3	100.0	0.0	17.0	100.0	0.0	100.0	0.0	100.0	100.0	15.4	100.0	0.0	23.3	26.7
Exiting Leg Total					6					8					3					11	28
Single-Unit Trucks	0	0	0	0	0	0	37	0	0	37	0	0	0	0	0	0	28	0	0	28	65
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	77.1	0.0	0.0	69.8	0.0	0.0	0.0	0.0	0.0	0.0	71.8	0.0	0.0	65.1	61.9
Exiting Leg Total					0					28					0					37	65
Articulated Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	12
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0	11.6	11.4
Exiting Leg Total					0					5					0					7	12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	15
8:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
8:15 AM	2	0	1	0	3	3	6	0	0	9	0	0	0	0	0	1	11	1	0	13	25
8:30 AM	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	0	7	0	0	7	16
Total Volume	2	0	1	0	3	3	28	0	0	31	0	0	1	0	1	1	25	1	0	27	62
% Approach Total	66.7	0.0	33.3	0.0		9.7	90.3	0.0	0.0		0.0	0.0	100.0	0.0		3.7	92.6	3.7	0.0		
PHF	0.250	0.000	0.250	0.000	0.250	0.250	0.700	0.000	0.000	0.775	0.000	0.000	0.250	0.000	0.250	0.250	0.568	0.250	0.000	0.519	0.620
Buses	2	0	1	0	3	3	3	0	0	6	0	0	1	0	1	1	5	1	0	7	17
Buses %	100.0	0.0	100.0	0.0	100.0	100.0	10.7	0.0	0.0	19.4	0.0	0.0	100.0	0.0	100.0	100.0	20.0	100.0	0.0	25.9	27.4
Single-Unit Trucks	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	17	0	0	17	40
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	82.1	0.0	0.0	74.2	0.0	0.0	0.0	0.0	0.0	0.0	68.0	0.0	0.0	63.0	64.5
Articulated Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	5
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	11.1	8.1
Buses	2	0	1	0	3	3	3	0	0	6	0	0	1	0	1	1	5	1	0	7	17
Single-Unit Trucks	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	17	0	0	17	40
Articulated Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	5
Total Entering Leg	2	0	1	0	3	3	28	0	0	31	0	0	1	0	1	1	25	1	0	27	62
Buses					4					6					1					6	17
Single-Unit Trucks					0					17					0					23	40
Articulated Trucks					0					3					0					2	5
Total Exiting Leg					4					26					1					31	62

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	3
7:15 AM	1	0	0	0	1	1	1	0	0	2	1	0	0	0	1	1	0	0	0	1	5
7:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Total	2	0	0	0	2	1	2	1	0	4	1	0	1	0	2	1	3	1	0	5	13
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	2	0	1	0	3	3	1	0	0	4	0	0	0	0	0	1	3	1	0	5	12
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	0	1	0	4	3	2	0	0	5	0	0	1	0	1	1	3	1	0	5	15
Grand Total	5	0	1	0	6	4	4	1	0	9	1	0	2	0	3	2	6	2	0	10	28
Approach %	83.3	0.0	16.7	0.0		44.4	44.4	11.1	0.0		33.3	0.0	66.7	0.0		20.0	60.0	20.0	0.0		
Total %	17.9	0.0	3.6	0.0	21.4	14.3	14.3	3.6	0.0	32.1	3.6	0.0	7.1	0.0	10.7	7.1	21.4	7.1	0.0	35.7	
Exiting Leg Total					6					8					3					11	28

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	2	0	1	0	3	3	1	0	0	4	0	0	0	0	0	1	3	1	0	5	12
Total Volume	3	0	1	0	4	3	3	0	0	6	0	0	0	0	0	1	5	2	0	8	18
% Approach Total	75.0	0.0	25.0	0.0		50.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0		12.5	62.5	25.0	0.0		
PHF	0.375	0.000	0.250	0.000	0.333	0.250	0.750	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.250	0.417	0.500	0.000	0.400	0.375
Entering Leg	3	0	1	0	4	3	3	0	0	6	0	0	0	0	0	1	5	2	0	8	18
Exiting Leg					5					6					1					6	18
Total					9					12					1					14	36

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
7:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	6
7:30 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
7:45 AM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	12
Total	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	12	0	0	12	33
8:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
8:15 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	11
8:30 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	7	0	0	7	14
8:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
Total	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	16	0	0	16	32
Grand Total	0	0	0	0	0	0	37	0	0	37	0	0	0	0	0	0	28	0	0	28	65
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	56.9	0.0	0.0	56.9	0.0	0.0	0.0	0.0	0.0	0.0	43.1	0.0	0.0	43.1	
Exiting Leg Total					0					28					0					37	65

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	12
8:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
8:15 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	11
8:30 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	7	0	0	7	14
Total Volume	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	17	0	0	17	40
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.639	0.000	0.000	0.639	0.000	0.000	0.000	0.000	0.000	0.000	0.607	0.000	0.000	0.607	0.714
Entering Leg	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	17	0	0	17	40
Exiting Leg					0					17					0					23	40
Total					0					40					0					40	80

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	7
Grand Total	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	12
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	58.3	0.0	0.0	58.3	0.0	0.0	0.0	0.0	0.0	0.0	41.7	0.0	0.0	41.7	
Exiting Leg Total					0					5					0					7	12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	7
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.375	0.875
Entering Leg	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	7
Exiting Leg					0					3					0					4	7
Total					0					7					0					7	14

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Park & Ride Lot from North							Wilbur Avenue (Route 103) from East							Home Street from South							Wilbur Avenue (Route 103) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Park & Ride Lot from North							Wilbur Avenue (Route 103) from East							Home Street from South							Wilbur Avenue (Route 103) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Park & Ride Lot							Wilbur Avenue (Route 103)							Home Street							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Park & Ride Lot							Wilbur Avenue (Route 103)							Home Street							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	9	0	3	0	12	5	331	4	0	340	5	0	1	0	6	1	216	5	0	222	580
4:15 PM	5	0	0	0	5	0	324	4	1	329	5	0	0	0	5	1	209	3	0	213	552
4:30 PM	2	0	0	0	2	3	282	7	0	292	2	0	0	0	2	1	235	1	0	237	533
4:45 PM	2	0	2	0	4	2	336	1	0	339	6	0	1	0	7	1	226	0	0	227	577
Total	18	0	5	0	23	10	1273	16	1	1300	18	0	2	0	20	4	886	9	0	899	2242
5:00 PM	1	0	0	0	1	0	328	8	0	336	2	0	0	0	2	0	172	1	0	173	512
5:15 PM	3	0	0	0	3	5	328	0	0	333	5	0	1	0	6	4	192	0	0	196	538
5:30 PM	6	0	0	0	6	2	289	4	0	295	2	0	0	0	2	2	198	0	0	200	503
5:45 PM	2	0	0	0	2	0	265	1	0	266	2	0	0	0	2	2	190	1	0	193	463
Total	12	0	0	0	12	7	1210	13	0	1230	11	0	1	0	12	8	752	2	0	762	2016
Grand Total	30	0	5	0	35	17	2483	29	1	2530	29	0	3	0	32	12	1638	11	0	1661	4258
Approach %	85.7	0.0	14.3	0.0		0.7	98.1	1.1	0.0		90.6	0.0	9.4	0.0		0.7	98.6	0.7	0.0		
Total %	0.7	0.0	0.1	0.0	0.8	0.4	58.3	0.7	0.0	59.4	0.7	0.0	0.1	0.0	0.8	0.3	38.5	0.3	0.0	39.0	
Exiting Leg Total					28					1673					41					2516	4258
Cars	27	0	5	0	32	17	2456	27	1	2501	28	0	3	0	31	12	1609	8	0	1629	4193
% Cars	90.0	0.0	100.0	0.0	91.4	100.0	98.9	93.1	100.0	98.9	96.6	0.0	100.0	0.0	96.9	100.0	98.2	72.7	0.0	98.1	98.5
Exiting Leg Total					25					1643					39					2486	4193
Heavy Vehicles	3	0	0	0	3	0	27	2	0	29	1	0	0	0	1	0	29	3	0	32	65
% Heavy Vehicles	10.0	0.0	0.0	0.0	8.6	0.0	1.1	6.9	0.0	1.1	3.4	0.0	0.0	0.0	3.1	0.0	1.8	27.3	0.0	1.9	1.5
Exiting Leg Total					3					30					2					30	65

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	9	0	3	0	12	5	331	4	0	340	5	0	1	0	6	1	216	5	0	222	580
4:15 PM	5	0	0	0	5	0	324	4	1	329	5	0	0	0	5	1	209	3	0	213	552
4:30 PM	2	0	0	0	2	3	282	7	0	292	2	0	0	0	2	1	235	1	0	237	533
4:45 PM	2	0	2	0	4	2	336	1	0	339	6	0	1	0	7	1	226	0	0	227	577
Total Volume	18	0	5	0	23	10	1273	16	1	1300	18	0	2	0	20	4	886	9	0	899	2242
% Approach Total	78.3	0.0	21.7	0.0		0.8	97.9	1.2	0.1		90.0	0.0	10.0	0.0		0.4	98.6	1.0	0.0		
PHF	0.500	0.000	0.417	0.000	0.479	0.500	0.947	0.571	0.250	0.956	0.750	0.000	0.500	0.000	0.714	1.000	0.943	0.450	0.000	0.948	0.966
Cars	17	0	5	0	22	10	1260	14	1	1285	17	0	2	0	19	4	867	8	0	879	2205
Cars %	94.4	0.0	100.0	0.0	95.7	100.0	99.0	87.5	100.0	98.8	94.4	0.0	100.0	0.0	95.0	100.0	97.9	88.9	0.0	97.8	98.3
Heavy Vehicles	1	0	0	0	1	0	13	2	0	15	1	0	0	0	1	0	19	1	0	20	37
Heavy Vehicles %	5.6	0.0	0.0	0.0	4.3	0.0	1.0	12.5	0.0	1.2	5.6	0.0	0.0	0.0	5.0	0.0	2.1	11.1	0.0	2.2	1.7
Cars Enter Leg	17	0	5	0	22	10	1260	14	1	1285	17	0	2	0	19	4	867	8	0	879	2205
Heavy Enter Leg	1	0	0	0	1	0	13	2	0	15	1	0	0	0	1	0	19	1	0	20	37
Total Entering Leg	18	0	5	0	23	10	1273	16	1	1300	18	0	2	0	20	4	886	9	0	899	2242
Cars Exiting Leg					18					890					18					1279	2205
Heavy Exiting Leg					1					20					2					14	37
Total Exiting Leg					19					910					20					1293	2242

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	9	0	3	0	12	5	327	4	0	336	4	0	1	0	5	1	207	5	0	213	566
4:15 PM	5	0	0	0	5	0	323	3	1	327	5	0	0	0	5	1	207	3	0	211	548
4:30 PM	1	0	0	0	1	3	277	7	0	287	2	0	0	0	2	1	231	0	0	232	522
4:45 PM	2	0	2	0	4	2	333	0	0	335	6	0	1	0	7	1	222	0	0	223	569
Total	17	0	5	0	22	10	1260	14	1	1285	17	0	2	0	19	4	867	8	0	879	2205
5:00 PM	0	0	0	0	0	0	324	8	0	332	2	0	0	0	2	0	169	0	0	169	503
5:15 PM	3	0	0	0	3	5	321	0	0	326	5	0	1	0	6	4	191	0	0	195	530
5:30 PM	6	0	0	0	6	2	288	4	0	294	2	0	0	0	2	2	196	0	0	198	500
5:45 PM	1	0	0	0	1	0	263	1	0	264	2	0	0	0	2	2	186	0	0	188	455
Total	10	0	0	0	10	7	1196	13	0	1216	11	0	1	0	12	8	742	0	0	750	1988
Grand Total	27	0	5	0	32	17	2456	27	1	2501	28	0	3	0	31	12	1609	8	0	1629	4193
Approach %	84.4	0.0	15.6	0.0		0.7	98.2	1.1	0.0		90.3	0.0	9.7	0.0		0.7	98.8	0.5	0.0		
Total %	0.6	0.0	0.1	0.0	0.8	0.4	58.6	0.6	0.0	59.6	0.7	0.0	0.1	0.0	0.7	0.3	38.4	0.2	0.0	38.9	
Exiting Leg Total					25					1643					39					2486	4193

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	9	0	3	0	12	5	327	4	0	336	4	0	1	0	5	1	207	5	0	213	566
4:15 PM	5	0	0	0	5	0	323	3	1	327	5	0	0	0	5	1	207	3	0	211	548
4:30 PM	1	0	0	0	1	3	277	7	0	287	2	0	0	0	2	1	231	0	0	232	522
4:45 PM	2	0	2	0	4	2	333	0	0	335	6	0	1	0	7	1	222	0	0	223	569
Total Volume	17	0	5	0	22	10	1260	14	1	1285	17	0	2	0	19	4	867	8	0	879	2205
% Approach Total	77.3	0.0	22.7	0.0		0.8	98.1	1.1	0.1		89.5	0.0	10.5	0.0		0.5	98.6	0.9	0.0		
PHF	0.472	0.000	0.417	0.000	0.458	0.500	0.946	0.500	0.250	0.956	0.708	0.000	0.500	0.000	0.679	1.000	0.938	0.400	0.000	0.947	0.969
Entering Leg	17	0	5	0	22	10	1260	14	1	1285	17	0	2	0	19	4	867	8	0	879	2205
Exiting Leg					18					890					18					1279	2205
Total					40					2175					37					2158	4410

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	9	0	0	9	14
4:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	4
4:30 PM	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	4	1	0	5	11
4:45 PM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	4	0	0	4	8
Total	1	0	0	0	1	0	13	2	0	15	1	0	0	0	1	0	19	1	0	20	37
5:00 PM	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	3	1	0	4	9
5:15 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	8
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
5:45 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	8
Total	2	0	0	0	2	0	14	0	0	14	0	0	0	0	0	0	10	2	0	12	28
Grand Total	3	0	0	0	3	0	27	2	0	29	1	0	0	0	1	0	29	3	0	32	65
Approach %	100.0	0.0	0.0	0.0		0.0	93.1	6.9	0.0		100.0	0.0	0.0	0.0		0.0	90.6	9.4	0.0		
Total %	4.6	0.0	0.0	0.0	4.6	0.0	41.5	3.1	0.0	44.6	1.5	0.0	0.0	0.0	1.5	0.0	44.6	4.6	0.0	49.2	
Exiting Leg Total					3					30					2					30	65
Buses	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	3	3	0	6	10
% Buses	100.0	0.0	0.0	0.0	100.0	0.0	3.7	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	10.3	100.0	0.0	18.8	15.4
Exiting Leg Total					3					3					0					4	10
Single-Unit Trucks	0	0	0	0	0	0	21	2	0	23	1	0	0	0	1	0	20	0	0	20	44
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	77.8	100.0	0.0	79.3	100.0	0.0	0.0	0.0	100.0	0.0	69.0	0.0	0.0	62.5	67.7
Exiting Leg Total					0					21					2					21	44
Articulated Trucks	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	11
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	18.5	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	0.0	20.7	0.0	0.0	18.8	16.9
Exiting Leg Total					0					6					0					5	11

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	9	0	0	9	14
4:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	4
4:30 PM	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	4	1	0	5	11
4:45 PM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	4	0	0	4	8
Total Volume	1	0	0	0	1	0	13	2	0	15	1	0	0	0	1	0	19	1	0	20	37
% Approach Total	100.0	0.0	0.0	0.0		0.0	86.7	13.3	0.0		100.0	0.0	0.0	0.0		0.0	95.0	5.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.650	0.500	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.000	0.528	0.250	0.000	0.556	0.661
Buses	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	6
Buses %	100.0	0.0	0.0	0.0	100.0	0.0	7.7	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	15.8	100.0	0.0	20.0	16.2
Single-Unit Trucks	0	0	0	0	0	0	9	2	0	11	1	0	0	0	1	0	14	0	0	14	26
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	69.2	100.0	0.0	73.3	100.0	0.0	0.0	0.0	100.0	0.0	73.7	0.0	0.0	70.0	70.3
Articulated Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0	10.0	13.5
Buses	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	6
Single-Unit Trucks	0	0	0	0	0	0	9	2	0	11	1	0	0	0	1	0	14	0	0	14	26
Articulated Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
Total Entering Leg	1	0	0	0	1	0	13	2	0	15	1	0	0	0	1	0	19	1	0	20	37
Buses					1					3					0					2	6
Single-Unit Trucks					0					15					2					9	26
Articulated Trucks					0					2					0					3	5
Total Exiting Leg					1					20					2					14	37

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	6
5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4
Grand Total	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	3	3	0	6	10
Approach %	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0		
Total %	30.0	0.0	0.0	0.0	30.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	0.0	60.0	
Exiting Leg Total					3					3					0					4	10

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	6
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.500	0.500
Entering Leg	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	6
Exiting Leg					1					3					0					2	6
Total					2					4					0					6	12

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	7	0	0	7	11
4:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	3
4:30 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
4:45 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	4
Total	0	0	0	0	0	0	9	2	0	11	1	0	0	0	1	0	14	0	0	14	26
5:00 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
5:15 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	8
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
Total	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	6	0	0	6	18
Grand Total	0	0	0	0	0	0	21	2	0	23	1	0	0	0	1	0	20	0	0	20	44
Approach %	0.0	0.0	0.0	0.0		0.0	91.3	8.7	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	47.7	4.5	0.0	52.3	2.3	0.0	0.0	0.0	2.3	0.0	45.5	0.0	0.0	45.5	
Exiting Leg Total					0					21					2					21	44

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot					Wilbur Avenue (Route 103)					Home Street					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	7	0	0	7	11
4:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	3
4:30 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
4:45 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	4
Total Volume	0	0	0	0	0	0	9	2	0	11	1	0	0	0	1	0	14	0	0	14	26
% Approach Total	0.0	0.0	0.0	0.0		0.0	81.8	18.2	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.563	0.500	0.000	0.688	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.500	0.591
Entering Leg	0	0	0	0	0	0	9	2	0	11	1	0	0	0	1	0	14	0	0	14	26
Exiting Leg					0					15					2					9	26
Total					0					26					3					23	52

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
5:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	6
Grand Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	11
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0	0.0	45.5	0.0	0.0	0.0	0.0	0.0	0.0	54.5	0.0	0.0	54.5	
Exiting Leg Total					0					6					0					5	11

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Park & Ride Lot from North					Wilbur Avenue (Route 103) from East					Home Street from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
5:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Total Volume	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.667
Entering Leg	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
Exiting Leg					0					4					0					4	8
Total					0					8					0					8	16

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Park & Ride Lot							Wilbur Avenue (Route 103)							Home Street							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot							Wilbur Avenue (Route 103)							Home Street							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 D**
Location: **N: Park & Ride Lot S: Home Street**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Pedestrians

	Park & Ride Lot							Wilbur Avenue (Route 103)							Home Street							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
Total	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4
Approach %	0	0	0	0	0	100		0	0	0	0	100	0		0	0	0	0	0	0		0	0	0	0	50	50		
Total %	0	0	0	0	0	25	25	0	0	0	0	25	0	25	0	0	0	0	0	0	0	0	0	0	0	25	25	50	
Exiting Leg Total							1							1							0							2	4

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Park & Ride Lot							Wilbur Avenue (Route 103)							Home Street							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
Total Volume	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.333
Entering Leg	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4
Exiting Leg							1							1							0							2	4
Total							2							2							0							4	8

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	107	0	0	107	46	0	0	46	1	94	0	95	248
7:15 AM	113	1	0	114	60	0	0	60	0	83	0	83	257
7:30 AM	115	1	0	116	48	0	0	48	1	71	0	72	236
7:45 AM	87	0	0	87	44	0	0	44	1	78	0	79	210
Total	422	2	0	424	198	0	0	198	3	326	0	329	951
8:00 AM	106	0	0	106	65	0	0	65	0	74	0	74	245
8:15 AM	110	0	0	110	49	0	0	49	2	88	0	90	249
8:30 AM	95	0	0	95	36	0	0	36	1	71	0	72	203
8:45 AM	87	0	0	87	55	1	0	56	0	76	0	76	219
Total	398	0	0	398	205	1	0	206	3	309	0	312	916
Grand Total	820	2	0	822	403	1	0	404	6	635	0	641	1867
Approach %	99.8	0.2	0.0		99.8	0.2	0.0		0.9	99.1	0.0		
Total %	43.9	0.1	0.0	44.0	21.6	0.1	0.0	21.6	0.3	34.0	0.0	34.3	
Exiting Leg Total				1038				8				821	1867
Cars	788	2	0	790	385	1	0	386	6	614	0	620	1796
% Cars	96.1	100.0	0.0	96.1	95.5	100.0	0.0	95.5	100.0	96.7	0.0	96.7	96.2
Exiting Leg Total				999				8				789	1796
Heavy Vehicles	32	0	0	32	18	0	0	18	0	21	0	21	71
% Heavy Vehicles	3.9	0.0	0.0	3.9	4.5	0.0	0.0	4.5	0.0	3.3	0.0	3.3	3.8
Exiting Leg Total				39				0				32	71

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	107	0	0	107	46	0	0	46	1	94	0	95	248
7:15 AM	113	1	0	114	60	0	0	60	0	83	0	83	257
7:30 AM	115	1	0	116	48	0	0	48	1	71	0	72	236
7:45 AM	87	0	0	87	44	0	0	44	1	78	0	79	210
Total Volume	422	2	0	424	198	0	0	198	3	326	0	329	951
% Approach Total	99.5	0.5	0.0		100.0	0.0	0.0		0.9	99.1	0.0		
PHF	0.917	0.500	0.000	0.914	0.825	0.000	0.000	0.825	0.750	0.867	0.000	0.866	0.925
Cars	408	2	0	410	190	0	0	190	3	317	0	320	920
Cars %	96.7	100.0	0.0	96.7	96.0	0.0	0.0	96.0	100.0	97.2	0.0	97.3	96.7
Heavy Vehicles	14	0	0	14	8	0	0	8	0	9	0	9	31
Heavy Vehicles %	3.3	0.0	0.0	3.3	4.0	0.0	0.0	4.0	0.0	2.8	0.0	2.7	3.3
Cars Enter Leg	408	2	0	410	190	0	0	190	3	317	0	320	920
Heavy Enter Leg	14	0	0	14	8	0	0	8	0	9	0	9	31
Total Entering Leg	422	2	0	424	198	0	0	198	3	326	0	329	951
Cars Exiting Leg				507				5				408	920
Heavy Exiting Leg				17				0				14	31
Total Exiting Leg				524				5				422	951

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	104	0	0	104	45	0	0	45	1	93	0	94	243
7:15 AM	110	1	0	111	59	0	0	59	0	79	0	79	249
7:30 AM	112	1	0	113	44	0	0	44	1	69	0	70	227
7:45 AM	82	0	0	82	42	0	0	42	1	76	0	77	201
Total	408	2	0	410	190	0	0	190	3	317	0	320	920
8:00 AM	102	0	0	102	62	0	0	62	0	74	0	74	238
8:15 AM	104	0	0	104	45	0	0	45	2	81	0	83	232
8:30 AM	90	0	0	90	35	0	0	35	1	66	0	67	192
8:45 AM	84	0	0	84	53	1	0	54	0	76	0	76	214
Total	380	0	0	380	195	1	0	196	3	297	0	300	876
Grand Total	788	2	0	790	385	1	0	386	6	614	0	620	1796
Approach %	99.7	0.3	0.0		99.7	0.3	0.0		1.0	99.0	0.0		
Total %	43.9	0.1	0.0	44.0	21.4	0.1	0.0	21.5	0.3	34.2	0.0	34.5	
Exiting Leg Total				999				8				789	1796

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	104	0	0	104	45	0	0	45	1	93	0	94	243
7:15 AM	110	1	0	111	59	0	0	59	0	79	0	79	249
7:30 AM	112	1	0	113	44	0	0	44	1	69	0	70	227
7:45 AM	82	0	0	82	42	0	0	42	1	76	0	77	201
Total Volume	408	2	0	410	190	0	0	190	3	317	0	320	920
% Approach Total	99.5	0.5	0.0		100.0	0.0	0.0		0.9	99.1	0.0		
PHF	0.911	0.500	0.000	0.907	0.805	0.000	0.000	0.805	0.750	0.852	0.000	0.851	0.924
Entering Leg	408	2	0	410	190	0	0	190	3	317	0	320	920
Exiting Leg				507				5				408	920
Total				917				195				728	1840

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	3	0	0	3	1	0	0	1	0	1	0	1	5
7:15 AM	3	0	0	3	1	0	0	1	0	4	0	4	8
7:30 AM	3	0	0	3	4	0	0	4	0	2	0	2	9
7:45 AM	5	0	0	5	2	0	0	2	0	2	0	2	9
Total	14	0	0	14	8	0	0	8	0	9	0	9	31
8:00 AM	4	0	0	4	3	0	0	3	0	0	0	0	7
8:15 AM	6	0	0	6	4	0	0	4	0	7	0	7	17
8:30 AM	5	0	0	5	1	0	0	1	0	5	0	5	11
8:45 AM	3	0	0	3	2	0	0	2	0	0	0	0	5
Total	18	0	0	18	10	0	0	10	0	12	0	12	40
Grand Total	32	0	0	32	18	0	0	18	0	21	0	21	71
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	45.1	0.0	0.0	45.1	25.4	0.0	0.0	25.4	0.0	29.6	0.0	29.6	
Exiting Leg Total				39				0				32	71
Buses	4	0	0	4	0	0	0	0	0	5	0	5	9
% Buses	12.5	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	23.8	0.0	23.8	12.7
Exiting Leg Total				5				0				4	9
Single-Unit Trucks	25	0	0	25	11	0	0	11	0	14	0	14	50
% Single-Unit	78.1	0.0	0.0	78.1	61.1	0.0	0.0	61.1	0.0	66.7	0.0	66.7	70.4
Exiting Leg Total				25				0				25	50
Articulated Trucks	3	0	0	3	7	0	0	7	0	2	0	2	12
% Articulated	9.4	0.0	0.0	9.4	38.9	0.0	0.0	38.9	0.0	9.5	0.0	9.5	16.9
Exiting Leg Total				9				0				3	12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:45 AM	5	0	0	5	2	0	0	2	0	2	0	2	9
8:00 AM	4	0	0	4	3	0	0	3	0	0	0	0	7
8:15 AM	6	0	0	6	4	0	0	4	0	7	0	7	17
8:30 AM	5	0	0	5	1	0	0	1	0	5	0	5	11
Total Volume	20	0	0	20	10	0	0	10	0	14	0	14	44
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.833	0.000	0.000	0.833	0.625	0.000	0.000	0.625	0.000	0.500	0.000	0.500	0.647
Buses	2	0	0	2	0	0	0	0	0	4	0	4	6
Buses %	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	28.6	0.0	28.6	13.6
Single-Unit Trucks	17	0	0	17	6	0	0	6	0	9	0	9	32
Single-Unit %	85.0	0.0	0.0	85.0	60.0	0.0	0.0	60.0	0.0	64.3	0.0	64.3	72.7
Articulated Trucks	1	0	0	1	4	0	0	4	0	1	0	1	6
Articulated %	5.0	0.0	0.0	5.0	40.0	0.0	0.0	40.0	0.0	7.1	0.0	7.1	13.6
Buses	2	0	0	2	0	0	0	0	0	4	0	4	6
Single-Unit Trucks	17	0	0	17	6	0	0	6	0	9	0	9	32
Articulated Trucks	1	0	0	1	4	0	0	4	0	1	0	1	6
Total Entering Leg	20	0	0	20	10	0	0	10	0	14	0	14	44
Buses				4				0				2	6
Single-Unit Trucks				15				0				17	32
Articulated Trucks				5				0				1	6
Total Exiting Leg				24				0				20	44

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	2	0	2	4
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	0	0	0	0	0	3	0	3	5
Grand Total	4	0	0	4	0	0	0	0	0	5	0	5	9
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	44.4	0.0	0.0	44.4	0.0	0.0	0.0	0.0	0.0	55.6	0.0	55.6	
Exiting Leg Total				5				0				4	9

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
Total Volume	2	0	0	2	0	0	0	0	0	4	0	4	6
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.333	0.375
Entering Leg	2	0	0	2	0	0	0	0	0	4	0	4	6
Exiting Leg				4				0				2	6
Total				6				0				6	12

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:15 AM	2	0	0	2	1	0	0	1	0	2	0	2	5
7:30 AM	3	0	0	3	2	0	0	2	0	2	0	2	7
7:45 AM	5	0	0	5	1	0	0	1	0	1	0	1	7
Total	10	0	0	10	5	0	0	5	0	6	0	6	21
8:00 AM	2	0	0	2	1	0	0	1	0	0	0	0	3
8:15 AM	5	0	0	5	3	0	0	3	0	3	0	3	11
8:30 AM	5	0	0	5	1	0	0	1	0	5	0	5	11
8:45 AM	3	0	0	3	1	0	0	1	0	0	0	0	4
Total	15	0	0	15	6	0	0	6	0	8	0	8	29
Grand Total	25	0	0	25	11	0	0	11	0	14	0	14	50
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	50.0	0.0	0.0	50.0	22.0	0.0	0.0	22.0	0.0	28.0	0.0	28.0	
Exiting Leg Total				25				0				25	50

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:45 AM	5	0	0	5	1	0	0	1	0	1	0	1	7
8:00 AM	2	0	0	2	1	0	0	1	0	0	0	0	3
8:15 AM	5	0	0	5	3	0	0	3	0	3	0	3	11
8:30 AM	5	0	0	5	1	0	0	1	0	5	0	5	11
Total Volume	17	0	0	17	6	0	0	6	0	9	0	9	32
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.850	0.000	0.000	0.850	0.500	0.000	0.000	0.500	0.000	0.450	0.000	0.450	0.727
Entering Leg	17	0	0	17	6	0	0	6	0	9	0	9	32
Exiting Leg				15				0				17	32
Total				32				6				26	64

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
7:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	2	0	0	2	3	0	0	3	0	1	0	1	6
8:00 AM	1	0	0	1	2	0	0	2	0	0	0	0	3
8:15 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	1	0	0	1	4	0	0	4	0	1	0	1	6
Grand Total	3	0	0	3	7	0	0	7	0	2	0	2	12
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	25.0	0.0	0.0	25.0	58.3	0.0	0.0	58.3	0.0	16.7	0.0	16.7	
Exiting Leg Total				9				0				3	12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
7:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:00 AM	1	0	0	1	2	0	0	2	0	0	0	0	3
8:15 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
Total Volume	1	0	0	1	6	0	0	6	0	1	0	1	8
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.750	0.000	0.000	0.750	0.000	0.250	0.000	0.250	0.667
Entering Leg	1	0	0	1	6	0	0	6	0	1	0	1	8
Exiting Leg				7				0				1	8
Total				8				6				2	16

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Bicycles (on Roadway and Crosswalks)**

	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	222	0	0	222	74	0	0	74	3	89	0	92	388
4:15 PM	183	0	0	183	81	0	0	81	2	95	0	97	361
4:30 PM	176	2	0	178	68	1	0	69	4	105	0	109	356
4:45 PM	204	1	0	205	73	0	0	73	1	116	0	117	395
Total	785	3	0	788	296	1	0	297	10	405	0	415	1500
5:00 PM	213	7	0	220	66	0	0	66	0	80	0	80	366
5:15 PM	200	2	1	203	75	1	0	76	2	91	0	93	372
5:30 PM	157	0	0	157	68	0	0	68	0	92	0	92	317
5:45 PM	158	0	0	158	70	0	0	70	0	86	0	86	314
Total	728	9	1	738	279	1	0	280	2	349	0	351	1369
Grand Total	1513	12	1	1526	575	2	0	577	12	754	0	766	2869
Approach %	99.1	0.8	0.1		99.7	0.3	0.0		1.6	98.4	0.0		
Total %	52.7	0.4	0.0	53.2	20.0	0.1	0.0	20.1	0.4	26.3	0.0	26.7	
Exiting Leg Total				1330				24				1515	2869
Cars	1494	12	1	1507	573	2	0	575	12	738	0	750	2832
% Cars	98.7	100.0	100.0	98.8	99.7	100.0	0.0	99.7	100.0	97.9	0.0	97.9	98.7
Exiting Leg Total				1312				24				1496	2832
Heavy Vehicles	19	0	0	19	2	0	0	2	0	16	0	16	37
% Heavy Vehicles	1.3	0.0	0.0	1.2	0.3	0.0	0.0	0.3	0.0	2.1	0.0	2.1	1.3
Exiting Leg Total				18				0				19	37

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	222	0	0	222	74	0	0	74	3	89	0	92	388
4:15 PM	183	0	0	183	81	0	0	81	2	95	0	97	361
4:30 PM	176	2	0	178	68	1	0	69	4	105	0	109	356
4:45 PM	204	1	0	205	73	0	0	73	1	116	0	117	395
Total Volume	785	3	0	788	296	1	0	297	10	405	0	415	1500
% Approach Total	99.6	0.4	0.0		99.7	0.3	0.0		2.4	97.6	0.0		
PHF	0.884	0.375	0.000	0.887	0.914	0.250	0.000	0.917	0.625	0.873	0.000	0.887	0.949
Cars	778	3	0	781	296	1	0	297	10	397	0	407	1485
Cars %	99.1	100.0	0.0	99.1	100.0	100.0	0.0	100.0	100.0	98.0	0.0	98.1	99.0
Heavy Vehicles	7	0	0	7	0	0	0	0	0	8	0	8	15
Heavy Vehicles %	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.9	1.0
Cars Enter Leg	778	3	0	781	296	1	0	297	10	397	0	407	1485
Heavy Enter Leg	7	0	0	7	0	0	0	0	0	8	0	8	15
Total Entering Leg	785	3	0	788	296	1	0	297	10	405	0	415	1500
Cars Exiting Leg				693				13				779	1485
Heavy Exiting Leg				8				0				7	15
Total Exiting Leg				701				13				786	1500

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	220	0	0	220	74	0	0	74	3	84	0	87	381
4:15 PM	183	0	0	183	81	0	0	81	2	95	0	97	361
4:30 PM	173	2	0	175	68	1	0	69	4	103	0	107	351
4:45 PM	202	1	0	203	73	0	0	73	1	115	0	116	392
Total	778	3	0	781	296	1	0	297	10	397	0	407	1485
5:00 PM	210	7	0	217	65	0	0	65	0	79	0	79	361
5:15 PM	194	2	1	197	74	1	0	75	2	89	0	91	363
5:30 PM	156	0	0	156	68	0	0	68	0	90	0	90	314
5:45 PM	156	0	0	156	70	0	0	70	0	83	0	83	309
Total	716	9	1	726	277	1	0	278	2	341	0	343	1347
Grand Total	1494	12	1	1507	573	2	0	575	12	738	0	750	2832
Approach %	99.1	0.8	0.1		99.7	0.3	0.0		1.6	98.4	0.0		
Total %	52.8	0.4	0.0	53.2	20.2	0.1	0.0	20.3	0.4	26.1	0.0	26.5	
Exiting Leg Total				1312				24				1496	2832

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	220	0	0	220	74	0	0	74	3	84	0	87	381
4:15 PM	183	0	0	183	81	0	0	81	2	95	0	97	361
4:30 PM	173	2	0	175	68	1	0	69	4	103	0	107	351
4:45 PM	202	1	0	203	73	0	0	73	1	115	0	116	392
Total Volume	778	3	0	781	296	1	0	297	10	397	0	407	1485
% Approach Total	99.6	0.4	0.0		99.7	0.3	0.0		2.5	97.5	0.0		
PHF	0.884	0.375	0.000	0.888	0.914	0.250	0.000	0.917	0.625	0.863	0.000	0.877	0.947
Entering Leg	778	3	0	781	296	1	0	297	10	397	0	407	1485
Exiting Leg				693				13				779	1485
Total				1474				310				1186	2970

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	2	0	0	2	0	0	0	0	0	5	0	5	7
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	3	0	0	3	0	0	0	0	0	2	0	2	5
4:45 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
Total	7	0	0	7	0	0	0	0	0	8	0	8	15
5:00 PM	3	0	0	3	1	0	0	1	0	1	0	1	5
5:15 PM	6	0	0	6	1	0	0	1	0	2	0	2	9
5:30 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
5:45 PM	2	0	0	2	0	0	0	0	0	3	0	3	5
Total	12	0	0	12	2	0	0	2	0	8	0	8	22
Grand Total	19	0	0	19	2	0	0	2	0	16	0	16	37
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	51.4	0.0	0.0	51.4	5.4	0.0	0.0	5.4	0.0	43.2	0.0	43.2	
Exiting Leg Total				18				0				19	37
Buses	1	0	0	1	2	0	0	2	0	4	0	4	7
% Buses	5.3	0.0	0.0	5.3	100.0	0.0	0.0	100.0	0.0	25.0	0.0	25.0	18.9
Exiting Leg Total				6				0				1	7
Single-Unit Trucks	14	0	0	14	0	0	0	0	0	9	0	9	23
% Single-Unit	73.7	0.0	0.0	73.7	0.0	0.0	0.0	0.0	0.0	56.3	0.0	56.3	62.2
Exiting Leg Total				9				0				14	23
Articulated Trucks	4	0	0	4	0	0	0	0	0	3	0	3	7
% Articulated	21.1	0.0	0.0	21.1	0.0	0.0	0.0	0.0	0.0	18.8	0.0	18.8	18.9
Exiting Leg Total				3				0				4	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:30 PM	3	0	0	3	0	0	0	0	0	2	0	2	5
4:45 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
5:00 PM	3	0	0	3	1	0	0	1	0	1	0	1	5
5:15 PM	6	0	0	6	1	0	0	1	0	2	0	2	9
Total Volume	14	0	0	14	2	0	0	2	0	6	0	6	22
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.583	0.000	0.000	0.583	0.500	0.000	0.000	0.500	0.000	0.750	0.000	0.750	0.611
Buses	0	0	0	0	2	0	0	2	0	3	0	3	5
Buses %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	50.0	0.0	50.0	22.7
Single-Unit Trucks	11	0	0	11	0	0	0	0	0	2	0	2	13
Single-Unit %	78.6	0.0	0.0	78.6	0.0	0.0	0.0	0.0	0.0	33.3	0.0	33.3	59.1
Articulated Trucks	3	0	0	3	0	0	0	0	0	1	0	1	4
Articulated %	21.4	0.0	0.0	21.4	0.0	0.0	0.0	0.0	0.0	16.7	0.0	16.7	18.2
Buses	0	0	0	0	2	0	0	2	0	3	0	3	5
Single-Unit Trucks	11	0	0	11	0	0	0	0	0	2	0	2	13
Articulated Trucks	3	0	0	3	0	0	0	0	0	1	0	1	4
Total Entering Leg	14	0	0	14	2	0	0	2	0	6	0	6	22
Buses				5				0				0	5
Single-Unit Trucks				2				0				11	13
Articulated Trucks				1				0				3	4
Total Exiting Leg				8				0				14	22

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	1	0	0	1	0	0	0	0	0	2	0	2	3
5:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	1	0	1	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	2	0	0	2	0	2	0	2	4
Grand Total	1	0	0	1	2	0	0	2	0	4	0	4	7
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	14.3	0.0	0.0	14.3	28.6	0.0	0.0	28.6	0.0	57.1	0.0	57.1	
Exiting Leg Total				6				0				1	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	1	0	1	0	1	2
Total Volume	0	0	0	0	2	0	0	2	0	3	0	3	5
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.750	0.000	0.750	0.625
Entering Leg	0	0	0	0	2	0	0	2	0	3	0	3	5
Exiting Leg				5				0				0	5
Total				5				2				3	10

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	1	0	0	1	0	0	0	0	0	5	0	5	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	0	0	4	0	0	0	0	0	6	0	6	10
5:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:15 PM	6	0	0	6	0	0	0	0	0	1	0	1	7
5:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	10	0	0	10	0	0	0	0	0	3	0	3	13
Grand Total	14	0	0	14	0	0	0	0	0	9	0	9	23
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	60.9	0.0	0.0	60.9	0.0	0.0	0.0	0.0	0.0	39.1	0.0	39.1	
Exiting Leg Total				9				0				14	23

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:30 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:15 PM	6	0	0	6	0	0	0	0	0	1	0	1	7
Total Volume	11	0	0	11	0	0	0	0	0	2	0	2	13
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.458	0.000	0.000	0.458	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.464
Entering Leg	11	0	0	11	0	0	0	0	0	2	0	2	13
Exiting Leg				2				0				11	13
Total				13				0				13	26

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
5:00 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	2	0	0	2	0	0	0	0	0	3	0	3	5
Grand Total	4	0	0	4	0	0	0	0	0	3	0	3	7
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	57.1	0.0	0.0	57.1	0.0	0.0	0.0	0.0	0.0	42.9	0.0	42.9	
Exiting Leg Total				3				0				4	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Wilbur Avenue (Route 103) from East				I-195 Westbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:00 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	3	0	0	3	0	0	0	0	0	2	0	2	5
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.625
Entering Leg	3	0	0	3	0	0	0	0	0	2	0	2	5
Exiting Leg				2				0				3	5
Total				5				0				5	10

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 E**
Location: **S: I-195 Westbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East						I-195 Westbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	158	0	0	158	0	0	0	0	124	98	0	222	380
7:15 AM	172	0	0	172	0	0	0	0	127	81	0	208	380
7:30 AM	179	0	0	179	0	0	0	0	202	73	0	275	454
7:45 AM	173	0	0	173	0	0	0	0	144	77	0	221	394
Total	682	0	0	682	0	0	0	0	597	329	0	926	1608
8:00 AM	182	0	0	182	0	0	0	0	126	76	0	202	384
8:15 AM	169	1	0	170	0	0	0	0	130	90	0	220	390
8:30 AM	162	0	0	162	0	0	0	0	120	74	0	194	356
8:45 AM	142	0	0	142	0	0	0	0	96	72	0	168	310
Total	655	1	0	656	0	0	0	0	472	312	0	784	1440
Grand Total	1337	1	0	1338	0	0	0	0	1069	641	0	1710	3048
Approach %	99.9	0.1	0.0		0.0	0.0	0.0		62.5	37.5	0.0		
Total %	43.9	0.0	0.0	43.9	0.0	0.0	0.0	0.0	35.1	21.0	0.0	56.1	
Exiting Leg Total				641				1070				1337	3048
Cars	1284	1	0	1285	0	0	0	0	1052	619	0	1671	2956
% Cars	96.0	100.0	0.0	96.0	0.0	0.0	0.0	0.0	98.4	96.6	0.0	97.7	97.0
Exiting Leg Total				619				1053				1284	2956
Heavy Vehicles	53	0	0	53	0	0	0	0	17	22	0	39	92
% Heavy Vehicles	4.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	1.6	3.4	0.0	2.3	3.0
Exiting Leg Total				22				17				53	92

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	179	0	0	179	0	0	0	0	202	73	0	275	454
7:45 AM	173	0	0	173	0	0	0	0	144	77	0	221	394
8:00 AM	182	0	0	182	0	0	0	0	126	76	0	202	384
8:15 AM	169	1	0	170	0	0	0	0	130	90	0	220	390
Total Volume	703	1	0	704	0	0	0	0	602	316	0	918	1622
% Approach Total	99.9	0.1	0.0		0.0	0.0	0.0		65.6	34.4	0.0		
PHF	0.966	0.250	0.000	0.967	0.000	0.000	0.000	0.000	0.745	0.878	0.000	0.835	0.893
Cars	675	1	0	676	0	0	0	0	592	304	0	896	1572
Cars %	96.0	100.0	0.0	96.0	0.0	0.0	0.0	0.0	98.3	96.2	0.0	97.6	96.9
Heavy Vehicles	28	0	0	28	0	0	0	0	10	12	0	22	50
Heavy Vehicles %	4.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	1.7	3.8	0.0	2.4	3.1
Cars Enter Leg	675	1	0	676	0	0	0	0	592	304	0	896	1572
Heavy Enter Leg	28	0	0	28	0	0	0	0	10	12	0	22	50
Total Entering Leg	703	1	0	704	0	0	0	0	602	316	0	918	1622
Cars Exiting Leg				304				593				675	1572
Heavy Exiting Leg				12				10				28	50
Total Exiting Leg				316				603				703	1622

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	151	0	0	151	0	0	0	0	121	97	0	218	369
7:15 AM	165	0	0	165	0	0	0	0	127	77	0	204	369
7:30 AM	174	0	0	174	0	0	0	0	200	71	0	271	445
7:45 AM	163	0	0	163	0	0	0	0	142	75	0	217	380
Total	653	0	0	653	0	0	0	0	590	320	0	910	1563
8:00 AM	178	0	0	178	0	0	0	0	124	75	0	199	377
8:15 AM	160	1	0	161	0	0	0	0	126	83	0	209	370
8:30 AM	155	0	0	155	0	0	0	0	118	69	0	187	342
8:45 AM	138	0	0	138	0	0	0	0	94	72	0	166	304
Total	631	1	0	632	0	0	0	0	462	299	0	761	1393
Grand Total	1284	1	0	1285	0	0	0	0	1052	619	0	1671	2956
Approach %	99.9	0.1	0.0		0.0	0.0	0.0		63.0	37.0	0.0		
Total %	43.4	0.0	0.0	43.5	0.0	0.0	0.0	0.0	35.6	20.9	0.0	56.5	
Exiting Leg Total				619				1053				1284	2956

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	174	0	0	174	0	0	0	0	200	71	0	271	445
7:45 AM	163	0	0	163	0	0	0	0	142	75	0	217	380
8:00 AM	178	0	0	178	0	0	0	0	124	75	0	199	377
8:15 AM	160	1	0	161	0	0	0	0	126	83	0	209	370
Total Volume	675	1	0	676	0	0	0	0	592	304	0	896	1572
% Approach Total	99.9	0.1	0.0		0.0	0.0	0.0		66.1	33.9	0.0		
PHF	0.948	0.250	0.000	0.949	0.000	0.000	0.000	0.000	0.740	0.916	0.000	0.827	0.883
Entering Leg	675	1	0	676	0	0	0	0	592	304	0	896	1572
Exiting Leg				304				593				675	1572
Total				980				593				1571	3144

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	7	0	0	7	0	0	0	0	3	1	0	4	11
7:15 AM	7	0	0	7	0	0	0	0	0	4	0	4	11
7:30 AM	5	0	0	5	0	0	0	0	2	2	0	4	9
7:45 AM	10	0	0	10	0	0	0	0	2	2	0	4	14
Total	29	0	0	29	0	0	0	0	7	9	0	16	45
8:00 AM	4	0	0	4	0	0	0	0	2	1	0	3	7
8:15 AM	9	0	0	9	0	0	0	0	4	7	0	11	20
8:30 AM	7	0	0	7	0	0	0	0	2	5	0	7	14
8:45 AM	4	0	0	4	0	0	0	0	2	0	0	2	6
Total	24	0	0	24	0	0	0	0	10	13	0	23	47
Grand Total	53	0	0	53	0	0	0	0	17	22	0	39	92
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		43.6	56.4	0.0		
Total %	57.6	0.0	0.0	57.6	0.0	0.0	0.0	0.0	18.5	23.9	0.0	42.4	
Exiting Leg Total				22				17				53	92
Buses	9	0	0	9	0	0	0	0	2	5	0	7	16
% Buses	17.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	11.8	22.7	0.0	17.9	17.4
Exiting Leg Total				5				2				9	16
Single-Unit Trucks	38	0	0	38	0	0	0	0	11	15	0	26	64
% Single-Unit	71.7	0.0	0.0	71.7	0.0	0.0	0.0	0.0	64.7	68.2	0.0	66.7	69.6
Exiting Leg Total				15				11				38	64
Articulated Trucks	6	0	0	6	0	0	0	0	4	2	0	6	12
% Articulated	11.3	0.0	0.0	11.3	0.0	0.0	0.0	0.0	23.5	9.1	0.0	15.4	13.0
Exiting Leg Total				2				4				6	12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:45 AM	10	0	0	10	0	0	0	0	2	2	0	4	14
8:00 AM	4	0	0	4	0	0	0	0	2	1	0	3	7
8:15 AM	9	0	0	9	0	0	0	0	4	7	0	11	20
8:30 AM	7	0	0	7	0	0	0	0	2	5	0	7	14
Total Volume	30	0	0	30	0	0	0	0	10	15	0	25	55
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		40.0	60.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.625	0.536	0.000	0.568	0.688
Buses	6	0	0	6	0	0	0	0	1	4	0	5	11
Buses %	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	10.0	26.7	0.0	20.0	20.0
Single-Unit Trucks	22	0	0	22	0	0	0	0	7	10	0	17	39
Single-Unit %	73.3	0.0	0.0	73.3	0.0	0.0	0.0	0.0	70.0	66.7	0.0	68.0	70.9
Articulated Trucks	2	0	0	2	0	0	0	0	2	1	0	3	5
Articulated %	6.7	0.0	0.0	6.7	0.0	0.0	0.0	0.0	20.0	6.7	0.0	12.0	9.1
Buses	6	0	0	6	0	0	0	0	1	4	0	5	11
Single-Unit Trucks	22	0	0	22	0	0	0	0	7	10	0	17	39
Articulated Trucks	2	0	0	2	0	0	0	0	2	1	0	3	5
Total Entering Leg	30	0	0	30	0	0	0	0	10	15	0	25	55
Buses				4				1				6	11
Single-Unit Trucks				10				7				22	39
Articulated Trucks				1				2				2	5
Total Exiting Leg				15				10				30	55

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	1	0	0	1	0	0	0	0	1	0	0	1	2
7:15 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	4	0	0	4	0	0	0	0	1	2	0	3	7
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	4	0	0	4	0	0	0	0	1	3	0	4	8
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	0	0	5	0	0	0	0	1	3	0	4	9
Grand Total	9	0	0	9	0	0	0	0	2	5	0	7	16
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		28.6	71.4	0.0		
Total %	56.3	0.0	0.0	56.3	0.0	0.0	0.0	0.0	12.5	31.3	0.0	43.8	
Exiting Leg Total				5				2				9	16

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	4	0	0	4	0	0	0	0	1	3	0	4	8
Total Volume	6	0	0	6	0	0	0	0	1	4	0	5	11
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		20.0	80.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.250	0.333	0.000	0.313	0.344
Entering Leg	6	0	0	6	0	0	0	0	1	4	0	5	11
Exiting Leg				4				1				6	11
Total				10				1				11	22

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	4	0	0	4	0	0	0	0	1	1	0	2	6
7:15 AM	4	0	0	4	0	0	0	0	0	2	0	2	6
7:30 AM	5	0	0	5	0	0	0	0	2	2	0	4	9
7:45 AM	9	0	0	9	0	0	0	0	2	1	0	3	12
Total	22	0	0	22	0	0	0	0	5	6	0	11	33
8:00 AM	2	0	0	2	0	0	0	0	1	1	0	2	4
8:15 AM	5	0	0	5	0	0	0	0	2	3	0	5	10
8:30 AM	6	0	0	6	0	0	0	0	2	5	0	7	13
8:45 AM	3	0	0	3	0	0	0	0	1	0	0	1	4
Total	16	0	0	16	0	0	0	0	6	9	0	15	31
Grand Total	38	0	0	38	0	0	0	0	11	15	0	26	64
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		42.3	57.7	0.0		
Total %	59.4	0.0	0.0	59.4	0.0	0.0	0.0	0.0	17.2	23.4	0.0	40.6	
Exiting Leg Total				15				11				38	64

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:45 AM	9	0	0	9	0	0	0	0	2	1	0	3	12
8:00 AM	2	0	0	2	0	0	0	0	1	1	0	2	4
8:15 AM	5	0	0	5	0	0	0	0	2	3	0	5	10
8:30 AM	6	0	0	6	0	0	0	0	2	5	0	7	13
Total Volume	22	0	0	22	0	0	0	0	7	10	0	17	39
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		41.2	58.8	0.0		
PHF	0.611	0.000	0.000	0.611	0.000	0.000	0.000	0.000	0.875	0.500	0.000	0.607	0.750
Entering Leg	22	0	0	22	0	0	0	0	7	10	0	17	39
Exiting Leg				10				7				22	39
Total				32				7				39	78

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	2	0	0	2	0	0	0	0	1	0	0	1	3
7:15 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	3	0	0	0	0	1	1	0	2	5
8:00 AM	1	0	0	1	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	0	1	1	0	2	2
8:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:45 AM	1	0	0	1	0	0	0	0	1	0	0	1	2
Total	3	0	0	3	0	0	0	0	3	1	0	4	7
Grand Total	6	0	0	6	0	0	0	0	4	2	0	6	12
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		66.7	33.3	0.0		
Total %	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	33.3	16.7	0.0	50.0	
Exiting Leg Total				2				4				6	12

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
8:00 AM	1	0	0	1	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	0	1	1	0	2	2
8:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:45 AM	1	0	0	1	0	0	0	0	1	0	0	1	2
Total Volume	3	0	0	3	0	0	0	0	3	1	0	4	7
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		75.0	25.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.750	0.250	0.000	0.500	0.875
Entering Leg	3	0	0	3	0	0	0	0	3	1	0	4	7
Exiting Leg				1				3				3	7
Total				4				3				7	14

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	347	2	0	349	0	0	0	0	131	93	0	224	573
4:15 PM	318	0	0	318	0	0	0	0	116	97	0	213	531
4:30 PM	297	0	0	297	0	0	0	0	129	110	0	239	536
4:45 PM	343	0	0	343	0	0	0	0	114	117	0	231	574
Total	1305	2	0	1307	0	0	0	0	490	417	0	907	2214
5:00 PM	334	0	0	334	0	0	0	0	108	78	0	186	520
5:15 PM	335	0	0	335	0	0	0	0	110	94	0	204	539
5:30 PM	289	0	0	289	0	0	0	0	109	96	0	205	494
5:45 PM	268	0	0	268	0	0	0	0	104	83	0	187	455
Total	1226	0	0	1226	0	0	0	0	431	351	0	782	2008
Grand Total	2531	2	0	2533	0	0	0	0	921	768	0	1689	4222
Approach %	99.9	0.1	0.0		0.0	0.0	0.0		54.5	45.5	0.0		
Total %	59.9	0.0	0.0	60.0	0.0	0.0	0.0	0.0	21.8	18.2	0.0	40.0	
Exiting Leg Total				768				923				2531	4222
Cars	2501	2	0	2503	0	0	0	0	907	753	0	1660	4163
% Cars	98.8	100.0	0.0	98.8	0.0	0.0	0.0	0.0	98.5	98.0	0.0	98.3	98.6
Exiting Leg Total				753				909				2501	4163
Heavy Vehicles	30	0	0	30	0	0	0	0	14	15	0	29	59
% Heavy Vehicles	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.5	2.0	0.0	1.7	1.4
Exiting Leg Total				15				14				30	59

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	347	2	0	349	0	0	0	0	131	93	0	224	573
4:15 PM	318	0	0	318	0	0	0	0	116	97	0	213	531
4:30 PM	297	0	0	297	0	0	0	0	129	110	0	239	536
4:45 PM	343	0	0	343	0	0	0	0	114	117	0	231	574
Total Volume	1305	2	0	1307	0	0	0	0	490	417	0	907	2214
% Approach Total	99.8	0.2	0.0		0.0	0.0	0.0		54.0	46.0	0.0		
PHF	0.940	0.250	0.000	0.936	0.000	0.000	0.000	0.000	0.935	0.891	0.000	0.949	0.964
Cars	1289	2	0	1291	0	0	0	0	478	408	0	886	2177
Cars %	98.8	100.0	0.0	98.8	0.0	0.0	0.0	0.0	97.6	97.8	0.0	97.7	98.3
Heavy Vehicles	16	0	0	16	0	0	0	0	12	9	0	21	37
Heavy Vehicles %	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.4	2.2	0.0	2.3	1.7
Cars Enter Leg	1289	2	0	1291	0	0	0	0	478	408	0	886	2177
Heavy Enter Leg	16	0	0	16	0	0	0	0	12	9	0	21	37
Total Entering Leg	1305	2	0	1307	0	0	0	0	490	417	0	907	2214
Cars Exiting Leg				408				480				1289	2177
Heavy Exiting Leg				9				12				16	37
Total Exiting Leg				417				492				1305	2214

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	343	2	0	345	0	0	0	0	126	88	0	214	559
4:15 PM	316	0	0	316	0	0	0	0	114	97	0	211	527
4:30 PM	291	0	0	291	0	0	0	0	125	108	0	233	524
4:45 PM	339	0	0	339	0	0	0	0	113	115	0	228	567
Total	1289	2	0	1291	0	0	0	0	478	408	0	886	2177
5:00 PM	331	0	0	331	0	0	0	0	106	78	0	184	515
5:15 PM	327	0	0	327	0	0	0	0	110	92	0	202	529
5:30 PM	288	0	0	288	0	0	0	0	109	94	0	203	491
5:45 PM	266	0	0	266	0	0	0	0	104	81	0	185	451
Total	1212	0	0	1212	0	0	0	0	429	345	0	774	1986
Grand Total	2501	2	0	2503	0	0	0	0	907	753	0	1660	4163
Approach %	99.9	0.1	0.0		0.0	0.0	0.0		54.6	45.4	0.0		
Total %	60.1	0.0	0.0	60.1	0.0	0.0	0.0	0.0	21.8	18.1	0.0	39.9	
Exiting Leg Total				753				909				2501	4163

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	343	2	0	345	0	0	0	0	126	88	0	214	559
4:15 PM	316	0	0	316	0	0	0	0	114	97	0	211	527
4:30 PM	291	0	0	291	0	0	0	0	125	108	0	233	524
4:45 PM	339	0	0	339	0	0	0	0	113	115	0	228	567
Total Volume	1289	2	0	1291	0	0	0	0	478	408	0	886	2177
% Approach Total	99.8	0.2	0.0		0.0	0.0	0.0		54.0	46.0	0.0		
PHF	0.940	0.250	0.000	0.936	0.000	0.000	0.000	0.000	0.948	0.887	0.000	0.951	0.960
Entering Leg	1289	2	0	1291	0	0	0	0	478	408	0	886	2177
Exiting Leg				408				480				1289	2177
Total				1699				480				2175	4354

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	4	0	0	4	0	0	0	0	5	5	0	10	14
4:15 PM	2	0	0	2	0	0	0	0	2	0	0	2	4
4:30 PM	6	0	0	6	0	0	0	0	4	2	0	6	12
4:45 PM	4	0	0	4	0	0	0	0	1	2	0	3	7
Total	16	0	0	16	0	0	0	0	12	9	0	21	37
5:00 PM	3	0	0	3	0	0	0	0	2	0	0	2	5
5:15 PM	8	0	0	8	0	0	0	0	0	2	0	2	10
5:30 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
5:45 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
Total	14	0	0	14	0	0	0	0	2	6	0	8	22
Grand Total	30	0	0	30	0	0	0	0	14	15	0	29	59
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		48.3	51.7	0.0		
Total %	50.8	0.0	0.0	50.8	0.0	0.0	0.0	0.0	23.7	25.4	0.0	49.2	
Exiting Leg Total				15				14				30	59
Buses	1	0	0	1	0	0	0	0	2	4	0	6	7
% Buses	3.3	0.0	0.0	3.3	0.0	0.0	0.0	0.0	14.3	26.7	0.0	20.7	11.9
Exiting Leg Total				4				2				1	7
Single-Unit Trucks	24	0	0	24	0	0	0	0	10	10	0	20	44
% Single-Unit	80.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	71.4	66.7	0.0	69.0	74.6
Exiting Leg Total				10				10				24	44
Articulated Trucks	5	0	0	5	0	0	0	0	2	1	0	3	8
% Articulated	16.7	0.0	0.0	16.7	0.0	0.0	0.0	0.0	14.3	6.7	0.0	10.3	13.6
Exiting Leg Total				1				2				5	8

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	4	0	0	4	0	0	0	0	5	5	0	10	14
4:15 PM	2	0	0	2	0	0	0	0	2	0	0	2	4
4:30 PM	6	0	0	6	0	0	0	0	4	2	0	6	12
4:45 PM	4	0	0	4	0	0	0	0	1	2	0	3	7
Total Volume	16	0	0	16	0	0	0	0	12	9	0	21	37
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		57.1	42.9	0.0		
PHF	0.667	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.600	0.450	0.000	0.525	0.661
Buses	1	0	0	1	0	0	0	0	2	2	0	4	5
Buses %	6.3	0.0	0.0	6.3	0.0	0.0	0.0	0.0	16.7	22.2	0.0	19.0	13.5
Single-Unit Trucks	12	0	0	12	0	0	0	0	9	7	0	16	28
Single-Unit %	75.0	0.0	0.0	75.0	0.0	0.0	0.0	0.0	75.0	77.8	0.0	76.2	75.7
Articulated Trucks	3	0	0	3	0	0	0	0	1	0	0	1	4
Articulated %	18.8	0.0	0.0	18.8	0.0	0.0	0.0	0.0	8.3	0.0	0.0	4.8	10.8
Buses	1	0	0	1	0	0	0	0	2	2	0	4	5
Single-Unit Trucks	12	0	0	12	0	0	0	0	9	7	0	16	28
Articulated Trucks	3	0	0	3	0	0	0	0	1	0	0	1	4
Total Entering Leg	16	0	0	16	0	0	0	0	12	9	0	21	37
Buses				2				2				1	5
Single-Unit Trucks				7				9				12	28
Articulated Trucks				0				1				3	4
Total Exiting Leg				9				12				16	37

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	1	0	0	1	0	0	0	0	2	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	1	0	0	1	0	0	0	0	2	2	0	4	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	2	0	2	2
Grand Total	1	0	0	1	0	0	0	0	2	4	0	6	7
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		33.3	66.7	0.0		
Total %	14.3	0.0	0.0	14.3	0.0	0.0	0.0	0.0	28.6	57.1	0.0	85.7	
Exiting Leg Total				4				2				1	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	1	0	0	1	0	0	0	0	2	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	1	0	0	1	0	0	0	0	2	2	0	4	5
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		50.0	50.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.500	0.417
Entering Leg	1	0	0	1	0	0	0	0	2	2	0	4	5
Exiting Leg				2				2				1	5
Total				3				2				5	10

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	3	0	0	3	0	0	0	0	3	5	0	8	11
4:15 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
4:30 PM	6	0	0	6	0	0	0	0	4	1	0	5	11
4:45 PM	2	0	0	2	0	0	0	0	1	1	0	2	4
Total	12	0	0	12	0	0	0	0	9	7	0	16	28
5:00 PM	2	0	0	2	0	0	0	0	1	0	0	1	3
5:15 PM	8	0	0	8	0	0	0	0	0	1	0	1	9
5:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	12	0	0	12	0	0	0	0	1	3	0	4	16
Grand Total	24	0	0	24	0	0	0	0	10	10	0	20	44
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		50.0	50.0	0.0		
Total %	54.5	0.0	0.0	54.5	0.0	0.0	0.0	0.0	22.7	22.7	0.0	45.5	
Exiting Leg Total				10				10				24	44

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	3	0	0	3	0	0	0	0	3	5	0	8	11
4:15 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
4:30 PM	6	0	0	6	0	0	0	0	4	1	0	5	11
4:45 PM	2	0	0	2	0	0	0	0	1	1	0	2	4
Total Volume	12	0	0	12	0	0	0	0	9	7	0	16	28
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		56.3	43.8	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.563	0.350	0.000	0.500	0.636
Entering Leg	12	0	0	12	0	0	0	0	9	7	0	16	28
Exiting Leg				7				9				12	28
Total				19				9				28	56

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	3	0	0	3	0	0	0	0	1	0	0	1	4
5:00 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	0	0	0	1	1	0	2	4
Grand Total	5	0	0	5	0	0	0	0	2	1	0	3	8
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		66.7	33.3	0.0		
Total %	62.5	0.0	0.0	62.5	0.0	0.0	0.0	0.0	25.0	12.5	0.0	37.5	
Exiting Leg Total				1				2				5	8

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Wilbur Avenue (Route 103) from East				I-195 Eastbound Ramps from South				Wilbur Avenue (Route 103) from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:15 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:00 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
Total Volume	4	0	0	4	0	0	0	0	2	0	0	2	6
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.750
Entering Leg	4	0	0	4	0	0	0	0	2	0	0	2	6
Exiting Leg				0				2				4	6
Total				4				2				6	12

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	
Exiting Leg Total						2						0						0	2

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.500
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Exiting Leg						2						0						0	2
Total						2						0						2	4

PDI File #: **228671 F**
Location: **S: I-195 Eastbound Ramps**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Wilbur Avenue (Route 103) from East						I-195 Eastbound Ramps from South						Wilbur Avenue (Route 103) from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	48	7	6	0	61	2	43	2	0	47	7	10	17	0	34	6	77	48	0	131	273
7:15 AM	46	5	4	0	55	2	46	1	0	49	4	14	15	0	33	12	73	55	0	140	277
7:30 AM	57	5	5	0	67	11	44	1	0	56	10	18	8	0	36	4	48	60	0	112	271
7:45 AM	39	5	5	0	49	5	36	3	0	44	2	8	12	0	22	5	63	51	0	119	234
Total	190	22	20	0	232	20	169	7	0	196	23	50	52	0	125	27	261	214	0	502	1055
8:00 AM	54	11	5	0	70	0	44	4	0	48	3	6	13	0	22	8	61	59	0	128	268
8:15 AM	33	4	5	0	42	9	58	1	0	68	5	18	14	0	37	5	61	71	0	137	284
8:30 AM	47	4	3	0	54	5	38	3	0	46	2	8	11	0	21	5	49	51	0	105	226
8:45 AM	29	13	5	0	47	2	39	2	0	43	2	10	11	0	23	5	58	67	0	130	243
Total	163	32	18	0	213	16	179	10	0	205	12	42	49	0	103	23	229	248	0	500	1021
Grand Total	353	54	38	0	445	36	348	17	0	401	35	92	101	0	228	50	490	462	0	1002	2076
Approach %	79.3	12.1	8.5	0.0		9.0	86.8	4.2	0.0		15.4	40.4	44.3	0.0		5.0	48.9	46.1	0.0		
Total %	17.0	2.6	1.8	0.0	21.4	1.7	16.8	0.8	0.0	19.3	1.7	4.4	4.9	0.0	11.0	2.4	23.6	22.3	0.0	48.3	
Exiting Leg Total					590					563					121					802	2076
Cars	338	52	35	0	425	35	331	15	0	381	31	89	100	0	220	49	473	441	0	963	1989
% Cars	95.8	96.3	92.1	0.0	95.5	97.2	95.1	88.2	0.0	95.0	88.6	96.7	99.0	0.0	96.5	98.0	96.5	95.5	0.0	96.1	95.8
Exiting Leg Total					565					539					116					769	1989
Heavy Vehicles	15	2	3	0	20	1	17	2	0	20	4	3	1	0	8	1	17	21	0	39	87
% Heavy Vehicles	4.2	3.7	7.9	0.0	4.5	2.8	4.9	11.8	0.0	5.0	11.4	3.3	1.0	0.0	3.5	2.0	3.5	4.5	0.0	3.9	4.2
Exiting Leg Total					25					24					5					33	87

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	57	5	5	0	67	11	44	1	0	56	10	18	8	0	36	4	48	60	0	112	271
7:45 AM	39	5	5	0	49	5	36	3	0	44	2	8	12	0	22	5	63	51	0	119	234
8:00 AM	54	11	5	0	70	0	44	4	0	48	3	6	13	0	22	8	61	59	0	128	268
8:15 AM	33	4	5	0	42	9	58	1	0	68	5	18	14	0	37	5	61	71	0	137	284
Total Volume	183	25	20	0	228	25	182	9	0	216	20	50	47	0	117	22	233	241	0	496	1057
% Approach Total	80.3	11.0	8.8	0.0		11.6	84.3	4.2	0.0		17.1	42.7	40.2	0.0		4.4	47.0	48.6	0.0		
PHF	0.803	0.568	1.000	0.000	0.814	0.568	0.784	0.563	0.000	0.794	0.500	0.694	0.839	0.000	0.791	0.688	0.925	0.849	0.000	0.905	0.930
Cars	176	25	19	0	220	24	171	7	0	202	17	49	47	0	113	22	222	228	0	472	1007
Cars %	96.2	100.0	95.0	0.0	96.5	96.0	94.0	77.8	0.0	93.5	85.0	98.0	100.0	0.0	96.6	100.0	95.3	94.6	0.0	95.2	95.3
Heavy Vehicles	7	0	1	0	8	1	11	2	0	14	3	1	0	0	4	0	11	13	0	24	50
Heavy Vehicles %	3.8	0.0	5.0	0.0	3.5	4.0	6.0	22.2	0.0	6.5	15.0	2.0	0.0	0.0	3.4	0.0	4.7	5.4	0.0	4.8	4.7
Cars Enter Leg	176	25	19	0	220	24	171	7	0	202	17	49	47	0	113	22	222	228	0	472	1007
Heavy Enter Leg	7	0	1	0	8	1	11	2	0	14	3	1	0	0	4	0	11	13	0	24	50
Total Entering Leg	183	25	20	0	228	25	182	9	0	216	20	50	47	0	117	22	233	241	0	496	1057
Cars Exiting Leg					301					258					54					394	1007
Heavy Exiting Leg					15					15					2					18	50
Total Exiting Leg					316					273					56					412	1057

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	47	6	6	0	59	2	42	2	0	46	7	9	16	0	32	6	76	47	0	129	266
7:15 AM	44	4	4	0	52	2	45	1	0	48	3	14	15	0	32	11	73	52	0	136	268
7:30 AM	56	5	4	0	65	10	42	1	0	53	10	18	8	0	36	4	45	57	0	106	260
7:45 AM	37	5	5	0	47	5	33	3	0	41	2	8	12	0	22	5	62	48	0	115	225
Total	184	20	19	0	223	19	162	7	0	188	22	49	51	0	122	26	256	204	0	486	1019
8:00 AM	53	11	5	0	69	0	39	2	0	41	3	6	13	0	22	8	60	57	0	125	257
8:15 AM	30	4	5	0	39	9	57	1	0	67	2	17	14	0	33	5	55	66	0	126	265
8:30 AM	42	4	3	0	49	5	36	3	0	44	2	8	11	0	21	5	45	49	0	99	213
8:45 AM	29	13	3	0	45	2	37	2	0	41	2	9	11	0	22	5	57	65	0	127	235
Total	154	32	16	0	202	16	169	8	0	193	9	40	49	0	98	23	217	237	0	477	970
Grand Total	338	52	35	0	425	35	331	15	0	381	31	89	100	0	220	49	473	441	0	963	1989
Approach %	79.5	12.2	8.2	0.0		9.2	86.9	3.9	0.0		14.1	40.5	45.5	0.0		5.1	49.1	45.8	0.0		
Total %	17.0	2.6	1.8	0.0	21.4	1.8	16.6	0.8	0.0	19.2	1.6	4.5	5.0	0.0	11.1	2.5	23.8	22.2	0.0	48.4	
Exiting Leg Total					565					539					116					769	1989

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	47	6	6	0	59	2	42	2	0	46	7	9	16	0	32	6	76	47	0	129	266
7:15 AM	44	4	4	0	52	2	45	1	0	48	3	14	15	0	32	11	73	52	0	136	268
7:30 AM	56	5	4	0	65	10	42	1	0	53	10	18	8	0	36	4	45	57	0	106	260
7:45 AM	37	5	5	0	47	5	33	3	0	41	2	8	12	0	22	5	62	48	0	115	225
Total Volume	184	20	19	0	223	19	162	7	0	188	22	49	51	0	122	26	256	204	0	486	1019
% Approach Total	82.5	9.0	8.5	0.0		10.1	86.2	3.7	0.0		18.0	40.2	41.8	0.0		5.3	52.7	42.0	0.0		
PHF	0.821	0.833	0.792	0.000	0.858	0.475	0.900	0.583	0.000	0.887	0.550	0.681	0.797	0.000	0.847	0.591	0.842	0.895	0.000	0.893	0.951
Entering Leg	184	20	19	0	223	19	162	7	0	188	22	49	51	0	122	26	256	204	0	486	1019
Exiting Leg					272					297					53					397	1019
Total					495					485					175					883	2038

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	1	1	0	0	2	0	1	0	0	1	0	1	1	0	2	0	1	1	0	2	7
7:15 AM	2	1	0	0	3	0	1	0	0	1	1	0	0	0	1	1	0	3	0	4	9
7:30 AM	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	0	3	3	0	6	11
7:45 AM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	9
Total	6	2	1	0	9	1	7	0	0	8	1	1	1	0	3	1	5	10	0	16	36
8:00 AM	1	0	0	0	1	0	5	2	0	7	0	0	0	0	0	0	1	2	0	3	11
8:15 AM	3	0	0	0	3	0	1	0	0	1	3	1	0	0	4	0	6	5	0	11	19
8:30 AM	5	0	0	0	5	0	2	0	0	2	0	0	0	0	0	0	4	2	0	6	13
8:45 AM	0	0	2	0	2	0	2	0	0	2	0	1	0	0	1	0	1	2	0	3	8
Total	9	0	2	0	11	0	10	2	0	12	3	2	0	0	5	0	12	11	0	23	51
Grand Total	15	2	3	0	20	1	17	2	0	20	4	3	1	0	8	1	17	21	0	39	87
Approach %	75.0	10.0	15.0	0.0		5.0	85.0	10.0	0.0		50.0	37.5	12.5	0.0		2.6	43.6	53.8	0.0		
Total %	17.2	2.3	3.4	0.0	23.0	1.1	19.5	2.3	0.0	23.0	4.6	3.4	1.1	0.0	9.2	1.1	19.5	24.1	0.0	44.8	
Exiting Leg Total					25					24					5					33	87
Buses	1	1	3	0	5	0	2	0	0	2	1	1	1	0	3	0	3	2	0	5	15
% Buses	6.7	50.0	100.0	0.0	25.0	0.0	11.8	0.0	0.0	10.0	25.0	33.3	100.0	0.0	37.5	0.0	17.6	9.5	0.0	12.8	17.2
Exiting Leg Total					3					7					1					4	15
Single-Unit Trucks	14	1	0	0	15	1	12	2	0	15	3	2	0	0	5	1	13	12	0	26	61
% Single-Unit	93.3	50.0	0.0	0.0	75.0	100.0	70.6	100.0	0.0	75.0	75.0	66.7	0.0	0.0	62.5	100.0	76.5	57.1	0.0	66.7	70.1
Exiting Leg Total					15					16					4					26	61
Articulated Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	7	0	8	11
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	33.3	0.0	20.5	12.6
Exiting Leg Total					7					1					0					3	11

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	9
8:00 AM	1	0	0	0	1	0	5	2	0	7	0	0	0	0	0	0	1	2	0	3	11
8:15 AM	3	0	0	0	3	0	1	0	0	1	3	1	0	0	4	0	6	5	0	11	19
8:30 AM	5	0	0	0	5	0	2	0	0	2	0	0	0	0	0	0	4	2	0	6	13
Total Volume	11	0	0	0	11	0	11	2	0	13	3	1	0	0	4	0	12	12	0	24	52
% Approach Total	100.0	0.0	0.0	0.0		0.0	84.6	15.4	0.0		75.0	25.0	0.0	0.0		0.0	50.0	50.0	0.0		
PHF	0.550	0.000	0.000	0.000	0.550	0.000	0.550	0.250	0.000	0.464	0.250	0.250	0.000	0.000	0.250	0.000	0.500	0.600	0.000	0.545	0.684
Buses	1	0	0	0	1	0	1	0	0	1	1	1	0	0	2	0	3	1	0	4	8
Buses %	9.1	0.0	0.0	0.0	9.1	0.0	9.1	0.0	0.0	7.7	33.3	100.0	0.0	0.0	50.0	0.0	25.0	8.3	0.0	16.7	15.4
Single-Unit Trucks	10	0	0	0	10	0	9	2	0	11	2	0	0	0	2	0	8	8	0	16	39
Single-Unit %	90.9	0.0	0.0	0.0	90.9	0.0	81.8	100.0	0.0	84.6	66.7	0.0	0.0	0.0	50.0	0.0	66.7	66.7	0.0	66.7	75.0
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	3	0	4	5
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	8.3	25.0	0.0	16.7	9.6
Buses	1	0	0	0	1	0	1	0	0	1	1	1	0	0	2	0	3	1	0	4	8
Single-Unit Trucks	10	0	0	0	10	0	9	2	0	11	2	0	0	0	2	0	8	8	0	16	39
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	3	0	4	5
Total Entering Leg	11	0	0	0	11	0	11	2	0	13	3	1	0	0	4	0	12	12	0	24	52
Buses					2					4					0					2	8
Single-Unit Trucks					8					10					2					19	39
Articulated Trucks					3					1					0					1	5
Total Exiting Leg					13					15					2					22	52

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
7:15 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	3
7:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	1	0	2	0	1	0	0	1	0	0	1	0	1	0	1	1	0	2	6
8:00 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	1	0	3	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	0	2	0	3	0	1	0	0	1	1	1	0	0	2	0	2	1	0	3	9
Grand Total	1	1	3	0	5	0	2	0	0	2	1	1	1	0	3	0	3	2	0	5	15
Approach %	20.0	20.0	60.0	0.0		0.0	100.0	0.0	0.0		33.3	33.3	33.3	0.0		0.0	60.0	40.0	0.0		
Total %	6.7	6.7	20.0	0.0	33.3	0.0	13.3	0.0	0.0	13.3	6.7	6.7	6.7	0.0	20.0	0.0	20.0	13.3	0.0	33.3	
Exiting Leg Total					3					7					1					4	15

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
8:00 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	1	0	3	5
Total Volume	1	0	1	0	2	0	1	0	0	1	1	1	0	0	2	0	3	1	0	4	9
% Approach Total	50.0	0.0	50.0	0.0		0.0	100.0	0.0	0.0		50.0	50.0	0.0	0.0		0.0	75.0	25.0	0.0		
PHF	0.250	0.000	0.250	0.000	0.500	0.000	0.250	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.250	0.000	0.375	0.250	0.000	0.333	0.450
Entering Leg	1	0	1	0	2	0	1	0	0	1	1	1	0	0	2	0	3	1	0	4	9
Exiting Leg					2					5					0					2	9
Total					4					6					2					6	18

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	5
7:15 AM	2	0	0	0	2	0	0	0	0	0	1	0	0	0	1	1	0	1	0	2	5
7:30 AM	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	0	3	1	0	4	8
7:45 AM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	2	0	2	7
Total	6	1	0	0	7	1	5	0	0	6	1	1	0	0	2	1	4	5	0	10	25
8:00 AM	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	1	0	0	1	6
8:15 AM	3	0	0	0	3	0	1	0	0	1	2	0	0	0	2	0	3	4	0	7	13
8:30 AM	5	0	0	0	5	0	2	0	0	2	0	0	0	0	0	0	4	2	0	6	13
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	1	0	2	4
Total	8	0	0	0	8	0	7	2	0	9	2	1	0	0	3	0	9	7	0	16	36
Grand Total	14	1	0	0	15	1	12	2	0	15	3	2	0	0	5	1	13	12	0	26	61
Approach %	93.3	6.7	0.0	0.0		6.7	80.0	13.3	0.0		60.0	40.0	0.0	0.0		3.8	50.0	46.2	0.0		
Total %	23.0	1.6	0.0	0.0	24.6	1.6	19.7	3.3	0.0	24.6	4.9	3.3	0.0	0.0	8.2	1.6	21.3	19.7	0.0	42.6	
Exiting Leg Total					15					16					4					26	61

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	2	0	2	7
8:00 AM	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	1	0	0	1	6
8:15 AM	3	0	0	0	3	0	1	0	0	1	2	0	0	0	2	0	3	4	0	7	13
8:30 AM	5	0	0	0	5	0	2	0	0	2	0	0	0	0	0	0	4	2	0	6	13
Total Volume	10	0	0	0	10	0	9	2	0	11	2	0	0	0	2	0	8	8	0	16	39
% Approach Total	100.0	0.0	0.0	0.0		0.0	81.8	18.2	0.0		100.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0		
PHF	0.500	0.000	0.000	0.000	0.500	0.000	0.750	0.250	0.000	0.550	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.500	0.000	0.571	0.750
Entering Leg	10	0	0	0	10	0	9	2	0	11	2	0	0	0	2	0	8	8	0	16	39
Exiting Leg					8					10					2					19	39
Total					18					21					4					35	78

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4	0	4	5
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	3	0	4	6
Grand Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	7	0	8	11
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	12.5	87.5	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	27.3	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	0.0	9.1	63.6	0.0	72.7	
Exiting Leg Total					7					1					0					3	11

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	6	0	6	7
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	0.583
Entering Leg	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	6	0	6	7
Exiting Leg					6					0					0					1	7
Total					6					1					0					7	14

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Bicycles (on Roadway and Crosswalks)

	Brayton Point Road from North							Wilbur Avenue (Route 103) from East							Brayton Point Road from South							Wilbur Avenue (Route 103) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road from North							Wilbur Avenue (Route 103) from East							Brayton Point Road from South							Wilbur Avenue (Route 103) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Pedestrians**

	Brayton Point Road							Wilbur Avenue (Route 103)							Brayton Point Road							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road							Wilbur Avenue (Route 103)							Brayton Point Road							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	83	12	4	0	99	13	118	8	0	139	6	15	10	0	31	11	63	77	0	151	420
4:15 PM	74	18	13	0	105	10	101	8	0	119	2	13	10	0	25	11	76	78	0	165	414
4:30 PM	65	13	7	0	85	7	86	4	0	97	3	12	10	0	25	16	64	91	0	171	378
4:45 PM	83	12	9	0	104	7	96	3	0	106	2	10	22	0	34	20	53	102	0	175	419
Total	305	55	33	0	393	37	401	23	0	461	13	50	52	0	115	58	256	348	0	662	1631
5:00 PM	92	18	9	0	119	5	121	6	0	132	6	10	12	0	28	14	55	83	0	152	431
5:15 PM	91	16	6	0	113	7	82	8	0	97	4	7	15	0	26	24	44	84	0	152	388
5:30 PM	65	11	4	0	80	12	79	7	0	98	8	11	5	0	24	18	58	81	0	157	359
5:45 PM	70	14	6	0	90	5	66	10	0	81	6	14	13	0	33	23	53	75	0	151	355
Total	318	59	25	0	402	29	348	31	0	408	24	42	45	0	111	79	210	323	0	612	1533
Grand Total	623	114	58	0	795	66	749	54	0	869	37	92	97	0	226	137	466	671	0	1274	3164
Approach %	78.4	14.3	7.3	0.0		7.6	86.2	6.2	0.0		16.4	40.7	42.9	0.0		10.8	36.6	52.7	0.0		
Total %	19.7	3.6	1.8	0.0	25.1	2.1	23.7	1.7	0.0	27.5	1.2	2.9	3.1	0.0	7.1	4.3	14.7	21.2	0.0	40.3	
Exiting Leg Total					829					561					305					1469	3164
Cars	619	113	56	0	788	63	738	52	0	853	36	92	94	0	222	135	458	664	0	1257	3120
% Cars	99.4	99.1	96.6	0.0	99.1	95.5	98.5	96.3	0.0	98.2	97.3	100.0	96.9	0.0	98.2	98.5	98.3	99.0	0.0	98.7	98.6
Exiting Leg Total					819					550					300					1451	3120
Heavy Vehicles	4	1	2	0	7	3	11	2	0	16	1	0	3	0	4	2	8	7	0	17	44
% Heavy Vehicles	0.6	0.9	3.4	0.0	0.9	4.5	1.5	3.7	0.0	1.8	2.7	0.0	3.1	0.0	1.8	1.5	1.7	1.0	0.0	1.3	1.4
Exiting Leg Total					10					11					5					18	44

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:15 PM	74	18	13	0	105	10	101	8	0	119	2	13	10	0	25	11	76	78	0	165	414
4:30 PM	65	13	7	0	85	7	86	4	0	97	3	12	10	0	25	16	64	91	0	171	378
4:45 PM	83	12	9	0	104	7	96	3	0	106	2	10	22	0	34	20	53	102	0	175	419
5:00 PM	92	18	9	0	119	5	121	6	0	132	6	10	12	0	28	14	55	83	0	152	431
Total Volume	314	61	38	0	413	29	404	21	0	454	13	45	54	0	112	61	248	354	0	663	1642
% Approach Total	76.0	14.8	9.2	0.0		6.4	89.0	4.6	0.0		11.6	40.2	48.2	0.0		9.2	37.4	53.4	0.0		
PHF	0.853	0.847	0.731	0.000	0.868	0.725	0.835	0.656	0.000	0.860	0.542	0.865	0.614	0.000	0.824	0.763	0.816	0.868	0.000	0.947	0.952
Cars	313	60	38	0	411	27	398	21	0	446	13	45	52	0	110	60	245	352	0	657	1624
Cars %	99.7	98.4	100.0	0.0	99.5	93.1	98.5	100.0	0.0	98.2	100.0	100.0	96.3	0.0	98.2	98.4	98.8	99.4	0.0	99.1	98.9
Heavy Vehicles	1	1	0	0	2	2	6	0	0	8	0	0	2	0	2	1	3	2	0	6	18
Heavy Vehicles %	0.3	1.6	0.0	0.0	0.5	6.9	1.5	0.0	0.0	1.8	0.0	0.0	3.7	0.0	1.8	1.6	1.2	0.6	0.0	0.9	1.1
Cars Enter Leg	313	60	38	0	411	27	398	21	0	446	13	45	52	0	110	60	245	352	0	657	1624
Heavy Enter Leg	1	1	0	0	2	2	6	0	0	8	0	0	2	0	2	1	3	2	0	6	18
Total Entering Leg	314	61	38	0	413	29	404	21	0	454	13	45	54	0	112	61	248	354	0	663	1642
Cars Exiting Leg					424					296					141					763	1624
Heavy Exiting Leg					4					3					2					9	18
Total Exiting Leg					428					299					143					772	1642

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	83	12	4	0	99	13	116	8	0	137	5	15	10	0	30	10	60	76	0	146	412
4:15 PM	74	18	13	0	105	9	101	8	0	118	2	13	9	0	24	11	76	78	0	165	412
4:30 PM	64	13	7	0	84	7	83	4	0	94	3	12	10	0	25	16	63	90	0	169	372
4:45 PM	83	11	9	0	103	7	95	3	0	105	2	10	22	0	34	19	53	102	0	174	416
Total	304	54	33	0	391	36	395	23	0	454	12	50	51	0	113	56	252	346	0	654	1612
5:00 PM	92	18	9	0	119	4	119	6	0	129	6	10	11	0	27	14	53	82	0	149	424
5:15 PM	89	16	6	0	111	7	80	8	0	95	4	7	14	0	25	24	43	83	0	150	381
5:30 PM	65	11	3	0	79	11	79	7	0	97	8	11	5	0	24	18	58	78	0	154	354
5:45 PM	69	14	5	0	88	5	65	8	0	78	6	14	13	0	33	23	52	75	0	150	349
Total	315	59	23	0	397	27	343	29	0	399	24	42	43	0	109	79	206	318	0	603	1508
Grand Total	619	113	56	0	788	63	738	52	0	853	36	92	94	0	222	135	458	664	0	1257	3120
Approach %	78.6	14.3	7.1	0.0		7.4	86.5	6.1	0.0		16.2	41.4	42.3	0.0		10.7	36.4	52.8	0.0		
Total %	19.8	3.6	1.8	0.0	25.3	2.0	23.7	1.7	0.0	27.3	1.2	2.9	3.0	0.0	7.1	4.3	14.7	21.3	0.0	40.3	
Exiting Leg Total					819					550					300					1451	3120

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:15 PM	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:15 PM	74	18	13	0	105	9	101	8	0	118	2	13	9	0	24	11	76	78	0	165	412
4:30 PM	64	13	7	0	84	7	83	4	0	94	3	12	10	0	25	16	63	90	0	169	372
4:45 PM	83	11	9	0	103	7	95	3	0	105	2	10	22	0	34	19	53	102	0	174	416
5:00 PM	92	18	9	0	119	4	119	6	0	129	6	10	11	0	27	14	53	82	0	149	424
Total Volume	313	60	38	0	411	27	398	21	0	446	13	45	52	0	110	60	245	352	0	657	1624
% Approach Total	76.2	14.6	9.2	0.0		6.1	89.2	4.7	0.0		11.8	40.9	47.3	0.0		9.1	37.3	53.6	0.0		
PHF	0.851	0.833	0.731	0.000	0.863	0.750	0.836	0.656	0.000	0.864	0.542	0.865	0.591	0.000	0.809	0.789	0.806	0.863	0.000	0.944	0.958
Entering Leg	313	60	38	0	411	27	398	21	0	446	13	45	52	0	110	60	245	352	0	657	1624
Exiting Leg					424					296					141					763	1624
Total					835					742					251					1420	3248

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	1	3	1	0	5	8
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2
4:30 PM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	6
4:45 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	3
Total	1	1	0	0	2	1	6	0	0	7	1	0	1	0	2	2	4	2	0	8	19
5:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	1	0	1	0	2	1	0	3	7
5:15 PM	2	0	0	0	2	0	2	0	0	2	0	0	1	0	1	0	1	1	0	2	7
5:30 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	3	0	3	5
5:45 PM	1	0	1	0	2	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	6
Total	3	0	2	0	5	2	5	2	0	9	0	0	2	0	2	0	4	5	0	9	25
Grand Total	4	1	2	0	7	3	11	2	0	16	1	0	3	0	4	2	8	7	0	17	44
Approach %	57.1	14.3	28.6	0.0		18.8	68.8	12.5	0.0		25.0	0.0	75.0	0.0		11.8	47.1	41.2	0.0		
Total %	9.1	2.3	4.5	0.0	15.9	6.8	25.0	4.5	0.0	36.4	2.3	0.0	6.8	0.0	9.1	4.5	18.2	15.9	0.0	38.6	
Exiting Leg Total					10					11					5					18	44
Buses	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	5	0	0	5	7
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	6.3	100.0	0.0	0.0	0.0	25.0	0.0	62.5	0.0	0.0	29.4	15.9
Exiting Leg Total					0					6					0					1	7
Single-Unit Trucks	2	1	1	0	4	2	8	2	0	12	0	0	3	0	3	2	3	5	0	10	29
% Single-Unit	50.0	100.0	50.0	0.0	57.1	66.7	72.7	100.0	0.0	75.0	0.0	0.0	100.0	0.0	75.0	100.0	37.5	71.4	0.0	58.8	65.9
Exiting Leg Total					7					4					5					13	29
Articulated Trucks	2	0	1	0	3	1	2	0	0	3	0	0	0	0	0	0	0	2	0	2	8
% Articulated	50.0	0.0	50.0	0.0	42.9	33.3	18.2	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.0	11.8	18.2
Exiting Leg Total					3					1					0					4	8

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Brayton Point Road					Wilbur Avenue (Route 103)					Brayton Point Road					Wilbur Avenue (Route 103)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	1	0	1	0	2	1	0	3	7
5:15 PM	2	0	0	0	2	0	2	0	0	2	0	0	1	0	1	0	1	1	0	2	7
5:30 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	3	0	3	5
5:45 PM	1	0	1	0	2	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	6
Total Volume	3	0	2	0	5	2	5	2	0	9	0	0	2	0	2	0	4	5	0	9	25
% Approach Total	60.0	0.0	40.0	0.0		22.2	55.6	22.2	0.0		0.0	0.0	100.0	0.0		0.0	44.4	55.6	0.0		
PHF	0.375	0.000	0.500	0.000	0.625	0.500	0.625	0.250	0.000	0.750	0.000	0.000	0.500	0.000	0.500	0.000	0.500	0.417	0.000	0.750	0.893
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	44.4	16.0
Single-Unit Trucks	2	0	1	0	3	1	4	2	0	7	0	0	2	0	2	0	0	3	0	3	15
Single-Unit %	66.7	0.0	50.0	0.0	60.0	50.0	80.0	100.0	0.0	77.8	0.0	0.0	100.0	0.0	100.0	0.0	0.0	60.0	0.0	33.3	60.0
Articulated Trucks	1	0	1	0	2	1	1	0	0	2	0	0	0	0	0	0	0	2	0	2	6
Articulated %	33.3	0.0	50.0	0.0	40.0	50.0	20.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	22.2	24.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
Single-Unit Trucks	2	0	1	0	3	1	4	2	0	7	0	0	2	0	2	0	0	3	0	3	15
Articulated Trucks	1	0	1	0	2	1	1	0	0	2	0	0	0	0	0	0	0	2	0	2	6
Total Entering Leg	3	0	2	0	5	2	5	2	0	9	0	0	2	0	2	0	4	5	0	9	25
Buses					0					4					0					0	4
Single-Unit Trucks					4					1					2					8	15
Articulated Trucks					3					1					0					2	6
Total Exiting Leg					7					6					2					10	25

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
Grand Total	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	5	0	0	5	7
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	14.3	14.3	0.0	0.0	0.0	14.3	0.0	71.4	0.0	0.0	71.4	
Exiting Leg Total					0					6					0					1	7

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.500
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
Exiting Leg					0					4					0					0	4
Total					0					4					0					4	8

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	3	1	0	5	6
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	4
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	1	0	0	1	1	4	0	0	5	0	0	1	0	1	2	3	2	0	7	14
5:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
5:15 PM	2	0	0	0	2	0	2	0	0	2	0	0	1	0	1	0	0	1	0	1	6
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	3
5:45 PM	0	0	1	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	4
Total	2	0	1	0	3	1	4	2	0	7	0	0	2	0	2	0	0	3	0	3	15
Grand Total	2	1	1	0	4	2	8	2	0	12	0	0	3	0	3	2	3	5	0	10	29
Approach %	50.0	25.0	25.0	0.0		16.7	66.7	16.7	0.0		0.0	0.0	100.0	0.0		20.0	30.0	50.0	0.0		
Total %	6.9	3.4	3.4	0.0	13.8	6.9	27.6	6.9	0.0	41.4	0.0	0.0	10.3	0.0	10.3	6.9	10.3	17.2	0.0	34.5	
Exiting Leg Total					7					4					5					13	29

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
5:15 PM	2	0	0	0	2	0	2	0	0	2	0	0	1	0	1	0	0	1	0	1	6
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	3
5:45 PM	0	0	1	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	4
Total Volume	2	0	1	0	3	1	4	2	0	7	0	0	2	0	2	0	0	3	0	3	15
% Approach Total	66.7	0.0	33.3	0.0		14.3	57.1	28.6	0.0		0.0	0.0	100.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.250	0.000	0.250	0.000	0.375	0.250	0.500	0.250	0.000	0.583	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.375	0.000	0.375	0.625
Entering Leg	2	0	1	0	3	1	4	2	0	7	0	0	2	0	2	0	0	3	0	3	15
Exiting Leg					4					1					2					8	15
Total					7					8					4					11	30

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	1	0	2	1	1	0	0	2	0	0	0	0	0	0	0	2	0	2	6
Grand Total	2	0	1	0	3	1	2	0	0	3	0	0	0	0	0	0	0	2	0	2	8
Approach %	66.7	0.0	33.3	0.0		33.3	66.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	25.0	0.0	12.5	0.0	37.5	12.5	25.0	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	
Exiting Leg Total					3					1					0					4	8

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Brayton Point Road from North					Wilbur Avenue (Route 103) from East					Brayton Point Road from South					Wilbur Avenue (Route 103) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	0	0	2	0	2	6
% Approach Total	0.0	0.0	100.0	0.0		33.3	66.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.250	0.500	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.500
Entering Leg	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	0	0	2	0	2	6
Exiting Leg					3					1					0					2	6
Total					4					4					0					4	12

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Brayton Point Road							Wilbur Avenue (Route 103)							Brayton Point Road							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Brayton Point Road							Wilbur Avenue (Route 103)							Brayton Point Road							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 G**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: Wilbur Ave (Route 103) W: Wilbur Ave (Route 103)**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Pedestrians**

	Brayton Point Road							Wilbur Avenue (Route 103)							Brayton Point Road							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	4
Approach %	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	75	25		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	25	100	
Exiting Leg Total							0							0							0							4	4

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Brayton Point Road							Wilbur Avenue (Route 103)							Brayton Point Road							Wilbur Avenue (Route 103)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.500
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Exiting Leg							0							0							0							2	2
Total							0							0							0							4	4

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	8	0	8	19	0	0	0	19	0	1	0	0	1	0	0	0	0	0	28
7:15 AM	0	2	5	0	7	24	0	0	0	24	0	0	0	0	0	0	0	0	0	0	31
7:30 AM	0	2	3	0	5	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	23
7:45 AM	0	1	3	0	4	10	0	0	1	11	0	0	0	0	0	0	0	0	0	0	15
Total	0	5	19	0	24	71	0	0	1	72	0	1	0	0	1	0	0	0	0	0	97
8:00 AM	0	0	10	0	10	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	21
8:15 AM	0	1	5	1	7	14	0	0	0	14	0	0	0	0	0	0	0	0	0	0	21
8:30 AM	0	0	1	0	1	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	11
8:45 AM	0	0	7	0	7	9	0	0	0	9	0	1	0	0	1	0	0	0	0	0	17
Total	0	1	23	1	25	44	0	0	0	44	0	1	0	0	1	0	0	0	0	0	70
Grand Total	0	6	42	1	49	115	0	0	1	116	0	2	0	0	2	0	0	0	0	0	167
Approach %	0.0	12.2	85.7	2.0		99.1	0.0	0.0	0.9		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	3.6	25.1	0.6	29.3	68.9	0.0	0.0	0.6	69.5	0.0	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					118					43					6					0	167
Cars	0	6	37	1	44	110	0	0	1	111	0	2	0	0	2	0	0	0	0	0	157
% Cars	0.0	100.0	88.1	100.0	89.8	95.7	0.0	0.0	100.0	95.7	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	94.0
Exiting Leg Total					113					38					6					0	157
Heavy Vehicles	0	0	5	0	5	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	10
% Heavy Vehicles	0.0	0.0	11.9	0.0	10.2	4.3	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Exiting Leg Total					5					5					0					0	10

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	8	0	8	19	0	0	0	19	0	1	0	0	1	0	0	0	0	0	28
7:15 AM	0	2	5	0	7	24	0	0	0	24	0	0	0	0	0	0	0	0	0	0	31
7:30 AM	0	2	3	0	5	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	23
7:45 AM	0	1	3	0	4	10	0	0	1	11	0	0	0	0	0	0	0	0	0	0	15
Total Volume	0	5	19	0	24	71	0	0	1	72	0	1	0	0	1	0	0	0	0	0	97
% Approach Total	0.0	20.8	79.2	0.0		98.6	0.0	0.0	1.4		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.625	0.594	0.000	0.750	0.740	0.000	0.000	0.250	0.750	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.782
Cars	0	5	17	0	22	69	0	0	1	70	0	1	0	0	1	0	0	0	0	0	93
Cars %	0.0	100.0	89.5	0.0	91.7	97.2	0.0	0.0	100.0	97.2	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	95.9
Heavy Vehicles	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Heavy Vehicles %	0.0	0.0	10.5	0.0	8.3	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Cars Enter Leg	0	5	17	0	22	69	0	0	1	70	0	1	0	0	1	0	0	0	0	0	93
Heavy Enter Leg	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Total Entering Leg	0	5	19	0	24	71	0	0	1	72	0	1	0	0	1	0	0	0	0	0	97
Cars Exiting Leg					70					18					5					0	93
Heavy Exiting Leg					2					2					0					0	4
Total Exiting Leg					72					20					5					0	97

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	7	0	7	18	0	0	0	18	0	1	0	0	1	0	0	0	0	0	26
7:15 AM	0	2	4	0	6	23	0	0	0	23	0	0	0	0	0	0	0	0	0	0	29
7:30 AM	0	2	3	0	5	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	23
7:45 AM	0	1	3	0	4	10	0	0	1	11	0	0	0	0	0	0	0	0	0	0	15
Total	0	5	17	0	22	69	0	0	1	70	0	1	0	0	1	0	0	0	0	0	93
8:00 AM	0	0	7	0	7	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	18
8:15 AM	0	1	5	1	7	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	18
8:30 AM	0	0	1	0	1	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	11
8:45 AM	0	0	7	0	7	9	0	0	0	9	0	1	0	0	1	0	0	0	0	0	17
Total	0	1	20	1	22	41	0	0	0	41	0	1	0	0	1	0	0	0	0	0	64
Grand Total	0	6	37	1	44	110	0	0	1	111	0	2	0	0	2	0	0	0	0	0	157
Approach %	0.0	13.6	84.1	2.3		99.1	0.0	0.0	0.9		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	3.8	23.6	0.6	28.0	70.1	0.0	0.0	0.6	70.7	0.0	1.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					113					38					6					0	157

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	7	0	7	18	0	0	0	18	0	1	0	0	1	0	0	0	0	0	26
7:15 AM	0	2	4	0	6	23	0	0	0	23	0	0	0	0	0	0	0	0	0	0	29
7:30 AM	0	2	3	0	5	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	23
7:45 AM	0	1	3	0	4	10	0	0	1	11	0	0	0	0	0	0	0	0	0	0	15
Total Volume	0	5	17	0	22	69	0	0	1	70	0	1	0	0	1	0	0	0	0	0	93
% Approach Total	0.0	22.7	77.3	0.0		98.6	0.0	0.0	1.4		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.625	0.607	0.000	0.786	0.750	0.000	0.000	0.250	0.761	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.802
Entering Leg	0	5	17	0	22	69	0	0	1	70	0	1	0	0	1	0	0	0	0	0	93
Exiting Leg					70					18					5					0	93
Total					92					88					6					0	186

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	3	0	3	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
Grand Total	0	0	5	0	5	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	10
Approach %	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	50.0	0.0	50.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					5					5					0					0	10
Buses	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
% Buses	0.0	0.0	40.0	0.0	40.0	40.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Exiting Leg Total					2					2					0					0	4
Single-Unit Trucks	0	0	2	0	2	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
% Single-Unit	0.0	0.0	40.0	0.0	40.0	60.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
Exiting Leg Total					3					2					0					0	5
Articulated Trucks	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Articulated	0.0	0.0	20.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Exiting Leg Total					0					1					0					0	1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	3	0	3	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
% Approach Total	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Buses	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Buses %	0.0	0.0	33.3	0.0	33.3	33.3	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3
Single-Unit Trucks	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Single-Unit %	0.0	0.0	33.3	0.0	33.3	66.7	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
Articulated Trucks	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Articulated %	0.0	0.0	33.3	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
Buses	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Single-Unit Trucks	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Articulated Trucks	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Entering Leg	0	0	3	0	3	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
Buses					1					1					0					0	2
Single-Unit Trucks					2					1					0					0	3
Articulated Trucks					0					1					0					0	1
Total Exiting Leg					3					3					0					0	6

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Approach %	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	50.0	0.0	50.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					2					2					0					0	4

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Exiting Leg					1					2					0					0	3
Total					3					3					0					0	6

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Brayton Point Road					O'Neil Road					Brayton Point Road					Access Road					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	0	2	0	2	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
Approach %	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	40.0	0.0	40.0	60.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					3					2					0					0	5

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Brayton Point Road					O'Neil Road					Brayton Point Road					Access Road					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Exiting Leg					2					1					0					0	3
Total					3					3					0					0	6

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					0					1					0					0	1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg					0					1					0					0	1
Total					1					1					0					0	2

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							0							0							0	0

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	1	15	0	16	7	0	0	0	7	0	1	0	0	1	0	0	0	0	0	24
4:15 PM	0	0	13	0	13	8	0	0	0	8	0	1	0	0	1	0	0	0	0	0	22
4:30 PM	0	1	18	0	19	14	0	0	0	14	0	1	0	0	1	0	0	0	0	0	34
4:45 PM	0	0	18	0	18	11	0	0	0	11	0	1	0	0	1	0	0	0	0	0	30
Total	0	2	64	0	66	40	0	0	0	40	0	4	0	0	4	0	0	0	0	0	110
5:00 PM	0	0	27	0	27	14	0	0	0	14	0	1	0	0	1	0	0	0	0	0	42
5:15 PM	0	2	27	0	29	12	0	0	0	12	2	1	0	0	3	0	0	0	0	0	44
5:30 PM	0	0	9	0	9	12	0	0	0	12	0	1	0	0	1	0	0	0	0	0	22
5:45 PM	0	2	13	1	16	14	0	0	0	14	0	2	0	0	2	0	0	0	0	0	32
Total	0	4	76	1	81	52	0	0	0	52	2	5	0	0	7	0	0	0	0	0	140
Grand Total	0	6	140	1	147	92	0	0	0	92	2	9	0	0	11	0	0	0	0	0	250
Approach %	0.0	4.1	95.2	0.7		100.0	0.0	0.0	0.0		18.2	81.8	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	2.4	56.0	0.4	58.8	36.8	0.0	0.0	0.0	36.8	0.8	3.6	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					102					142					6					0	250
Cars	0	6	140	1	147	91	0	0	0	91	2	8	0	0	10	0	0	0	0	0	248
% Cars	0.0	100.0	100.0	100.0	100.0	98.9	0.0	0.0	0.0	98.9	100.0	88.9	0.0	0.0	90.9	0.0	0.0	0.0	0.0	0.0	99.2
Exiting Leg Total					100					142					6					0	248
Heavy Vehicles	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	0.0	11.1	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.8
Exiting Leg Total					2					0					0					0	2

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:30 PM	0	1	18	0	19	14	0	0	0	14	0	1	0	0	1	0	0	0	0	0	34
4:45 PM	0	0	18	0	18	11	0	0	0	11	0	1	0	0	1	0	0	0	0	0	30
5:00 PM	0	0	27	0	27	14	0	0	0	14	0	1	0	0	1	0	0	0	0	0	42
5:15 PM	0	2	27	0	29	12	0	0	0	12	2	1	0	0	3	0	0	0	0	0	44
Total Volume	0	3	90	0	93	51	0	0	0	51	2	4	0	0	6	0	0	0	0	0	150
% Approach Total	0.0	3.2	96.8	0.0		100.0	0.0	0.0	0.0		33.3	66.7	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.375	0.833	0.000	0.802	0.911	0.000	0.000	0.000	0.911	0.250	1.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.852
Cars	0	3	90	0	93	50	0	0	0	50	2	3	0	0	5	0	0	0	0	0	148
Cars %	0.0	100.0	100.0	0.0	100.0	98.0	0.0	0.0	0.0	98.0	100.0	75.0	0.0	0.0	83.3	0.0	0.0	0.0	0.0	0.0	98.7
Heavy Vehicles	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	25.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	1.3
Cars Enter Leg	0	3	90	0	93	50	0	0	0	50	2	3	0	0	5	0	0	0	0	0	148
Heavy Enter Leg	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Total Entering Leg	0	3	90	0	93	51	0	0	0	51	2	4	0	0	6	0	0	0	0	0	150
Cars Exiting Leg					53					92					3					0	148
Heavy Exiting Leg					2					0					0					0	2
Total Exiting Leg					55					92					3					0	150

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	1	15	0	16	7	0	0	0	7	0	1	0	0	1	0	0	0	0	0	24
4:15 PM	0	0	13	0	13	8	0	0	0	8	0	1	0	0	1	0	0	0	0	0	22
4:30 PM	0	1	18	0	19	14	0	0	0	14	0	1	0	0	1	0	0	0	0	0	34
4:45 PM	0	0	18	0	18	11	0	0	0	11	0	1	0	0	1	0	0	0	0	0	30
Total	0	2	64	0	66	40	0	0	0	40	0	4	0	0	4	0	0	0	0	0	110
5:00 PM	0	0	27	0	27	13	0	0	0	13	0	1	0	0	1	0	0	0	0	0	41
5:15 PM	0	2	27	0	29	12	0	0	0	12	2	0	0	0	2	0	0	0	0	0	43
5:30 PM	0	0	9	0	9	12	0	0	0	12	0	1	0	0	1	0	0	0	0	0	22
5:45 PM	0	2	13	1	16	14	0	0	0	14	0	2	0	0	2	0	0	0	0	0	32
Total	0	4	76	1	81	51	0	0	0	51	2	4	0	0	6	0	0	0	0	0	138
Grand Total	0	6	140	1	147	91	0	0	0	91	2	8	0	0	10	0	0	0	0	0	248
Approach %	0.0	4.1	95.2	0.7		100.0	0.0	0.0	0.0		20.0	80.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	2.4	56.5	0.4	59.3	36.7	0.0	0.0	0.0	36.7	0.8	3.2	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					100					142					6					0	248

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:30 PM	0	1	18	0	19	14	0	0	0	14	0	1	0	0	1	0	0	0	0	0	34
4:45 PM	0	0	18	0	18	11	0	0	0	11	0	1	0	0	1	0	0	0	0	0	30
5:00 PM	0	0	27	0	27	13	0	0	0	13	0	1	0	0	1	0	0	0	0	0	41
5:15 PM	0	2	27	0	29	12	0	0	0	12	2	0	0	0	2	0	0	0	0	0	43
Total Volume	0	3	90	0	93	50	0	0	0	50	2	3	0	0	5	0	0	0	0	0	148
% Approach Total	0.0	3.2	96.8	0.0		100.0	0.0	0.0	0.0		40.0	60.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.375	0.833	0.000	0.802	0.893	0.000	0.000	0.000	0.893	0.250	0.750	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.860
Entering Leg	0	3	90	0	93	50	0	0	0	50	2	3	0	0	5	0	0	0	0	0	148
Exiting Leg					53					92					3					0	148
Total					146					142					8					0	296

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Grand Total	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					2					0					0					0	2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total					0					0					0					0	0
Single-Unit Trucks	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% Single-Unit	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Exiting Leg Total					2					0					0					0	2
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total					0					0					0					0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Single-Unit %	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single-Unit Trucks	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Buses					0					0					0					0	0
Single-Unit Trucks					2					0					0					0	2
Articulated Trucks					0					0					0					0	0
Total Exiting Leg					2					0					0					0	2

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					0					0					0					0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg					0					0					0					0	0
Total					0					0					0					0	0

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Brayton Point Road					O'Neil Road					Brayton Point Road					Access Road					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Grand Total	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					2					0					0					0	2

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Brayton Point Road					O'Neil Road					Brayton Point Road					Access Road					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Exiting Leg					2					0					0					0	2
Total					2					1					1					0	4

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					0					0					0					0	0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Brayton Point Road from North					O'Neil Road from East					Brayton Point Road from South					Access Road from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg					0					0					0					0	0
Total					0					0					0					0	0

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Bicycles (on Roadway and Crosswalks)

	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							1							0							0							0	1

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg							1							0							0							0	1
Total							1							1							0							0	2

PDI File #: **228671 H**
Location: **N: Brayton Point Road S: Brayton Point Road**
Location: **E: O'Neil Road W: Access Road**
City, State: **Somerset, MA**
Client: **VHB/Z. Tiang**
Site Code: **15542.00**
Count Date: **Thursday, June 9, 2022**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0	0	0	0	0	0		0	0	0	0	0	100		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							1							0							0	1

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:45 PM	Brayton Point Road from North							O'Neil Road from East							Brayton Point Road from South							Access Road from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg							0							1							0							0	1
Total							0							2							0							0	2

Appendix 2 – SRTA - Route 14 Swansea Mall Schedule

Route 14 Swansea Mall

14

Fall River Route

Map on reverse side

Fares

	Cash	CharlieCard**
Regular	$1.50	$1.25
Reduced*	$0.75	$0.60

- Children age five and younger ride for free. Up to two free children are allowed with each adult.
- Free transfers are valid for 90 minutes from time of boarding first bus to time of boarding second bus.
- * To find out if you qualify for a reduced fare, and for more information on fares, go to www.srtabus.com.
- ** One two-hour transfer from any bus to any bus, in any direction.

Information

No Sunday service

All buses are wheelchair accessible

Rules of Riding

- No smoking on buses.
- No eating or drinking on buses.
- SRTA reserves the right to refuse transportation to anyone under the influence of drugs or alcohol, who is incapable of taking care of themselves, or who is behaving in a way that will make them objectionable to passengers.
- Please keep your conversations quiet to not bother passengers or the driver.

Contact SRTA

SRTA
700 Pleasant St, Suite 530
New Bedford, MA 02740
508-999-5211
www.srtabus.com

Weekday Outbound

A	B	C	D
SRTA Terminal	Commonwealth Landing	Somerset Stop&Shop	Swansea Walmart
8:30 AM	8:37 AM	8:44 AM	8:59 AM
9:30 AM	9:37 AM	9:44 AM	9:59 AM
10:30 AM	10:37 AM	10:44 AM	10:59 AM
11:30 AM	11:37 AM	11:44 AM	11:59 AM
12:30 PM	12:37 PM	12:44 PM	12:59 PM
1:30 PM	1:37 PM	1:44 PM	1:59 PM
2:30 PM	2:37 PM	2:44 PM	2:59 PM
3:30 PM	3:37 PM	3:44 PM	3:59 PM
4:30 PM	4:37 PM	4:44 PM	4:59 PM
5:30 PM	5:37 PM	5:44 PM	5:59 PM
6:30 PM	6:37 PM	6:44 PM	6:59 PM
7:30 PM	7:37 PM	7:44 PM	7:59 PM
8:30 PM	8:37 PM	8:44 PM	8:59 PM

Weekday Inbound

D	C	B	A
Swansea Walmartv	Somerset Stop&Shop	Commonwealth Landing	SRTA Terminal
9:00 AM	9:13 AM	9:18 AM	9:24 AM
10:00 AM	10:13 AM	10:18 AM	10:24 AM
11:00 AM	11:13 AM	11:18 AM	11:24 AM
12:00 PM	12:13 PM	12:18 PM	12:24 PM
1:00 PM	1:13 PM	1:18 PM	1:24 PM
2:00 PM	2:13 PM	2:18 PM	2:24 PM
3:00 PM	3:13 PM	3:18 PM	3:24 PM
4:00 PM	4:13 PM	4:18 PM	4:24 PM
5:00 PM	5:13 PM	5:18 PM	5:24 PM
6:00 PM	6:13 PM	6:18 PM	6:24 PM
7:00 PM	7:13 PM	7:18 PM	7:24 PM
8:00 PM	8:13 PM	8:18 PM	8:24 PM
9:00 PM	9:13 PM	9:18 PM	9:24 PM

Saturday Outbound

A	B	C	D
SRTA Terminal	Commonwealth Landing	Somerset Stop&Shop	Swansea Walmart
8:30 AM	8:37 AM	8:44 AM	8:59 AM
9:30 AM	9:37 AM	9:44 AM	9:59 AM
10:30 AM	10:37 AM	10:44 AM	10:59 AM
11:30 AM	11:37 AM	11:44 AM	11:59 AM
12:30 PM	12:37 PM	12:44 PM	12:59 PM
1:30 PM	1:37 PM	1:44 PM	1:59 PM
2:30 PM	2:37 PM	2:44 PM	2:59 PM
3:30 PM	3:37 PM	3:44 PM	3:59 PM
4:30 PM	4:37 PM	4:44 PM	4:59 PM
5:30 PM	5:37 PM	5:44 PM	5:59 PM

Saturday Inbound

D	C	B	A
Swansea Walmartv	Somerset Stop&Shop	Commonwealth Landing	SRTA Terminal
9:00 AM	9:13 AM	9:18 AM	9:24 AM
10:00 AM	10:13 AM	10:18 AM	10:24 AM
11:00 AM	11:13 AM	11:18 AM	11:24 AM
12:00 PM	12:13 PM	12:18 PM	12:24 PM
1:00 PM	1:13 PM	1:18 PM	1:24 PM
2:00 PM	2:13 PM	2:18 PM	2:24 PM
3:00 PM	3:13 PM	3:18 PM	3:24 PM
4:00 PM	4:13 PM	4:18 PM	4:24 PM
5:00 PM	5:13 PM	5:18 PM	5:24 PM
6:00 PM	6:13 PM	6:18 PM	6:24 PM

Visit our website!

Scan this QR code with your mobile device's camera

Holiday service operates on a Saturday schedule

Route 14 Swansea Mall

Fall River Route

Timetable on reverse side

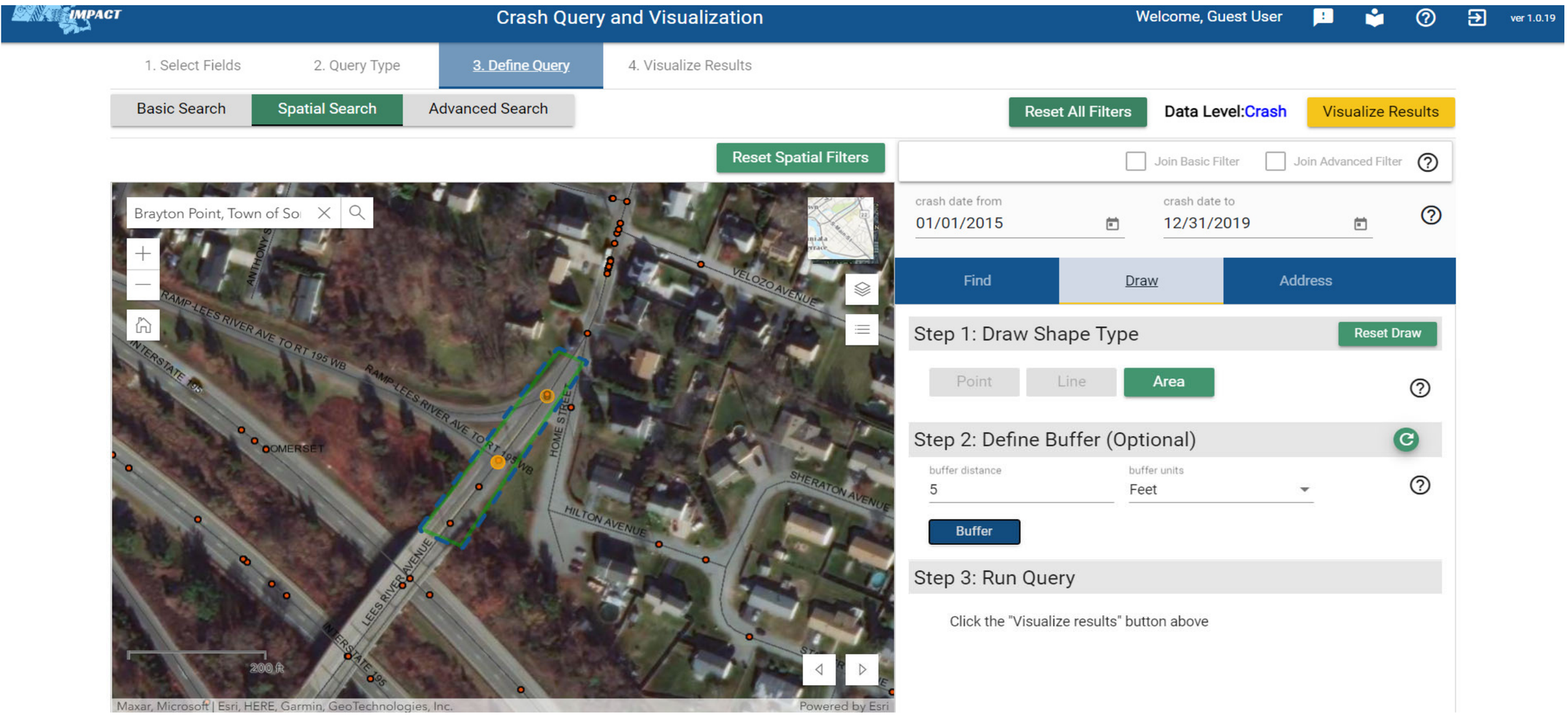


Effective 06/27/2022

Appendix 3 – Crash Data

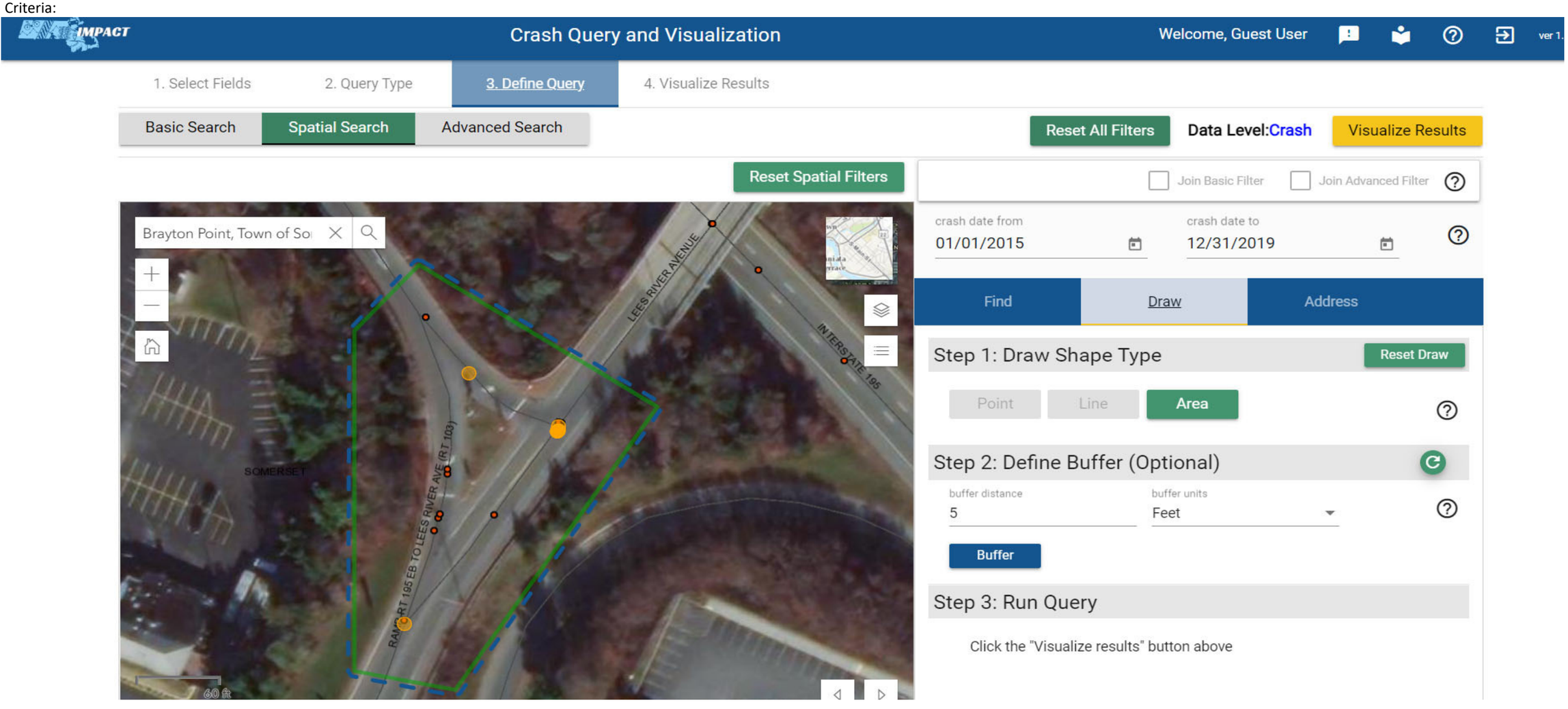
Crash Num	Crash Date	Crash Seve	Crash Time	Max Injury	Numb	Age of D	Age of	Driver Con	Driver Dist	First Harmf	Light Condi	Manner of	Road Surfa	Roadway Junc	Fatali	Non-Fa	Traffic Con	Trafficway	Vehicle Act	Vehicle Tra	Weather C	Crash Repc	First Harmf	Hit & Run
4031939	04/03/2015	Property da	8:04 PM	No injury	2	18-20	75-84	D1: (Follow	D1: Not Dis	Collision w	Dark - light	Rear-end	Wet	Not at junctio	0	0	No control	Two-way, r	V1: Travelli	V1: N / V2	Rain	15-133-AC	Roadway	No hit and
4220285	06/14/2016	Property da	2:20 AM	No injury	1	25-34	25-34	D1: (Opera		Collision w	Dark - light	Single vehi	Dry	On-ramp	0	0	No control	Two-way, r	V1: Turning	V1: W	Clear	2016-0D3-	Outside ro	No hit and
4739935	08/17/2019	Non-fatal in	3:32 PM	Non-fatal in	1	55-64	55-64	D1: (No im	D1: Not Dis	Collision w	Daylight	Single vehi	Sand, mud,	Y-intersection	0	1	No control	One-way, r	V1: Turning	V1: W	Clear	19-288-AC	Roadway	No hit and

Data Level:
Query Type:
Criteria:



Crash Num	Crash Date	Crash Seve	Crash Time	Max Injury	Number	Age of	Age of	Driver Con	Driver Dist	First Harm	Light Cond	Manner of	Road Surfa	Roadway Ju	Fatali	Total	Traffic Con	Trafficway	Vehicle Act	Vehicle Tra	Weather	Crash Repo	First Harm	Hit and Run
4037829	05/01/2015	Non-fatal in	2:34 PM	Non-fatal in	2	18-20	65-74	D1: (Failed	D1: Not Dis	Collision w	Daylight	Angle	Dry	T-intersect	0	1	Stop signs	Two-way, n	V1: Turning	V1: E / V2	Clear	15-165-AC	Roadway	No hit and run
4093131	10/02/2015	Non-fatal in	6:49 PM	Non-fatal in	1	75-84	75-84	D1: (Inatte	D1: Not Dis	Collision w	Dark - roa	Angle	Wet	Off-ramp	0	1	No control	Two-way, n	V1: Turning	V1: N	Rain/Clou	15-354-AC	Roadway	No hit and run
4099884	10/19/2015	Property da	2:28 PM	No injury	2	25-34	45-54	D1: (Failed	D1: Not Dis	Collision w	Daylight	Angle	Dry	Off-ramp	0	0	No control	Two-way, n	V1: Enterin	V1: E / V2	Clear	15-379-AC	Roadway	No hit and run
4113378	11/16/2015	Property da	8:22 PM	No injury	2	25-34	65-74	D1: (Failed	D1: Not Dis	Collision w	Dark - ligh	Angle	Dry	Off-ramp	0	0	Stop signs	Two-way, n	V1: Slowing	V1: E / V2	Clear	15-426-AC	Roadway	No hit and run
4333425	03/02/2017	Property da	2:50 PM	No injury	2	35-44	35-44	D1: (Failed	D2: Not Dis	Collision w	Daylight	Single vehi	Dry	Off-ramp	0	0	Stop signs	Two-way, n	V1: Enterin	V1: W / V:	Clear	17-75-AC	, Outside ro	No hit and run
4354720	04/18/2017	Non-fatal in	5:52 PM	Non-fatal in	2	25-34	25-34	D1: (Failed	D1: Not Dis	Collision w	Daylight	Angle	Dry	Y-intersect	0	2	Yield signs	Two-way, n	V1: Travelli	V1: E / V2	Clear	17-138-AC	Roadway	No hit and run
4354795	04/23/2017	Property da	7:40 PM	No injury	1	21-24	21-24	D1: (Opera		Collision w	Daylight	Single vehi	Dry	Off-ramp	0	0	Stop signs	One-way, n	V1: Travelli	V1: E	Clear	17-147-AC	Outside ro	No hit and run
4560843	06/28/2018	Property da	3:33 PM	No injury	3	18-20	25-34	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	On-ramp	0	0	No control	Two-way, n	V1: Travelli	V1: N / V2	Clear	18-228-AC	Roadway	No hit and run
4670848	02/28/2019	Non-fatal in	6:07 PM	Non-fatal in	2	35-44	45-54	D1: (Failed	D1: Passen	Collision w	Dark - ligh	Angle	Dry	Y-intersect	0	2	Yield signs	Two-way, n	V1: Turning	V1: E / V2	Clear	19-74-AC	Roadway	No hit and run
4728119	07/19/2019	Property da	5:05 PM	No injury	2	25-34	25-34	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end		Off-ramp	0	0	Yield signs	One-way, n	V1: Travelli	V1: E / V2	Clear	19-253-AC	Roadway	No hit and run

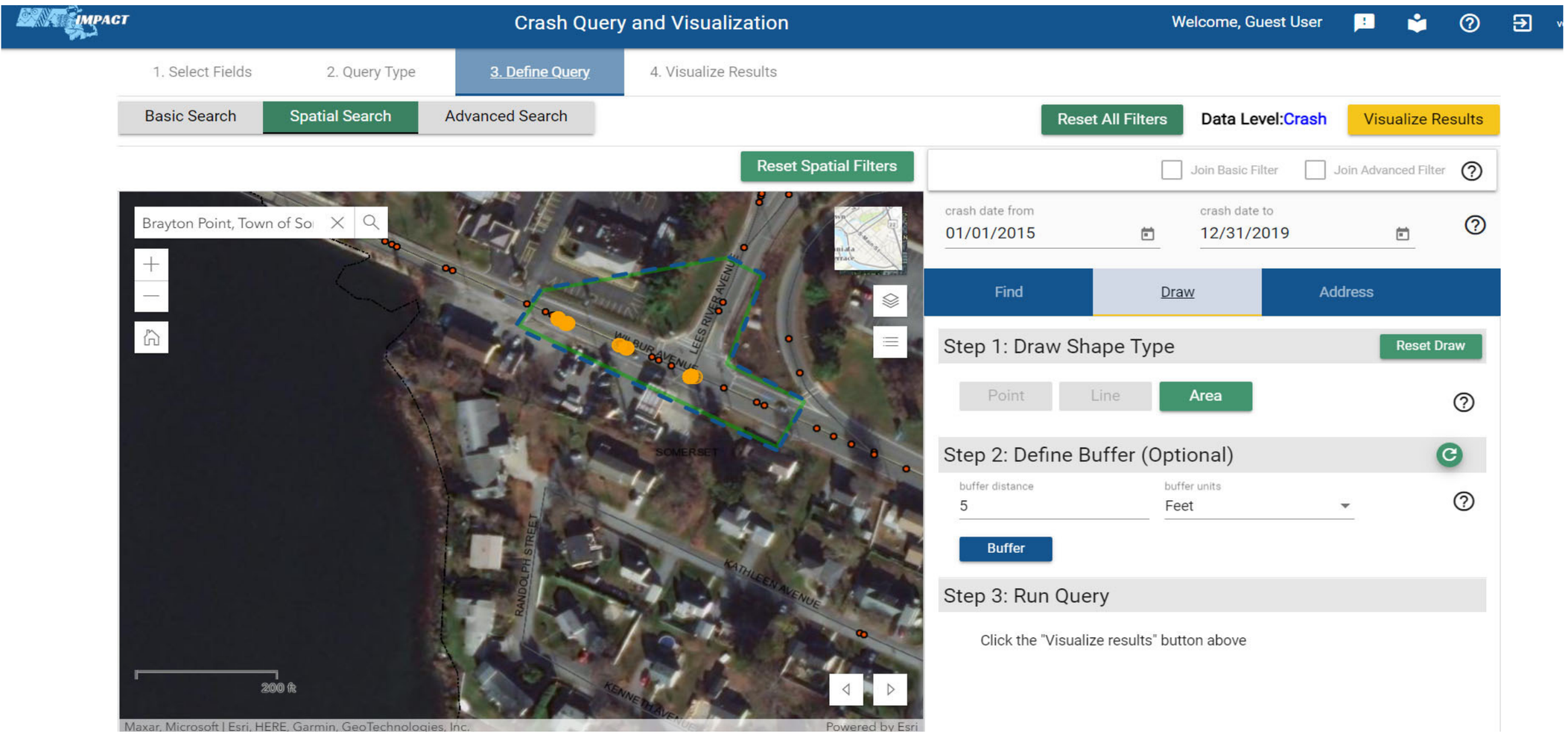
Data Level:
Query Type:
Criteria:



Crash Num	Crash Date	Crash Sev	Crash Time	Max Injur	Numb	Age of	Age of	Driver Cor	Driver Dist	First Harr	Light Condi	Manner of	Road Surfa	Roadway Ju	Fatali	Non-	Traffic Co	Trafficway	Vehicle Act	Vehicle Tra	Weather C	Crash Repc	First Harmf	Hit and Run
4022705	03/20/2015	Non-fatal	7:59 PM	Non-fatal	2	25-34	35-44	D1: (Inatte	D1: Not Dis	Collision	Dark - light	Rear-end	Snow	Four-way i	0	1	Traffic cor	Two-way,	V1: Travelli	V1: E / V2:	Snow	15-117-AC	Roadway	No hit and run
4031940	04/04/2015	Property (	8:11 AM	No injury	3	35-44	65-74	D1: (Other	D1: Not Dis	Collision	Daylight	Angle	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: E / V2:	Rain	15-134-AC	Roadway	No hit and run
4031942	04/10/2015	Property (	12:37 AM	No injury	1	25-34	25-34	D1: (Fatigu	D1: Not Dis	Collision	Dark - light	Single vehi	Wet	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: E	Cloudy/Rai	15-139-AC	Roadside	No hit and run
4063354	07/17/2015	Property (	10:08 PM	No injury	2	25-34	25-34	D2: (Inatte	D2: Not Dis	Collision	Dark - road	Angle	Dry	Not at junc	0	0	No contro	Two-way,	V1: Parked	V1: Not Re	Clear	15-246-AC	Roadway	No hit and run
4070796	08/06/2015	Property (	6:03 PM	No injury	2	35-44	35-44	D1: (Follov		Collision	Daylight	Rear-end	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	15-268-AC	Roadway	No hit and run
4092257	09/25/2015	Non-fatal	7:38 PM	Non-fatal	1	25-34	25-34	D1: (No in	D1: Not Dis	Collision	Dark - light	Rear-end	Dry	T-intersect	0	1	Traffic cor	Two-way,	V1: Slowing	V1: W	Clear	15-339-AC	Roadway	No hit and run
4099889	10/21/2015	Non-fatal	6:25 PM	Non-fatal	3	45-54	55-64	D1: (Follov	D2: Not Dis	Collision	Dark - light	Rear-end	Dry	Not at junc	0	2	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear/Othe	15-384-AC	Roadway	No hit and run
4117644	12/01/2015	Non-fatal	8:35 PM	Non-fatal	2	25-34	25-34	D1: (Follov		Collision	Daylight	Rear-end	Dry	T-intersect	0	1	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear/Unkr	15-455-AC	Roadway	No hit and run
4165099	03/16/2016	Property (	6:10 PM	No injury	2	35-44	45-54	D1: (Failec	D1: Not Dis	Collision	Dusk	Angle	Dry	Not at junc	0	0	No contro	Two-way,	V1: Turning	V1: W / V2	Cloudy	16-108-AC	Roadway	No hit and run
4188293	05/09/2016	Property (	5:39 AM	No injury	2	35-44	55-64	D1: (No in	D1: Not Dis	Collision	Daylight	Angle	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	16-179-AC	Roadway	No hit and run
4198694	05/28/2016	Property (	10:56 PM	No injury	2	25-34	45-54	D1: (Follov	D1: Not Dis	Collision	Dark - light	Rear-end	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	16-210-AC	Roadway	No hit and run
4200926	06/03/2016	Non-fatal	5:19 PM	Non-fatal	2	25-34	35-44	D1: (Failec	D1: Not Dis	Collision	Daylight	Angle	Dry	Y-intersect	0	1	Traffic cor	Two-way,	V1: Travelli	V1: N / V2	Clear	16-214-AC	Roadway	No hit and run
4211483	06/24/2016	Property (	4:25 PM	No injury	2	16-17	25-34	D1: (Inatte	D1: Not Dis	Collision	Daylight	Rear-end	Dry	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: E / V2:	Clear	16-244-AC	Roadway	No hit and run
4212260	06/30/2016	Non-fatal	3:45 PM	Non-fatal	3	21-24	65-74	D1: (Inatte	D1: Not Dis	Collision	Daylight	Rear-end	Dry	Not at junc	0	1	No contro	Two-way,	V1: Travelli	V1: E / V2:	Clear	16-258-AC	Roadway	No hit and run
4213409	07/02/2016	Not Repor	10:09 AM	Not repor	2			D1: (Unkn		Collision	Unknown	Unknown	Wet	Not at junc	0	0	No contro	Two-way,	V1: Unknov	V1: Not Re	Cloudy/Rai	16-263-AC	Roadway	No hit and run
4221820	07/19/2016	Property (	5:04 PM	No injury	3	35-44	55-64	D1: (Oper	D2: Not Dis	Collision	Daylight	Rear-end	Dry	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: W / V2	Clear	16-283-AC	Roadway	No hit and run
4228646	08/03/2016	Property (	1:20 AM	No injury	2	35-44	35-44	D1: (Inatte		Collision	Dark - light	Sideswipe,	Dry	Not at junc	0	0	No contro	Two-way,	V1: Backing	V1: N / V2	Clear	16-304-AC	Outside ro	No hit and run
4257998	10/02/2016	Property (	11:11 AM	No injury	1	25-34	25-34	D1: (Swer		Collision	Daylight	Single vehi	Dry	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: W	Cloudy	16-372-AC	Roadway	No hit and run
4262577	10/03/2016	Property (	3:49 PM	No injury	2	21-24	55-64	D1: (Follov	D1: Not Dis	Collision	Daylight	Rear-end	Dry	Not at junc	0	0	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	16-376-AC	Roadway	No hit and run
4264862	10/02/2016	Property (	7:07 PM	No injury	2	45-54	45-54	D1: (Inatte	D1: Not Dis	Collision	Dark - light	Angle	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: W / V2	Clear	16-374-AC	Roadway	No hit and run
4264863	10/04/2016	Property (	1:12 PM	No injury	2	21-24	25-34	D1: (Failec	D1: Not Dis	Collision	Daylight	Angle	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: W / V2	Clear	16-378-AC	Roadway	No hit and run
4292622	11/24/2016	Property (	4:50 PM	No injury	2	45-54	55-64	D1: (Inatte	D1: Not Dis	Collision	Dark - light	Rear-end	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	16-437-AC	Roadway	No hit and run
4308549	01/04/2017	Non-fatal	2:01 PM	Non-fatal	2	25-34	35-44	D1: (Failec	D1: Not Dis	Collision	Daylight	Angle	Dry	Not at junc	0	2	Traffic cor	Two-way,	V1: Enterin	V1: S / V2:	Cloudy	17-5-AC /	Roadway	No hit and run
4309474	01/06/2017	Property (	3:22 PM	No injury	2	21-24	35-44	D1: (Failur	D1: Not Dis	Collision	Daylight	Angle	Wet	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: E / V2:	Clear	17-12-AC /	Roadway	No hit and run
4318162	01/24/2017	Property (	11:46 AM	No injury	2	21-24	25-34	D1: (Failec	D1: Not Dis	Collision	Daylight	Angle	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: E / V2:	Rain	17-33-AC /	Roadway	No hit and run
4331549	02/21/2017	Property (	8:35 PM	No injury	2	21-24	25-34	D1: (Disre	D1: Not Dis	Collision	Dark - light	Angle	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: S / V2:	Cloudy	17-63-AC /	Roadway	No hit and run
4339105	03/10/2017	Property (	6:12 PM	No injury	1	35-44	35-44	D1: (No in	D1: Not Dis	Collision	Daylight	Rear-end	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: S	Snow	17-91-AC /	Roadway	No hit and run
4341557	03/19/2017	Property (	12:28 PM	No injury	2	25-34	55-64	D1: (Inatte	D2: Not Dis	Collision	Daylight	Sideswipe,	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: S / V2:	Clear	17-99-AC /	Roadway	No hit and run
4353027	04/15/2017	Property (	7:35 PM	No injury	2	21-24	35-44	D1: (Failec	D1: Not Dis	Collision	Dark - light	Angle	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: E / V2:	Rain	17-133-AC	Roadway	No hit and run
4367587	05/19/2017	Non-fatal	12:32 PM	Non-fatal	2	45-54	55-64	D1: (Follov	D1: Not Dis	Collision	Daylight	Rear-end	Dry	Not at junc	0	1	No contro	Two-way,	V1: Travelli	V1: W / V2	Clear	17-180-AC	Roadway	No hit and run
4378769	06/17/2017	Property (	9:39 AM	No injury	2	35-44	45-54	D1: (Failec	D1: Not Dis	Collision	Daylight	Angle	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: W / V2	Cloudy	17-229-AC	Roadway	No hit and run
4428393	09/09/2017	Non-fatal	12:33 PM	Non-fatal	2	35-44	45-54	D1: (Inatte	D2: Not Dis	Collision	Daylight	Rear-end	Dry	Not at junc	0	1	No contro	Two-way,	V1: Travelli	V1: W / V2	Clear	17-322-AC	Roadway	No hit and run
4451978	11/11/2017	Non-fatal	2:39 PM	Non-fatal	2	25-34	25-34	D1: (Oper	D2: Not Dis	Collision	Daylight	Head-on	Dry	T-intersect	0	2	No contro	Two-way,	V1: Turning	V1: W / V2	Clear	17-414-AC	Roadway	No hit and run
4485515	01/16/2018	Property (	1:11 PM	No injury	3	21-24	65-74	D1: (Follov	D2: Not Dis	Collision	Daylight	Rear-end	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	18-31-AC	Roadway	Yes, hit and run
4505272	02/22/2018	Property (	11:00 PM	No injury	2	25-34	45-54	D1: (Oper	D2: Not Dis	Collision	Dark - light	Angle	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: N / V2	Clear	18-77-AC	Roadway	No hit and run
4533981	05/04/2018	Non-fatal	12:31 PM	Non-fatal	2	55-64	>84	D1: (Follov	D2: Not Dis	Collision	Daylight	Rear-end	Dry	T-intersect	0	2	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Cloudy	18-155-AC	Roadway	No hit and run
4536648	05/04/2018	Non-fatal	8:55 PM	Non-fatal	2	21-24	65-74	D1: (Failec	D1: Not Dis	Collision	Dark - light	Angle	Dry	T-intersect	0	2	Traffic cor	Two-way,	V1: Turning	V1: S / V2:	Clear	18-156-AC	Roadway	No hit and run
4536651	05/08/2018	Non-fatal	5:36 PM	Non-fatal	4	18-20	65-74	D1: (Failec	D2: Not Dis	Collision	Daylight	Angle	Dry	T-intersect	0	4	Traffic cor	Two-way,	V1: Enterin	V1: N / V2	Clear/Othe	18-160-AC	Roadway	No hit and run
4562733	06/30/2018	Property (	3:25 PM	Not repor	1					Collision	Daylight	Single vehi	Dry	Not at junc	0	0	No contro	Two-way,	V1: Backing	V1: N	Clear	18-232-AC	Outside ro	No hit and run
4564644	07/13/2018	Non-fatal	9:10 PM	Non-fatal	1	45-54	45-54	D1: (Oper	D1: Not Dis	Collision	Dark - light	Single vehi	Dry	T-intersect	0	1	Traffic cor	Two-way,	V1: Turning	V1: E	Clear	18-252-AC	Roadside	No hit and run
4586245	08/16/2018	Property (	12:21 PM	No injury	2	35-44	45-54	D1: (Inatte	D2: Not Dis	Collision	Daylight	Sideswipe,	Dry	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: W / V2	Clear	18-287-AC	Roadway	No hit and run
4600641	09/25/2018	Property (	11:02 AM	No injury	2	35-44	45-54	D1: (Follov	D1: Not Dis	Collision	Daylight	Rear-end	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Travelli	V1: E / V2:	Cloudy/Rai	18-345-AC	Roadway	No hit and run
4614858	10/25/2018	Non-fatal	6:37 AM	Non-fatal	1	35-44	35-44	D1: (No in	D1: Not Dis	Collision	Dawn	Single vehi	Dry	T-intersect	0	1	Traffic cor	Two-way,	V1: Turning	V1: N	Clear	18-377-AC	Roadway	No hit and run
4623452	11/15/2018	Property (	6:17 PM	No injury	2	25-34	55-64	D1: (No in	D1: Not Dis	Collision	Dark - light	Sideswipe,	Snow	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: W / V2	Snow	18-410-AC	Roadway	No hit and run
4652911	01/19/2019	Property (	6:50 PM	No injury	2	21-24	35-44	D1: (Failur	D2: Not Dis	Collision	Dark - light	Angle	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: E / V2:	Cloudy/Snc	19-18-AC	Roadway	No hit and run
4664443	02/12/2019	Property (	1:27 PM	No injury	2	45-54	45-54	D1: (Drivir	D1: Not Dis	Collision	Daylight	Angle	Snow	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: S / V2:	Cloudy/Snc	19-43-AC	Roadway	No hit and run

4665961	02/10/2019	Property (	4:45 PM	No injury	2	18-20	65-74	D1: (Failec		Collision	Daylight	Angle	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Turning	V1: W / V2	Clear	19-41-AC Roadway	No hit and run
4691179	04/16/2019	Unknown	12:18 PM	No injury	2	65-74	65-74	D1: (Failec	D2: Not Dis	Collision	Daylight	Angle	Dry	T-intersect	0	0	Traffic cor	Two-way,	V1: Enterin	V1: N / V2	Clear	19-117-AC Roadway	Yes, hit and run
4729549	07/23/2019	Property (	10:38 PM	No injury	2	21-24	25-34	D1: (Follov	D1: Not Dis	Collision	Dark - light	Rear-end		T-intersect	0	0	Traffic cor	Two-way,	V1: Slowing	V1: S / V2:	Clear	19-258-AC Roadway	No hit and run
4731142	07/27/2019	Non-fatal	12:35 AM	Non-fatal	3	21-24	45-54	D1: (Oper	D2: Not Dis	Collision	Dark - light	Rear-end		T-intersect	0	4	Traffic cor	Two-way,	V1: Travelli	V1: S / V2:	Clear	19-261-AC Roadway	No hit and run
4732363	07/27/2019	Property (	4:22 PM	No injury	2	21-24	25-34	D1: (Inatte	D2: Not Dis	Collision	Daylight	Angle		Not at junc	0	0	No contro	Two-way,	V1: Overtal	V1: W / V2	Clear	19-262-AC Roadway	No hit and run
4737528	08/13/2019	Non-fatal	6:12 PM	Non-fatal	3	18-20	45-54	D1: (Follov	D2: Not Dis	Collision	Dusk	Rear-end	Dry	T-intersect	0	2	Traffic cor	Two-way,	V1: Travelli	V1: W / V2	Clear	19-280-AC Roadway	No hit and run
4765736	10/21/2019	Property (	4:42 PM	No Appar	3	18-20	35-44	D1: (Follov	D1: Other a	Collision	Daylight	Rear-end	Dry	Not at junc	0	0	No contro	Two-way,	V1: Travelli	V1: E / V2:	Clear	19-355-AC Roadway	No hit and run
4788003	12/09/2019	Non-fatal	9:12 PM	Possible Ir	2	45-54	45-54	D1: (Follov	D2: Not Dis	Collision	Dark - light	Rear-end	Wet	T-intersect	0	0	Traffic cor	Two-way,	V1: Slowing	V1: W / V2	Rain	19-415-AC Roadway	No hit and run

Data Level:
Query Type:
Criteria:



Crash Num	Crash Date	Crash Seve	Crash Time	Max Injury	Numb	Age of	Age of	Driver Con	Driver Dist	First Harmf	Light Condi	Manner of	Road Surfa	Roadway Ju	Fatali	Non-F	Traffic Con	Trafficway	Vehicle Act	Vehicle Tra	Weather C	Crash Repc	First Harmf	Hit and Rur
4042054	05/11/2015	Non-fatal i	11:53 AM	Non-fatal ii	2	35-44	35-44	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	2	Stop signs	Two-way, r	V1: Enterin	V1: W / V2	Clear	15-174-AC	Roadway	No hit and
4050576	06/05/2015	Non-fatal i	10:03 AM	Non-fatal ii	2	25-34	55-64	D1: (Failed	D1: Not Dis	Collision w	Daylight	Sideswipe,	Dry	Off-ramp	0	1	Stop signs	Two-way, r	V1: Slowing	V1: W / V2	Clear	15-197-AC	Roadway	No hit and
4063356	07/18/2015	Non-fatal i	8:48 PM	Non-fatal ii	2	21-24	45-54	D1: (Disreg		Collision w	Dark - light	Rear-end	Dry	Off-ramp	0	1	Stop signs	Two-way, r	V1: Travelli	V1: W / V2	Clear/Othe	15-250-AC	Roadway	No hit and
4073365	08/10/2015	Non-fatal i	2:07 PM	Non-fatal ii	2	35-44	35-44	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	1	Stop signs	One-way, r	V1: Slowing	V1: Not Re	Clear	15-277-AC	Roadway	No hit and
4073370	08/12/2015	Property d	2:56 PM	No injury	2	21-24	65-74	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Stop signs	One-way, r	V1: Travelli	V1: W / V2	Clear	15-283-AC	Roadway	No hit and
4073396	08/04/2015	Property d	4:23 PM	No injury	2	18-20	45-54	D1: (Failed		Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	Two-way, c	V1: Slowing	V1: W / V2	Clear	2015-0D3-	Roadway	No hit and
4075496	08/12/2015	Property d	5:08 PM	No injury	2	21-24	45-54	D1: (Inatte	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Stop signs	One-way, r	V1: Travelli	V1: W / V2	Clear	15-284-AC	Roadway	No hit and
4075529	08/05/2015	Property d	6:33 PM	No injury	2	18-20	25-34	D1: (No im		Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way, r	V1: Slowing	V1: W / V2	Clear	2015-0D3-	Roadway	No hit and
4085291	09/04/2015	Property d	2:00 PM	No injury	2	45-54	55-64	D1: (No im		Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Stop signs	One-way, r	V1: Slowing	V1: W / V2	Clear	2015-0D3-	Roadway	No hit and
4088161	09/17/2015	Property d	4:47 PM	No injury	2	25-34	55-64	D1: (Inatte	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Stop signs	One-way, r	V1: Travelli	V1: W / V2	Clear	15-327-AC	Roadway	No hit and
4102101	10/28/2015	Property d	6:09 PM	No injury	2	35-44	35-44	D1: (Follow	D2: Not Dis	Collision w	Dark - road	Rear-end	Wet	Off-ramp	0	0	Stop signs	One-way, r	V1: Travelli	V1: W / V2	Rain	15-394-AC	Roadway	No hit and
4128621	12/29/2015	Non-fatal i	3:56 PM	Non-fatal ii	2	18-20	35-44	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Wet	Off-ramp	0	1	Yield signs	One-way, r	V1: Travelli	V1: W / V2	Cloudy/Rai	15-502-AC	Roadway	No hit and
4201943	06/07/2016	Property d	8:01 AM	No injury	2	35-44	35-44	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way, r	V1: Slowing	V1: W / V2	Clear	16-219-AC	Roadway	No hit and
4226141	07/30/2016	Non-fatal i	1:46 AM	Non-fatal ii	2	21-24	55-64	D1: (Opera	D1: Not Dis	Collision w	Dark - light	Rear-end	Dry	Not at junct	0	4	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear	16-301-AC	Roadway	No hit and
4231612	08/09/2016	Property d	4:35 PM	No injury	2	21-24	55-64	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Y-intersecti	0	0	Yield signs	Two-way, r	V1: Travelli	V1: W / V2	Clear/Othe	16-315-AC	Roadway	No hit and
4382302	06/19/2017	Property d	4:46 PM	No injury	2	35-44	65-74	D1: (Made	D1: Not Dis	Collision w	Daylight	Angle	Dry	Off-ramp	0	0	Yield signs	Two-way, r	V1: Turning	V1: E / V2:	Clear	17-235-AC	Roadway	No hit and
4441552	10/13/2017	Non-fatal i	8:40 AM	Non-fatal ii	1	35-44	35-44	D1: (No im	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	1	Yield signs	Two-way, r	V1: Slowing	V1: W	Clear	17-377-AC	Roadway	No hit and
4499191	02/10/2018	Property d	8:54 PM	No injury	1	18-20	18-20	D1: (Drivin		Collision w	Dark - road	Single vehi	Wet	Off-ramp	0	0	No control	One-way, r	V1: Turning	V1: W	Rain	2018-0D3-	Shoulder -	No hit and
4544157	05/21/2018	Property d	11:41 AM	No injury	2	25-34	45-54	D1: (Follow	D1: Externa	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way, r	V1: Slowing	V1: W / V2	Clear	18-174-AC	Roadway	No hit and
4600640	09/22/2018	Property d	7:38 PM	No injury	2	25-34	55-64	D1: (Follow	D1: Not Dis	Collision w	Dark - light	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way, r	V1: Travelli	V1: E / V2:	Clear	18-342-AC	Roadway	No hit and
4606546	10/05/2018	Property d	3:52 PM	No injury	2	21-24	65-74		D1: Not Dis	Collision w	Daylight	Rear-end	Dry	On-ramp	0	0	Yield signs	One-way, r	V1: Travelli	V1: S / V2:	Clear	2018-0D3-	Roadway	No hit and
4609615	10/14/2018	Property d	9:05 AM	No injury	2	55-64	75-84	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	Two-way, r	V1: Slowing	V1: W / V2	Cloudy	18-363-AC	Roadway	No hit and
4614946	10/25/2018	Non-fatal i	12:44 PM	Non-fatal ii	2	35-44	35-44	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	1	No control	One-way, r	V1: Slowing	V1: W / V2	Clear	2018-0D3-	Roadway	No hit and
4655702	01/23/2019	Property d	5:35 PM	No injury	3	21-24	35-44	D1: (Follow	D1: Not Dis	Collision w	Dark - road	Rear-end	Wet	Off-ramp	0	0	Yield signs	Two-way, r	V1: Travelli	V1: W / V2	Clear	2019-0D3-	Roadway	No hit and
4706991	05/23/2019	Property d	3:08 PM	No injury	2	25-34	55-64	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way, r	V1: Travelli	V1: W / V2	Cloudy	19-171-AC	Roadway	No hit and
4707503	05/31/2019	Property d	4:10 PM	No injury	2	25-34	35-44	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	Two-way, r	V1: Travelli	V1: W / V2	Clear/Othe	19-181-AC	Roadway	No hit and
4743615	08/26/2019	Property d	5:55 PM	No injury	2	25-34	35-44	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	Two-way, r	V1: Travelli	V1: W / V2	Clear	19-295-AC	Roadway	No hit and
4750405	09/14/2019	Non-fatal i	7:35 PM	Non-fatal ii	1	45-54	45-54	D1: (Failure		Collision w	Dark - road	Single vehi	Dry	Off-ramp	0	1	No control	One-way, r	V1: Travelli	V1: W	Cloudy	19-317-AC	Outside ro	No hit and

Data Level:
Query Type:
Criteria:

IMPACT

Crash Query and Visualization

Welcom

1. Select Fields | 2. Query Type | 3. Define Query | 4. Visualize Results

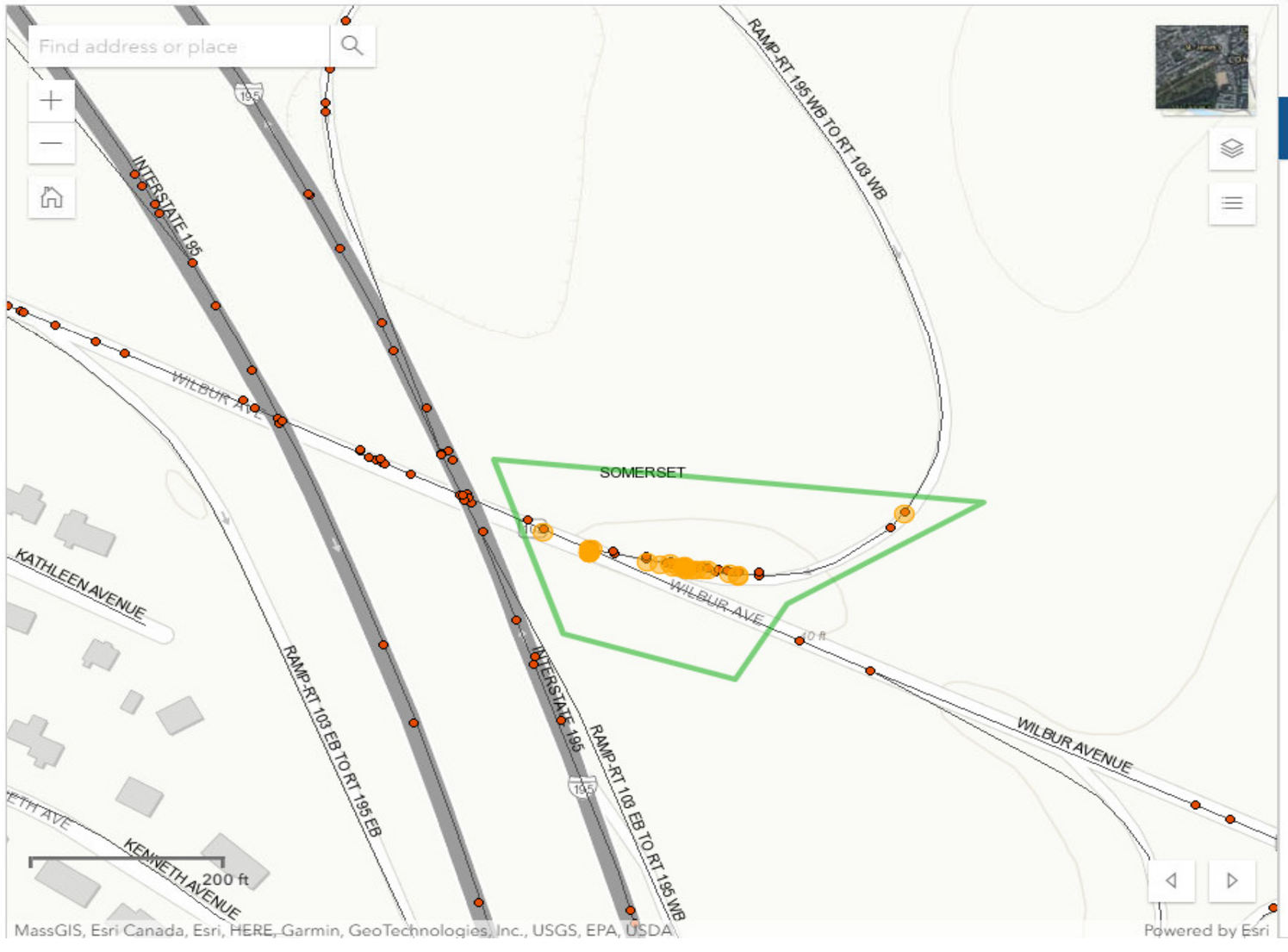
Basic Search | Spatial Search | Advanced Search

Reset All Filters

Data Level:Cr

Reset Spatial Filters

Join Basic Filt



crash date from: 01/01/2015

crash date to: 12/31/2019

Find | Draw | Add

Step 1: Draw Shape Type

Point | Line | Area

Step 2: Define Buffer (Optional)

buffer distance: 1000

buffer units: Feet

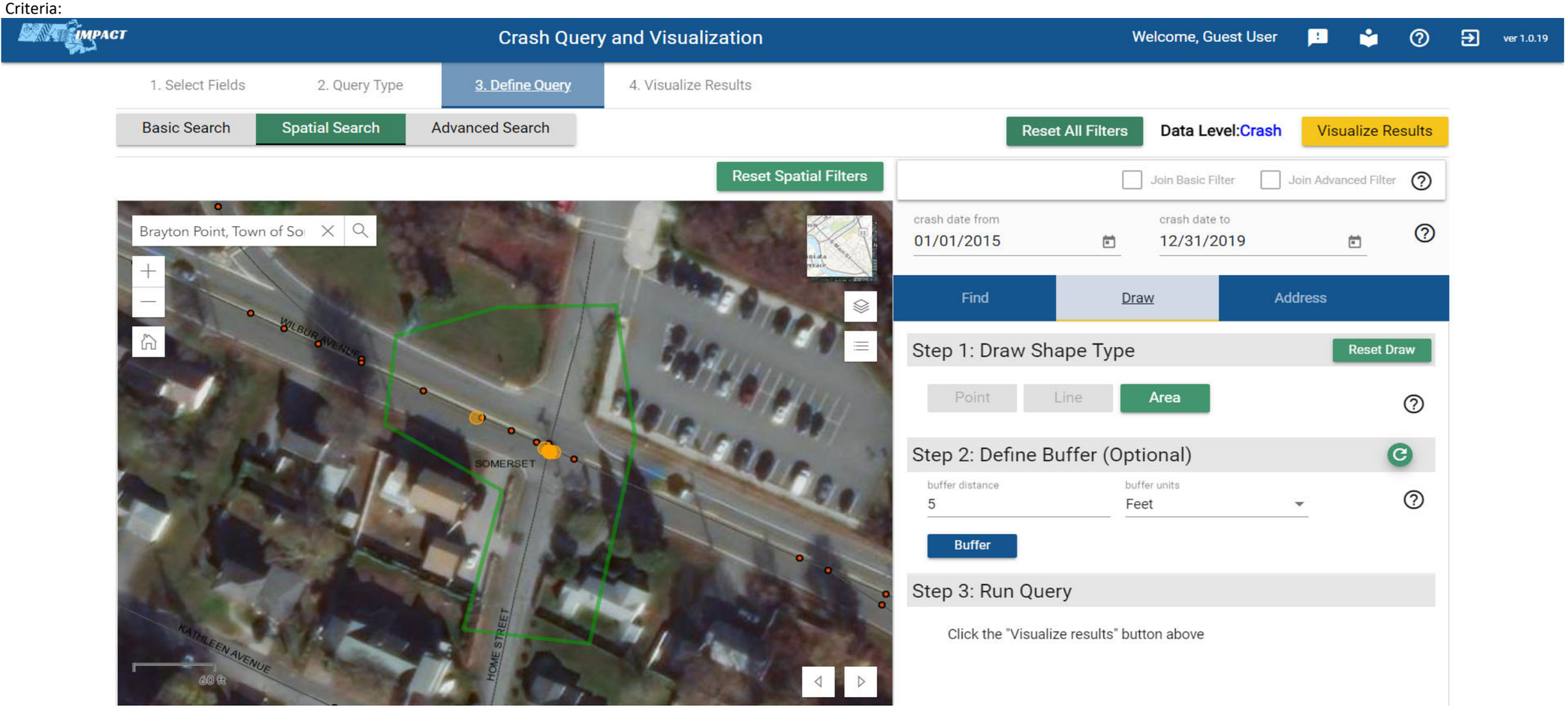
Buffer

Step 3: Run Query

Click the "Visualize results" button above

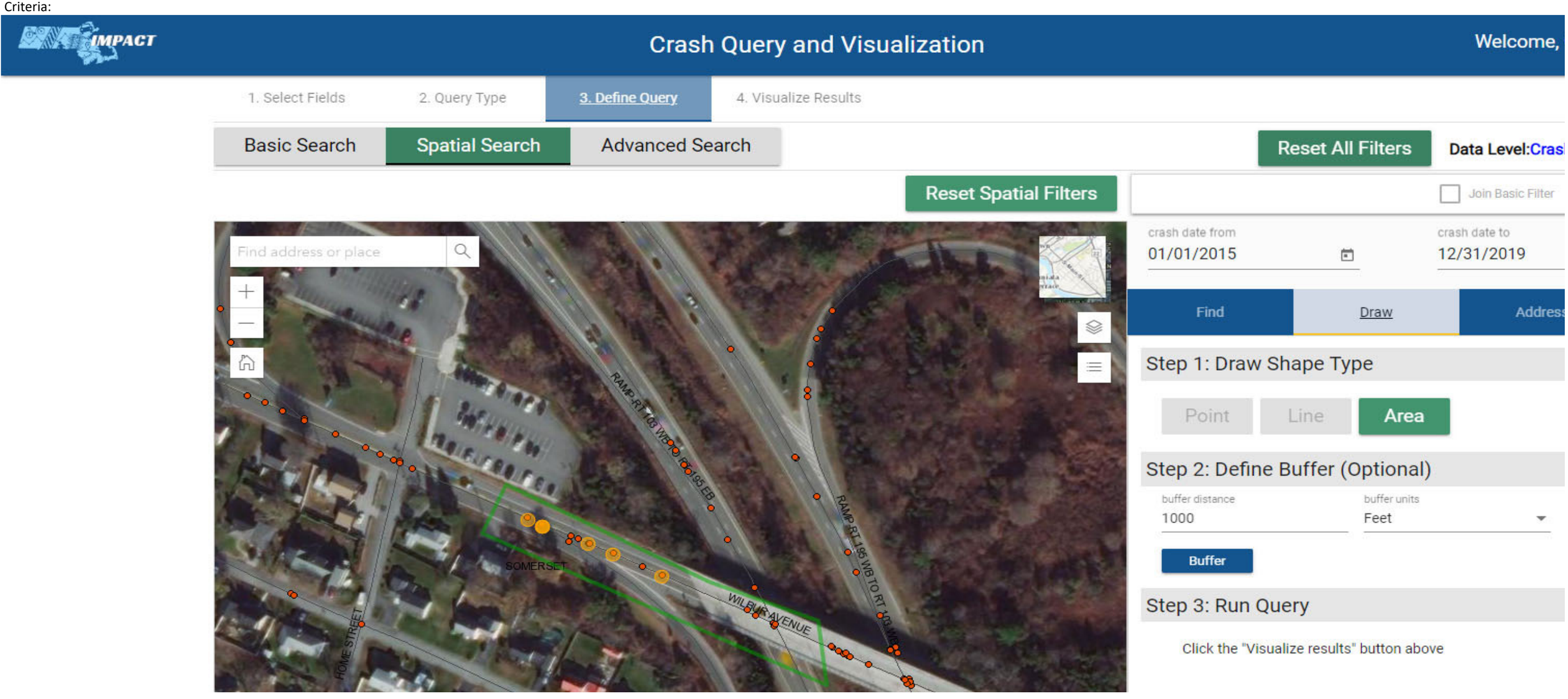
Crash Num	Crash Date	Crash Sev	Crash Time	Max Injury	Numb	Age of	Age of	Driver Con	Driver Dist	First Harmf	Light Condi	Manner of	Road Surfa	Roadway Ju	Fatali	Non-F	Traffic Con	Trafficway	Vehicle Act	Vehicle Tra	Weather C	County Nar	Crash Repc	First Harmf
4122602	12/09/2015	Property c	4:47 PM	No injury	1	55-64	55-64	D1: (No im	D1: Not Dis	Collision w	Dark - light	Rear-end	Dry	Not at junct	0	0	No control	Two-way, r	V1: Slowin	V1: W	Clear	BRISTOL	15-463-AC	Roadway
4235830	08/22/2016	Property c	5:22 PM	No injury	2	25-34	55-64	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Not at junct	0	0	No control	Two-way, r	V1: Travelli	V1: E / V2:	Clear	BRISTOL	16-330-AC	Roadway
4247875	09/09/2016	Property c	6:47 PM	No injury	2	25-34	25-34	D1: (Inatte	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Not at junct	0	0	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear	BRISTOL	16-343-AC	Roadway
4378006	06/03/2017	Property c	3:53 PM	No injury	2	45-54	65-74	D1: (Failure	D1: Not Dis	Collision w	Daylight	Angle	Dry	Four-way in	0	0	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear	BRISTOL	17-202-AC	Roadway
4378007	06/04/2017	Property c	3:15 PM	No injury	2	55-64	55-64	D1: (Follow	D1: Externa	Collision w	Daylight	Sideswipe,	Dry	Four-way in	0	0	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear	BRISTOL	17-204-AC	Roadway
4407619	08/05/2017	Non-fatal	12:33 PM	Non-fatal ir	1	25-34	25-34	D1: (Opera		Collision w	Daylight	Single vehi	Wet	Not at junct	0	2	No control	Two-way, r	V1: Travelli	V1: E	Cloudy/Rai	BRISTOL	17-284-AC	Shoulder -
4444956	10/24/2017	Property c	8:47 PM	No injury	2	25-34	35-44	D1: (Failed	D2: Not Dis	Collision w	Dark - light	Angle	Dry	T-intersecti	0	0	Stop signs	Two-way, r	V1: Turning	V1: N / V2	Clear	BRISTOL	17-393-AC	Roadway
4461781	12/01/2017	Non-fatal	12:29 AM	Non-fatal ir	2	21-24	25-34	D1: (Failed	D1: Not Dis	Collision w	Dark - light	Angle	Dry	T-intersecti	0	2	Stop signs	Two-way, r	V1: Turning	V1: E / V2:	Clear	BRISTOL	17-435-AC	Roadway
4465581	12/05/2017	Property c	4:44 PM	No injury	2	21-24	25-34	D1: (Follow	D1: Not Dis	Collision w	Dark - light	Rear-end	Wet	Not at junct	0	0	No control	Two-way, r	V1: Travelli	V1: W / V2	Rain	BRISTOL	17-443-AC	Roadway
4476336	12/20/2017	Property c	5:54 PM	No injury	2	45-54	55-64	D1: (Failure	D1: Not Dis	Collision w	Dark - light	Angle	Dry	T-intersecti	0	0	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear	BRISTOL	17-463-AC	Roadway
4499806	02/13/2018	Non-fatal	6:17 AM	Non-fatal ir	2	35-44	55-64	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	T-intersecti	0	3	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear	BRISTOL	18-64-AC	Roadway
4615765	10/29/2018	Non-fatal	4:17 PM	Non-fatal ir	2	21-24	35-44	D1: (Opera	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	T-intersecti	0	1	Traffic cont	Two-way, r	V1: Travelli	V1: W / V2	Clear	BRISTOL	18-382-AC	Roadway

Data Level:
Query Type:
Criteria:



Crash Num	Crash Date	Crash Seve	Crash Time	Max Injury	Numb	Age of	Age of	Driver Con	Driver Dist	First Harmf	Light Condi	Manner of	Road Surfa	Roadway Ju	Fatal	Non-I	Traffic Con	Trafficway	Vehicle Act	Vehicle Tra	Weather C	Crash Repc	First Harmf	Hit and Rur
4000790	01/29/2015	Property da	7:31 AM	No injury	1	45-54	45-54	D1: (Glare)	D1: Externa	Collision w	Daylight	Single vehi	Other	Not at junc	0	0	Warning si	Two-way, r	V1: Travelli	V1: E	Clear	15-35-AC	Roadway	No hit and
4176555	04/08/2016	Non-fatal in	12:08 PM	Non-fatal i	2	18-20	21-24	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	On-ramp	0	1	No control	Two-way, r	V1: Travelli	V1: E / V2:	Clear	16-139-AC	Roadway	No hit and
4244668	08/31/2016	Property da	10:39 PM	No injury	2	25-34	35-44	D1: (Inatte	D2: Not Dis	Collision w	Dark - light	Angle	Dry	Not at junc	0	0	No control	Two-way, r	V1: Travelli	V1: E / V2:	Clear	16-337-AC	Roadway	No hit and
4346216	04/01/2017	Non-fatal in	1:35 PM	Non-fatal i	2	18-20	45-54	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Wet	Not at junc	0	2	No control	Two-way, r	V1: Travelli	V1: W / V2	Cloudy/Snc	17-115-AC	Roadway	No hit and
4544256	05/21/2018	Property da	10:24 AM	No injury	2	25-34	25-34	D1: (Wrong	D2: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way, r	V1: Backing	V1: W / V2	Clear	18-173-AC	Roadway	Yes, hit anc
4559022	06/29/2018	Property da	5:26 PM	No injury	2	35-44	45-54	D1: (Follow	D1: Not Dis	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	Two-way, r	V1: Slowing	V1: W / V2	Clear	18-230-AC	Roadway	No hit and
4729550	07/24/2019	Property da	4:20 PM	No injury	2	35-44	75-84	D1: (Follow	D2: Not Dis	Collision w	Daylight	Rear-end		Not at junc	0	0	No control	Two-way, r	V1: Travelli	V1: W / V2	Clear/Othe	19-259-AC	Roadway	No hit and

Data Level:
Query Type:
Criteria:

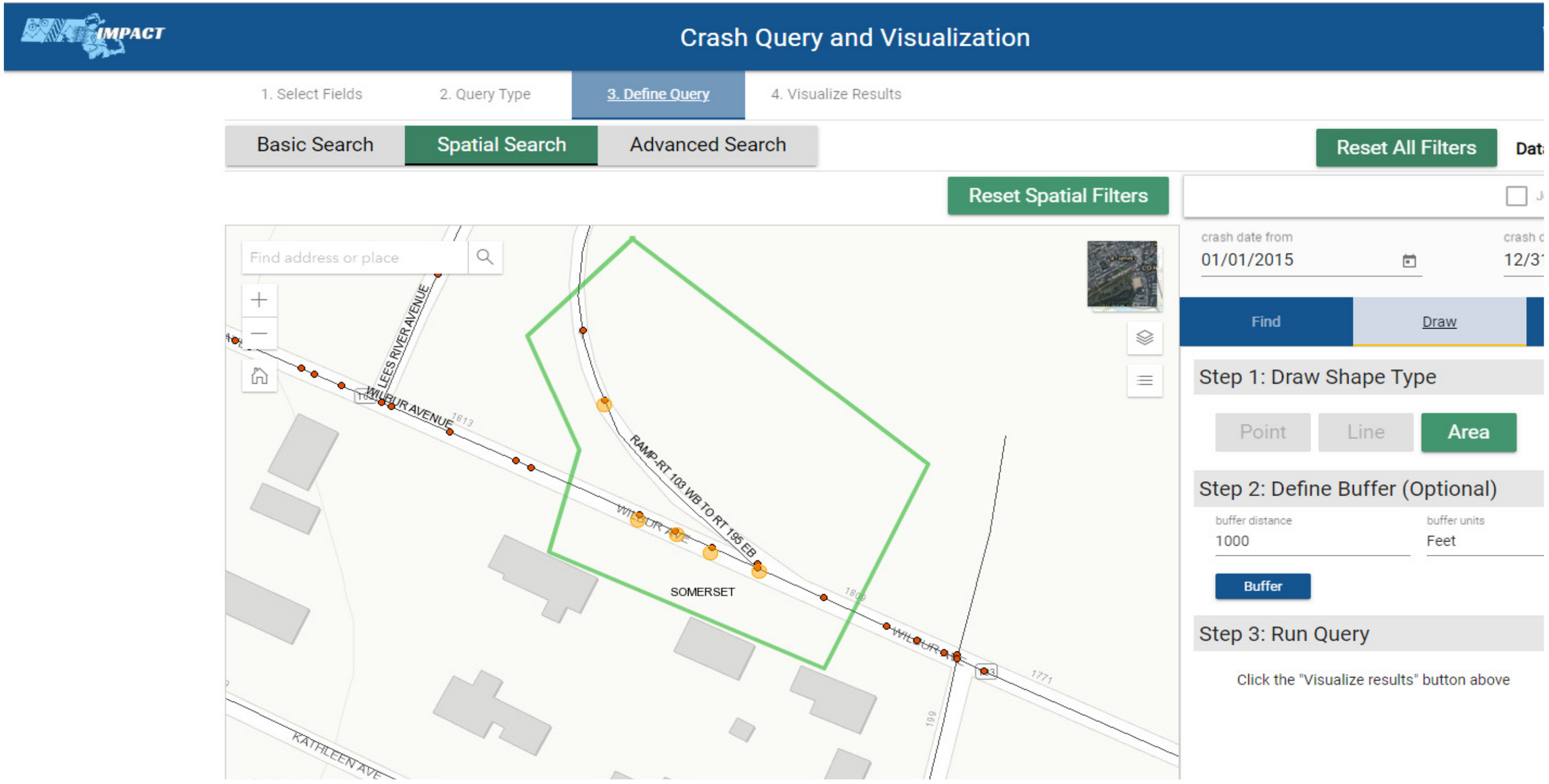


Crash Num	Crash Date	Crash Seve	Crash Time	Max Injury	Numb	Age of	Age of	Driver Con	Driver Dist	First Harm	Light Cond	Manner of	Road Surfa	Roadway J	Fatal	Non-F	Traffic Con	Trafficway	Vehicle Ac	Vehicle Tra	Weather C	Crash Repo	First Harm
4002394	01/31/2015	Property d	4:13 PM	No injury	2	18-20	25-34	D1: (Inatte	D1: Other	Collision w	Daylight	Rear-end	Wet	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: E / V2	Clear	15-37-AC	Roadway
4053771	06/17/2015	Property d	3:59 PM	No injury	2	21-24	65-74	D1: (Follov	D2: Not Di	Collision w	Daylight	Rear-end	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: W / V:	Clear	15-212-AC	Roadway
4109948	11/12/2015	Property d	10:45 AM	No injury	3	18-20	35-44	D1: (No im		Collision w	Daylight	Rear-end	Wet	On-ramp	0	0	No control	One-way,	V1: Slowin	V1: W / V:	Cloudy	2015-0D3	Roadway
4153849	02/17/2016	Property d	5:41 PM	No injury	2	25-34	35-44	D1: (Follov	D2: Not Di	Collision w	Dark - ligh	Rear-end	Dry	T-intersect	0	0	Traffic con	Two-way,	V1: Travell	V1: W / V:	Clear/Othe	16-71-AC	Roadway
4206822	06/17/2016	Property d	4:46 PM	No injury	2	18-20	21-24	D1: (Follov	D2: Not Di	Collision w	Daylight	Rear-end	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: W / V:	Clear	16-231-AC	Roadway

Data Level:

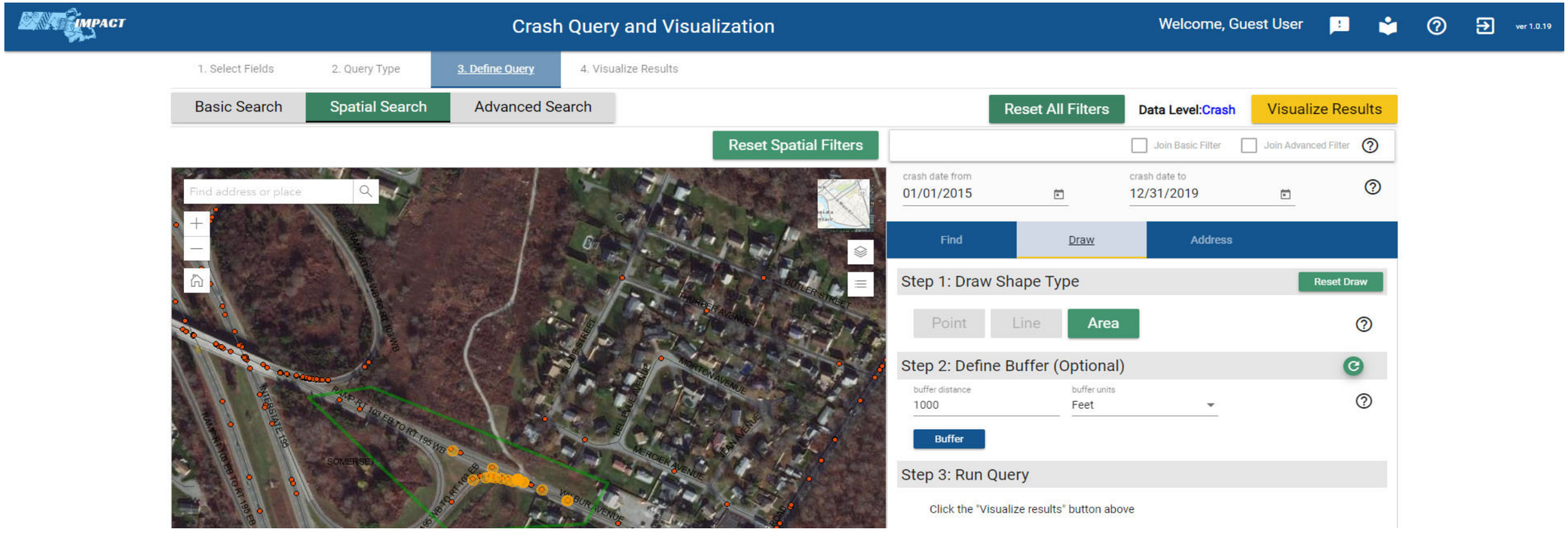
Query Type:

Criteria:



Crash Num	Crash Date	Crash Seve	Crash Time	Max Injury	Number of	Age of	Age of	Driver Con	Driver Dist	First Harm	Light Cond	Manner of	Road Surfa	Roadway J	Fatal	Non-F	Traffic Con	Trafficway	Vehicle Ac	Vehicle Tra	Weather C	Crash Rep	First Harm
4044979	05/20/2015	Property d	3:49 PM	No injury	2	21-24	55-64	D1: (Inatte	D2: Not Di	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way,	V1: Enterir	V1: W / V2	Clear	15-186-AC	Roadway
4058918	07/11/2015	Property d	11:27 AM	No injury	2	21-24	45-54	D1: (Follov	D1: Not Di	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Stop signs	One-way,	V1: Travell	V1: E / V2	Clear	15-237-AC	Roadway
4106325	10/20/2015	Property d	9:30 AM	No injury	2	18-20	35-44	D1: (Follov	D1: Not Di	Collision w	Daylight	Rear-end	Unknown	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: E / V2	Unknown	15-397-AC	Roadway
4114773	11/20/2015	Property d	9:23 PM	No injury	1	25-34	25-34	D1: (No im	D1: Not Di	Collision w	Dark - roac	Single vehi	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: W	Clear	15-435-AC	Roadway
4193308	05/02/2016	Property d	3:15 PM	No injury	2	25-34	45-54	D1: (Inatte	D1: Not Di	Collision w	Daylight	Angle	Dry	Not at junc	0	0	No control	Two-way,	V1: Backin	V1: S / V2	Cloudy	16-169-AC	Roadway
4200927	06/04/2016	Non-fatal i	9:53 AM	Non-fatal i	1	55-64	55-64	D1: (Failed	D1: Not Di	Overturn/r	Daylight	Single vehi	Dry	Not at junc	0	1	No control	Two-way,	V1: Overta	V1: W	Clear	16-215-AC	Shoulder -
4293917	11/28/2016	Property d	4:51 PM	No injury	2	25-34	35-44	D1: (Inatte	D1: Not Di	Collision w	Daylight	Rear-end	Dry	Not at junc	0	0	Yield signs	One-way,	V1: Travell	V1: W / V2	Clear	16-446-AC	Roadway
4303754	12/19/2016	Property d	4:38 PM	No injury	1	65-74	65-74	D1: (No im	D1: Not Di	Collision w	Dusk	Single vehi	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: E	Clear	16-475-AC	Roadway
4318163	01/27/2017	Property d	7:14 AM	No injury	3	18-20	55-64	D1: (Inatte	D1: Extern	Collision w	Daylight	Rear-end	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: E / V2	Clear	17-36-AC	Roadway
4336811	03/07/2017	Property d	5:20 PM	No injury	2	18-20	21-24	D1: (Follov	D2: Not Di	Collision w	Dark - light	Rear-end	Wet	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: W / V2	Rain/Othe	17-81-AC	Roadway
4415708	08/23/2017	Property d	10:13 PM	No injury	1	21-24	21-24	D1: (Failur		Collision w	Dark - light	Single vehi	Dry	Off-ramp	0	0	Yield signs	One-way,	V1: Turnin	V1: E	Clear	17-305-AC	Roadside
4439776	10/13/2017	Property d	2:38 PM	No injury	2	18-20	18-20	D1: (Other	D1: Not Di	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way,	V1: Travell	V1: E / V2	Clear	17-378-AC	Roadway
4499617	02/13/2018	Property d	5:14 PM	No injury	2	18-20	25-34	D1: (Follov	D1: Other	Collision w	Dusk	Rear-end	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: W / V2	Clear/Othe	18-66-AC	Roadway
4555007	06/15/2018	Property d	4:50 PM	No injury	2	35-44	45-54	D1: (Follov	D2: Not Di	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way,	V1: Slowin	V1: W / V2	Cloudy	2018-0D3	Roadway
4598840	09/20/2018	Property d	9:47 PM	No injury	1	55-64	55-64	D1: (No im	D1: Not Di	Collision w	Dark - roac	Single vehi	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: E	Clear	18-340-AC	Roadway
4647779	01/05/2019	Property d	4:33 PM	No injury	1	16-17	16-17	D1: (Failur		Collision w	Dark - roac	Single vehi	Wet	Off-ramp	0	0	Yield signs	One-way,	V1: Leavin	V1: W	Rain	2019-0D3	Roadside
4704172	05/21/2019	Property d	2:34 PM	No injury	2	18-20	35-44	D1: (Inatte	D2: Not Di	Collision w	Daylight	Rear-end	Dry	Off-ramp	0	0	Yield signs	One-way,	V1: Travell	V1: E / V2	Clear	19-169-AC	Roadway
4741329	08/22/2019	Property d	9:45 AM	No injury	2	45-54	65-74	D1: (Failed	D1: Not Di	Collision w	Daylight	Angle	Dry	Not at junc	0	0	No control	Two-way,	V1: Enterir	V1: S / V2	Cloudy	19-291-AC	Roadway
4789025	12/13/2019	Non-fatal i	4:43 PM	Suspected	2	35-44	45-54	D1: (Follov	D2: Not Di	Collision w	Dusk	Rear-end	Dry	Not at junc	0	0	No control	Two-way,	V1: Travell	V1: W / V2	Clear	19-425-AC	Roadway
4804039	12/30/2019	Property d	7:48 AM	No Appare	2	25-34	45-54	D1: (Inatte	D2: Not Di	Collision w	Daylight	Sideswipe,	Wet	Off-ramp	0	0	Yield signs	One-way,	V1: Overta	V1: E / V2	Rain	19-458-AC	Roadway

Data Level:
Query Type:
Criteria:


IMPACT
Crash Query and Visualization
Welcome, Guest User
ver 1.0.19
1. Select Fields
2. Query Type
3. Define Query
4. Visualize Results
Basic Search
Spatial Search
Advanced Search
Reset All Filters
Data Level:Crash
Visualize Results
Reset Spatial Filters
Join Basic Filter
Join Advanced Filter
Find address or place
crash date from
01/01/2015
crash date to
12/31/2019
Find
Draw
Address
Step 1: Draw Shape Type
Reset Draw
Point
Line
Area
Step 2: Define Buffer (Optional)
buffer distance
1000
buffer units
Feet
Buffer
Step 3: Run Query
Click the "Visualize results" button above
RAMP FROM RT 18 NB TO RT 1&9 NB
RAMP FROM RT 1&9 NB TO RT 18 SB
RAMP FROM RT 1&9 SB TO RT 18 NB
RAMP FROM RT 18 SB TO RT 1&9 SB
RAMP FROM RT 1&9 NB TO RT 1&9 SB
RAMP FROM RT 1&9 SB TO RT 1&9 NB
RAMP FROM RT 1&9 SB TO RT 1&9 NB
RAMP FROM RT 1&9 NB TO RT 1&9 S

Crash Num	Crash Date	Crash Sev	Crash Time	Numb	Age of	Age of	Driver Con	Driver Dis	First Harm	Light Condi	Manner o	Road Surfa	Roadway Jur	Fatali	Non-Fa	Traffic Co	Trafficway	Vehicle Act	Vehicle Tra	Weather	Crash Repo	First Harm	Hit and Rur
4004247	02/02/2015	Property	8:24 AM	2	21-24	21-24	D1: (No im	D2: Not D	Collision v	Daylight	Angle	Wet	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: E / V2	Cloudy	15-40-AC	Roadway	No hit and
4012922	02/20/2015	Property	1:49 PM	2	25-34	25-34	D1: (Unkn	D2: Not D	Collision v	Daylight	Rear-end	Dry	Not at junct	0	0	No contro	Two-way,	V1: Travelli	V1: E / V2	Clear	15-70-AC	Roadway	No hit and
4012923	02/22/2015	Not Repo	11:22 AM	1					Collision v	Daylight	Angle	Snow	Not at junct	0	0	No contro	Two-way,	V1: Parked	V1: W	Snow/Sle	15-74-AC	Outside rc	No hit and
4028197	03/29/2015	Property	4:29 PM	2	16-17	35-44	D1: (Inatte	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	0	No contro	Two-way,	V1: Backing	V1: S / V2	Clear	15-126-AC	Roadway	No hit and
4048967	06/02/2015	Property	12:33 PM	3	18-20	25-34	D1: (Follov	D1: Not D	Collision v	Daylight	Rear-end	Wet	Not at junct	0	0	No contro	Two-way,	V1: Travelli	V1: W / V	Cloudy/Ra	15-195-AC	Roadway	No hit and
4064643	07/08/2015	Property	9:50 PM	2	45-54	55-64	D1: (Inatte		Collision v	Dark - light	Rear-end	Wet	Four-way int	0	0	Traffic cor	Two-way,	V1: Backing	V1: E / V2	Cloudy	15-236-AC	Roadway	No hit and
4092259	09/26/2015	Non-fatal	3:20 PM	2	45-54	55-64	D1: (Inatte	D2: Not D	Collision v	Daylight	Rear-end	Dry	Not at junct	0	1	No contro	Two-way,	V1: Travelli	V1: E / V2	Clear	15-342-AC	Roadway	No hit and
4109182	11/09/2015	Property	6:46 AM	2	25-34	55-64	D1: (Glare)	D1: Not D	Collision v	Daylight	Rear-end	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Travelli	V1: E / V2	Clear	15-412-AC	Roadway	No hit and
4110326	11/09/2015	Property	6:47 AM	2	25-34	35-44	D1: (Visibil	D2: Not D	Collision v	Daylight	Rear-end	Dry	Not at junct	0	0	No contro	Two-way,	V1: Travelli	V1: E / V2	Clear	15-413-AC	Roadway	No hit and
4117645	12/04/2015	Non-fatal	2:47 PM	3	35-44	55-64	D1: (Follov	D1: Not D	Collision v	Daylight	Rear-end	Dry	Four-way int	0	1	Flashing tı	Two-way,	V1: Travelli	V1: E / V2	Clear	15-456-AC	Roadway	No hit and
4131979	01/06/2016	Property	5:54 PM	2	25-34	45-54	D1: (Inatte	D1: Not D	Collision v	Dark - light	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: E / V2	Clear	16-7-AC	Roadway	No hit and
4133536	12/27/2015	Non-fatal	11:15 PM	2	25-34	45-54	D1: (Unkn		Collision v	Dark - light	Angle	Wet	Not at junct	0	2	No contro	Two-way,	V1: Travelli	V1: E / V2	Rain/Clou	15-499-AC	Roadway	No hit and
4154708	02/24/2016	Non-fatal	9:05 AM	2	55-64	55-64	D1: (Failed	D2: Not D	Collision v	Daylight	Angle	Wet	Four-way int	0	1	Traffic cor	Two-way,	V1: Turning	V1: E / V2	Rain	16-81-AC	Roadway	No hit and
4193315	05/19/2016	Non-fatal	8:02 AM	2	21-24	25-34	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	1	No contro	Two-way,	V1: Turning	V1: E / V2	Clear	16-191-AC	Roadway	No hit and
4217933	07/16/2016	Property	12:12 PM	2	25-34	35-44	D1: (Inatte	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	0	No contro	Two-way,	V1: Backing	V1: S / V2	Clear	16-276-AC	Outside rc	No hit and
4235828	08/16/2016	Property	6:00 AM	2	25-34	25-34	D1: (Unkn	D1: Not D	Collision v	Daylight	Rear-to-re	Dry	Not at junct	0	0	No contro	Two-way,	V1: Backing	V1: S / V2	Cloudy	16-324-AC	Outside rc	No hit and
4235829	08/22/2016	Property	2:25 PM	2	18-20	25-34	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: E / V2	Clear	16-329-AC	Roadway	No hit and
4241186	08/31/2016	Property	11:18 AM	2	18-20	45-54	D1: (Failed	D2: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: N / V2	Cloudy	16-336-AC	Roadway	No hit and
4281394	11/10/2016	Property	6:59 AM	2	35-44	45-54	D1: (Disreg	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Travelli	V1: S / V2	Clear	16-408-AC	Roadway	No hit and
4299671	12/14/2016	Property	2:24 PM	2	45-54	45-54	D1: (Glare)	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: N / V2	Clear	16-468-AC	Roadway	No hit and
4300260	12/15/2016	Non-fatal	4:14 PM	3	45-54	55-64	D1: (Disreg	D1: Not D	Collision v	Dusk	Angle	Dry	Four-way int	0	2	Traffic cor	Two-way,	V1: Overtal	V1: W / V	Clear	16-471-AC	Roadway	No hit and
4336812	03/08/2017	Property	6:46 PM	2	18-20	21-24	D1: (Unkn	D2: Not D	Collision v	Dark - light	Angle	Dry	Driveway	0	0	No contro	Two-way,	V1: Backing	V1: N / V2	Clear/Unk	17-82-AC	Outside rc	No hit and
4358256	04/16/2017	Non-fatal	2:12 PM	3	25-34	65-74	D1: (Follov	D1: Not D	Collision v	Daylight	Rear-end	Dry	Four-way int	0	1	Traffic cor	Two-way,	V1: Travelli	V1: E / V2	Clear	17-136-AC	Roadway	No hit and
4360322	05/03/2017	Property	10:03 AM	2	65-74	65-74	D1: (Failed	D2: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Overtal	V1: S / V2	Clear	17-158-AC	Roadway	No hit and
4378008	06/06/2017	Property	2:45 PM	1	75-84	75-84	D1: (Failed		Collision v	Daylight	Angle	Wet	Not at junct	0	0	No contro	Two-way,	V1: Turning	V1: W	Cloudy	17-207-AC	Roadway	No hit and
4391371	07/14/2017	Property	9:50 AM	2	35-44	55-64	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	0	No contro	Two-way,	V1: Enterin	V1: E / V2	Cloudy	17-256-AC	Roadway	No hit and
4427152	09/12/2017	Property	1:32 PM	2	35-44	45-54	D1: (Failed	D1: Not D	Collision v	Daylight	Sideswipe	Dry	Not at junct	0	0	No contro	Two-way,	V1: Overtal	V1: S / V2	Clear	17-328-AC	Roadway	No hit and
4439676	10/12/2017	Property	2:22 PM	2	25-34	55-64	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	0	No contro	Two-way,	V1: Turning	V1: E / V2	Clear	17-374-AC	Roadway	No hit and
4442737	10/19/2017	Non-fatal	5:05 PM	2	25-34	55-64	D1: (Other	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	2	Traffic cor	Two-way,	V1: Travelli	V1: E / V2	Clear	17-388-AC	Roadway	No hit and
4464246	12/01/2017	Non-fatal	9:38 AM	2	45-54	55-64	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	1	Traffic cor	Two-way,	V1: Turning	V1: S / V2	Clear	17-436-AC	Roadway	No hit and
4502189	02/16/2018	Property	8:21 AM	2	25-34	65-74	D1: (Follov	D2: Not D	Collision v	Daylight	Rear-end	Wet	Four-way int	0	0	Traffic cor	Two-way,	V1: Travelli	V1: E / V2	Rain/Clou	18-67-AC	Roadway	No hit and
4518748	03/24/2018	Property	2:18 PM	2	16-17	16-17	D1: (Inatte	D1: Not D	Collision v	Daylight	Rear-end	Dry	Not at junct	0	0	No contro	Two-way,	V1: Backing	V1: S / V2	Cloudy	18-112-AC	Outside rc	No hit and
4558996	06/25/2018	Property	6:47 PM	2	25-34	65-74	D1: (Other		Collision v	Daylight	Angle	Dry	Not at junct	0	0	No contro	Two-way,	V1: Backing	V1: E / V2	Clear	18-222-AC	Roadway	No hit and
4561413	07/06/2018	Property	10:13 AM	2	25-34	35-44	D1: (Made	D2: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V2: Travelli	V2: E / V1	Clear	18-239-AC	Roadway	No hit and
4581379	08/13/2018	Non-fatal	7:51 PM	2	25-34	45-54	D1: (Failed	D1: Not D	Collision v	Dark - light	Angle	Wet	Four-way int	0	3	Traffic cor	Two-way,	V1: Turning	V1: E / V2	Rain	18-286-AC	Roadway	No hit and
4583442	08/20/2018	Non-fatal	12:25 PM	2	55-64	65-74	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	1	Traffic cor	Two-way,	V1: Turning	V1: E / V2	Clear	18-295-AC	Roadway	No hit and
4615768	10/30/2018	Non-fatal	6:16 AM	2	18-20	25-34	D1: (Fatigu	D1: Other	Collision v	Dawn	Rear-end	Dry	Not at junct	0	2	Traffic cor	Two-way,	V1: Travelli	V1: E / V2	Clear	18-385-AC	Roadway	No hit and
4616949	11/01/2018	Property	4:04 PM	2	25-34	65-74	D1: (Failur	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Overtal	V1: E / V2	Clear	18-391-AC	Roadway	No hit and
4619773	11/07/2018	Property	6:52 AM	2	25-34	55-64	D1: (Glare)	D1: Not D	Collision v	Daylight	Sideswipe	Wet	Four-way int	0	0	Traffic cor	Two-way,	V1: Travelli	V1: E / V2	Clear	18-401-AC	Roadway	No hit and
4625788	11/17/2018	Non-fatal	1:04 PM	2	45-54	55-64	D1: (No im	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	1	No contro	Two-way,	V1: Enterin	V1: E / V2	Cloudy	18-416-AC	Roadway	No hit and
4642573	12/26/2018	Property	11:33 AM	2	25-34	55-64	D1: (Failed	D2: Not D	Collision v	Daylight	Sideswipe	Dry	Driveway	0	0	No contro	Two-way,	V1: Enterin	V1: N / V2	Clear	18-465-AC	Roadway	No hit and
4658552	01/26/2019	Property	3:18 PM	2	25-34	35-44	D1: (Failed	D1: Not D	Collision v	Daylight	Angle	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: N / V2	Clear	19-22-AC	Roadway	No hit and
4661812	02/04/2019	Property	11:06 AM	2	25-34	35-44	D1: (Follov	D2: Not D	Collision v	Daylight	Rear-end	Dry	Not at junct	0	0	No contro	Two-way,	V1: Travelli	V1: W / V	Clear	19-32-AC	Roadway	No hit and
4661814	02/05/2019	Non-fatal	8:46 AM	3	25-34	75-84	D1: (Made	D1: Not D	Collision v	Daylight	Angle	Dry	Not at junct	0	1	No contro	Two-way,	V1: Turning	V1: E / V2	Clear	19-34-AC	Shoulder -	No hit and
4694097	04/22/2019	Property	3:06 PM	2	16-17	55-64	D1: (Follov	D2: Not D	Collision v	Daylight	Rear-end	Wet	Not at junct	0	0	No contro	Two-way,	V1: Travelli	V1: N / V2	Cloudy/Ra	19-131-AC	Roadway	No hit and
4703608	05/19/2019	Property	7:05 PM	2	45-54	45-54	D1: (Follov		Collision v	Daylight	Rear-end	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: W / V	Clear	19-163-AC	Roadway	No hit and

4709883	06/02/2019	Property	2:50 PM	2	45-54	65-74	D1: (Failur	D1: Not D	Collision v	Daylight	Rear-end	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Slowing	V1: S	/ V2	Clear	19-189-AC	Roadway	No hit and
4711936	06/12/2019	Property	12:49 AM	1	25-34	25-34	D1: (Opera	D1: Manu	Collision v	Dark - light	Single veh	Dry	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: N		Clear	19-202-AC	Roadway	No hit and
4724104	07/15/2019	Non-fatal	8:21 PM	2	25-34	>84	D1: (Failed	D2: Not D	Collision v	Dark - light	Angle		Four-way int	0	2	Traffic cor	Two-way,	V1: Turning	V1: N	/ V2	Clear/Oth	19-247-AC	Roadway	No hit and
4739866	08/17/2019	Non-fatal	10:01 AM	2	25-34	25-34	D1: (Distra	D1: Other	Collision v	Daylight	Rear-end	Dry	Not at juncti	0	2	No contro	Two-way,	V1: Travelli	V1: E	/ V2	Clear	19-286-AC	Roadway	No hit and
4760221	10/09/2019	Property	10:43 AM	2	25-34	55-64	D1: (Disreg	D1: Not D	Collision v	Daylight	Angle	Wet	Not at juncti	0	0	No contro	Two-way,	V1: Overtal	V1: E	/ V2	Cloudy/Ra	19-347-AC	Roadway	No hit and
4760776	10/11/2019	Property	4:47 PM	2	55-64	65-74	D1: (Failur	D2: Not D	Collision v	Daylight	Sideswipe	Wet	Four-way int	0	0	Traffic cor	Two-way,	V1: Overtal	V1: E	/ V2	Rain	19-350-AC	Roadway	No hit and
4762555	10/17/2019	Property	5:07 PM	2	35-44	65-74	D1: (Follov	D2: Not D	Collision v	Daylight	Angle	Dry	Not at juncti	0	0	No contro	Two-way,	V1: Travelli	V1: E	/ V2	Clear	19-353-AC	Roadway	No hit and
4773945	11/05/2019	Property	12:48 PM	2	18-20	55-64	D1: (Inatte	D2: Not D	Collision v	Daylight	Angle	Wet	Four-way int	0	0	Traffic cor	Two-way,	V1: Turning	V1: E	/ V2	Rain	19-370-AC	Roadway	No hit and

Data Level:
Query Type:
Criteria:

1. Select Fields | 2. Query Type | 3. Define Query | 4. Visualize Results

Basic Search | Spatial Search | Advanced Search

Reset All Filters | Data Level:Crash | Visualiz

Reset Spatial Filters



Join Basic Filter | Join Advanced F

crash date from: 01/01/2015

crash date to: 12/31/2019

Find | Draw | Address

Step 1: Draw Shape Type

Resc

Point | Line | Area

Step 2: Define Buffer (Optional)

buffer distance: 5

buffer units: Feet

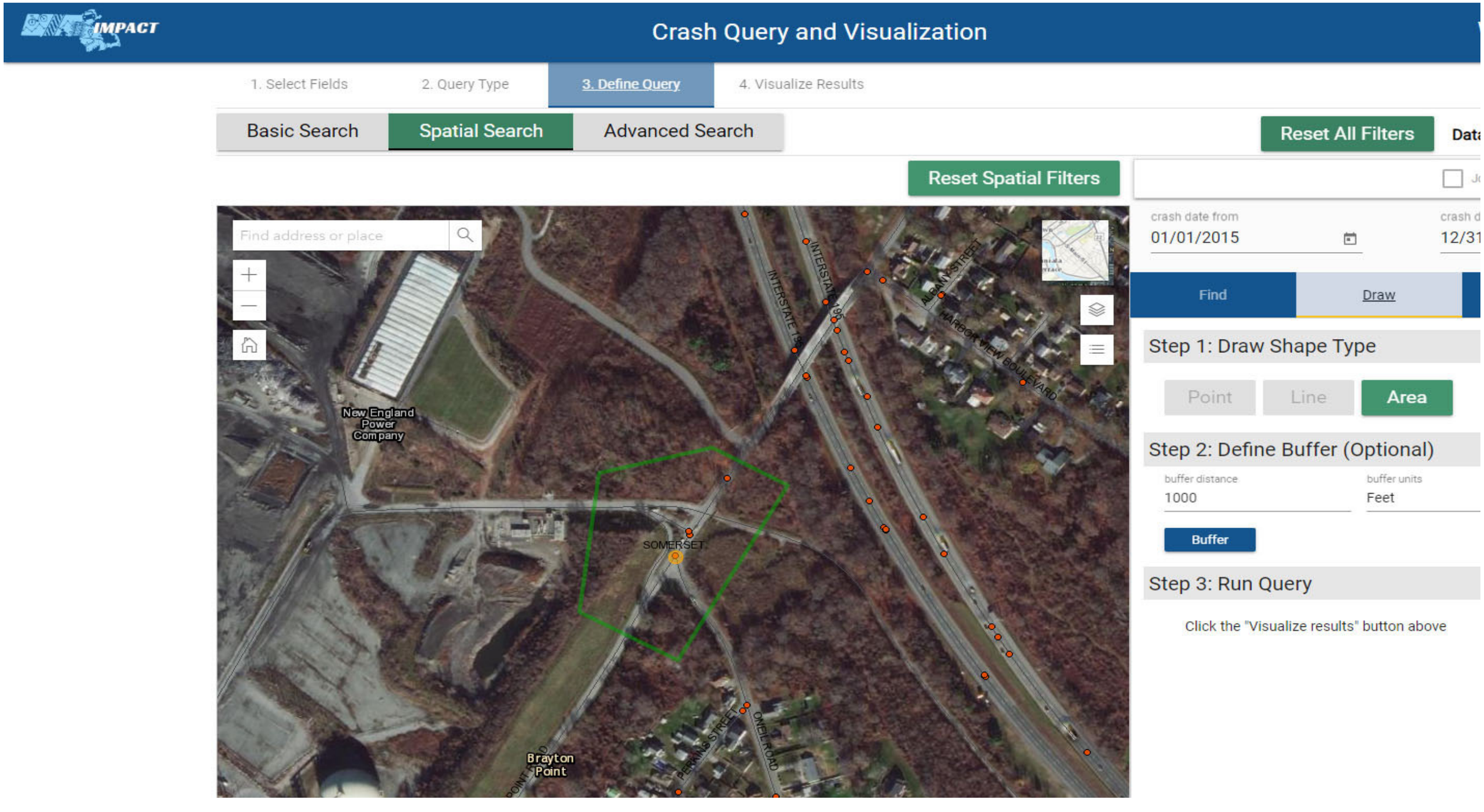
Buffer

Step 3: Run Query

Click the "Visualize results" button above

Crash Num	Crash Date	Crash Sev	Crash Statu	Crash Time	Number	Age of	Age of	Driver Con	Driver Distı	First Harm	Light Condi	Manner o	Road Surfa	Roadway Ju	Fatali	Non-Fa	Traffic Cor	Trafficway	Vehicle Act	Vehicle Tra	Weather	Crash Repc	First Harm
4354722	04/18/2017	Property	Closed	3:00 AM	1	21-24	21-24	D1: (Drivin	D1: Not Dis	Collision w	Dark - light	Single veh	Dry	T-intersecti	0	0	No contro	Two-way, r	V1: Travelli	V1: S	Clear	17-140-AC	Outside rc

Data Level:
Query Type:
Criteria:



Appendix 4 – Crash Rate Sheets

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset | COUNT DATE : June 2022

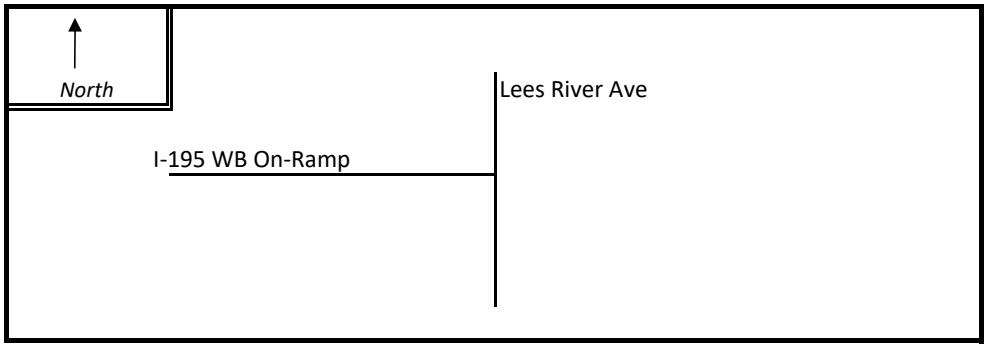
DISTRICT : 5 | UNSIGNALIZED : X (0.61) | SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Lees River Ave

MINOR STREET(S) : I-195 WB On-Ramp

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	540	405	0	0		**945**

I-195 WB

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **10,500**

TOTAL # OF CRASHES : 3 | # OF YEARS : 5 | AVERAGE # OF CRASHES PER YEAR (**A**) : **0.60**

CRASH RATE CALCULATION : **0.16**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset | COUNT DATE : June 2022

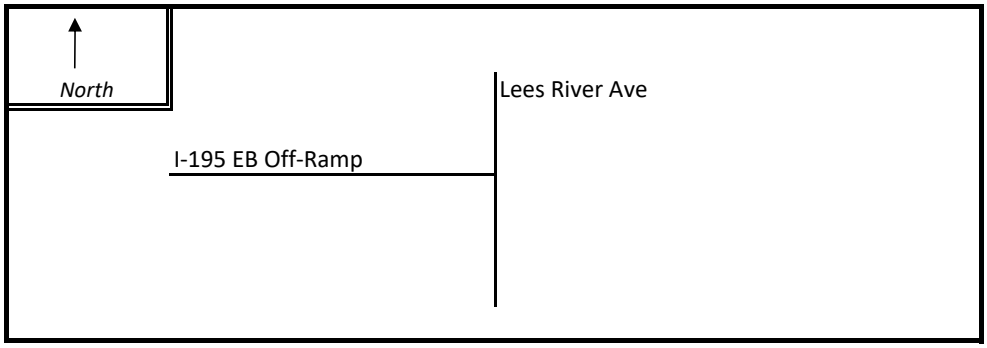
DISTRICT : 3 | UNSIGNALIZED : X (0.61) | SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Lees River Ave

MINOR STREET(S) : I-195 EB Off-Ramp

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	335	210	400	0		**945**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **10,500**

TOTAL # OF CRASHES : 10 | # OF YEARS : 5 | AVERAGE # OF CRASHES PER YEAR (**A**) : **2.00**

CRASH RATE CALCULATION : **0.52**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset | COUNT DATE : June 2022

DISTRICT : 5 | UNSIGNALIZED : | SIGNALIZED : X

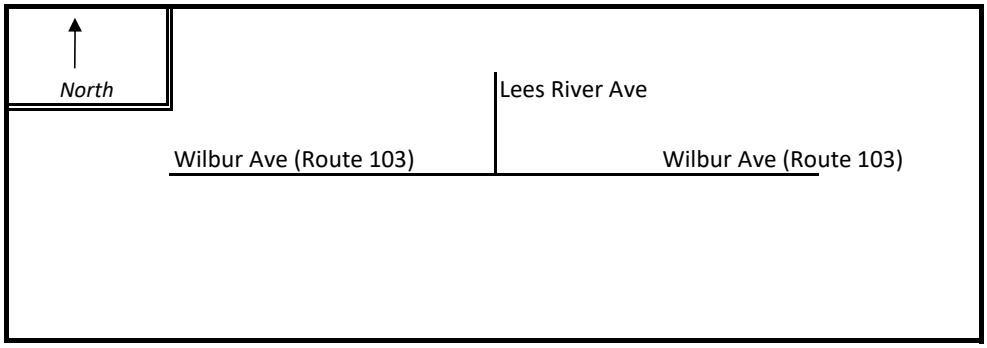
0.61 | 0.89

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : Lees River Ave

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :		SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :		390	705	1,025		**2,120**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **23,556**

TOTAL # OF CRASHES : 54 | # OF YEARS : 5 | AVERAGE # OF CRASHES PER YEAR (**A**) : **10.80**

CRASH RATE CALCULATION : **1.26**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset | COUNT DATE : June 2022

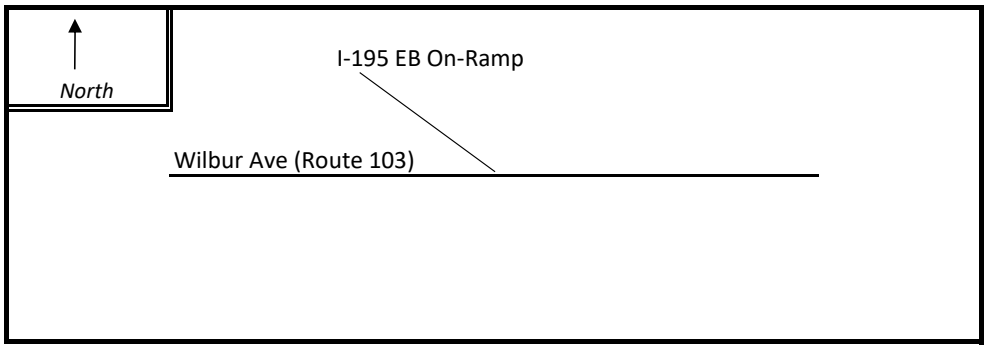
DISTRICT : 5 | UNSIGNALIZED : X (0.61) | SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : I-195 EB On-Ramp

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :		SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :		0	905	1,295		**2,200**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **24,444**

TOTAL # OF CRASHES : 12 | # OF YEARS : 5 | AVERAGE # OF CRASHES PER YEAR (**A**) : **2.40**

CRASH RATE CALCULATION : **0.27**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset COUNT DATE : June 2022

DISTRICT : 3 UNSIGNALIZED : X SIGNALIZED :

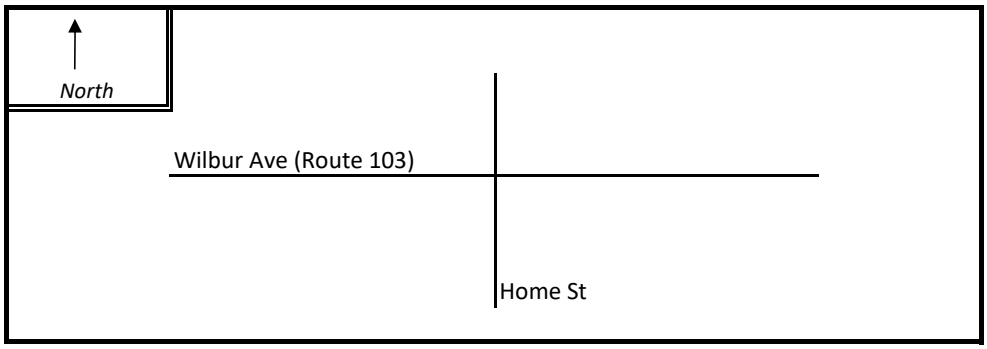
0.61 0.89

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : Home St

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	25	25	905	1,305		**2,260**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **25,111**

TOTAL # OF CRASHES : 12 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **2.40**

CRASH RATE CALCULATION : **0.26**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset

COUNT DATE : June 2022

DISTRICT : 5

UNSIGNALIZED : X (0.61)

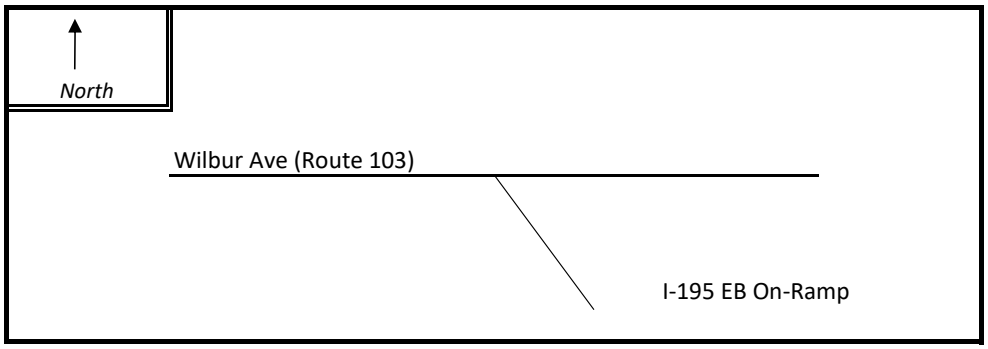
SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : I-195 EB On-Ramp

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	0	0	910	1,310		**2,220**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **24,667**

TOTAL # OF CRASHES : 7

OF YEARS : 5

AVERAGE # OF CRASHES PER YEAR (**A**) : **1.40**

CRASH RATE CALCULATION : **0.16**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Worcester

COUNT DATE : June 2022

DISTRICT : 5

UNSIGNALIZED : X (0.61)

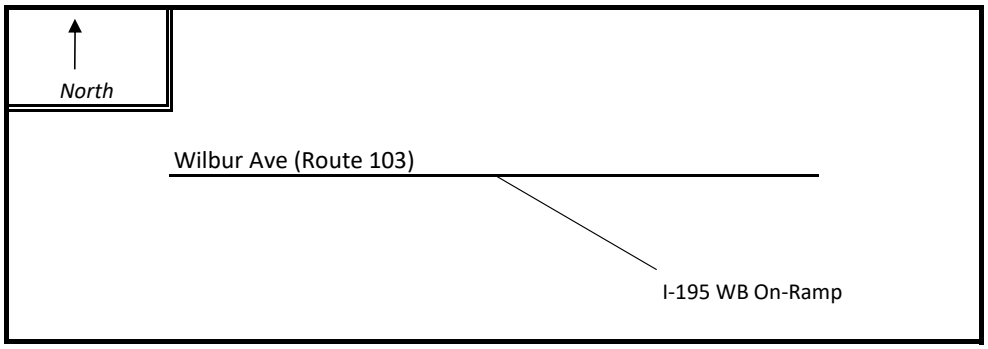
SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : I-195 WB Off-Ramp

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :		520	420	785		**1,725**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **19,167**

TOTAL # OF CRASHES : 28

OF YEARS : 5

AVERAGE # OF CRASHES PER YEAR (**A**) : **5.60**

CRASH RATE CALCULATION : **0.80**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset

COUNT DATE : June 2022

DISTRICT : 5

UNSIGNALIZED : X (0.61)

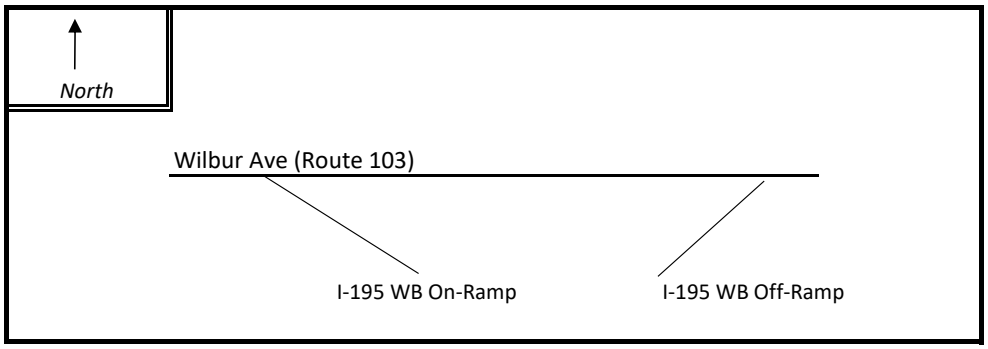
SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : I-195 WB Off-Ramp

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	300	0	415	790		**1,505**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **16,722**

TOTAL # OF CRASHES : 20

OF YEARS : 5

AVERAGE # OF CRASHES PER YEAR (**A**) : **4.00**

CRASH RATE CALCULATION : **0.66**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset | COUNT DATE : June 2022

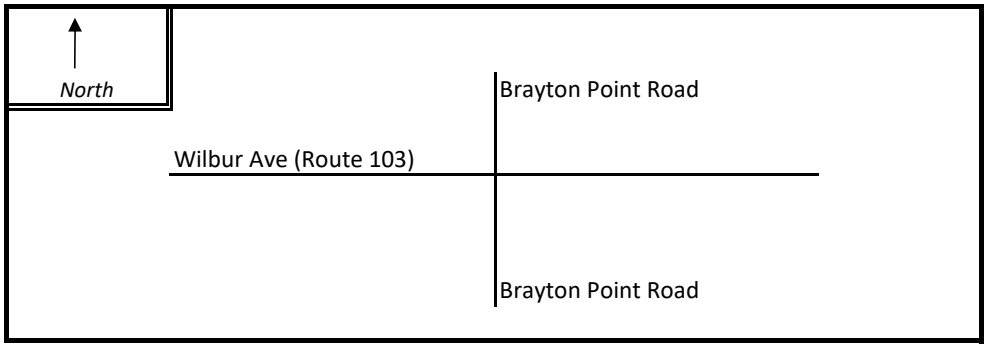
DISTRICT : 5 | UNSIGNALIZED : [ ] 0.61 | SIGNALIZED : [X] 0.89

~ INTERSECTION DATA ~

MAJOR STREET : Wilbur Ave (Route 103)

MINOR STREET(S) : Brayton Point Road

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	120	395	670	470		**1,655**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **18,389**

TOTAL # OF CRASHES : 54 | # OF YEARS : 5 | AVERAGE # OF CRASHES PER YEAR (**A**) : **10.80**

CRASH RATE CALCULATION : **1.61**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Somerset | COUNT DATE : June 2022

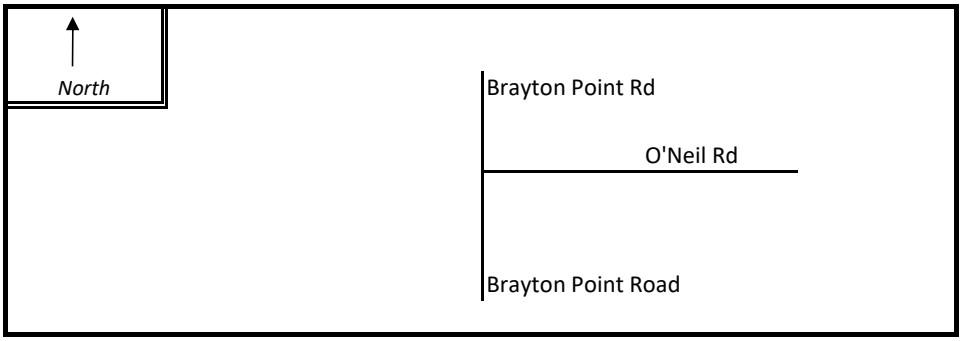
DISTRICT : 5 | UNSIGNALIZED : X (0.61) | SIGNALIZED : (0.89)

~ INTERSECTION DATA ~

MAJOR STREET : Brayton Point Road

MINOR STREET(S) : O'Neil Rd

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB		WB		
PEAK HOURLY VOLUMES (AM/**PM**) :	5	70		40		**115**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **1,278**

TOTAL # OF CRASHES : 1 | # OF YEARS : 5 | AVERAGE # OF CRASHES PER YEAR (**A**) : **0.20**

CRASH RATE CALCULATION : **0.43**

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : MassDOT Accident Data (2015-2019)

Project Title & Date: 15542 Prysmian Brayton Point 8/22/2022

* Some movements at this intersection were back-calculated from other study area intersections to determine the approach volume.

Appendix 5 – Trip Generation

Manufacturing
(140)

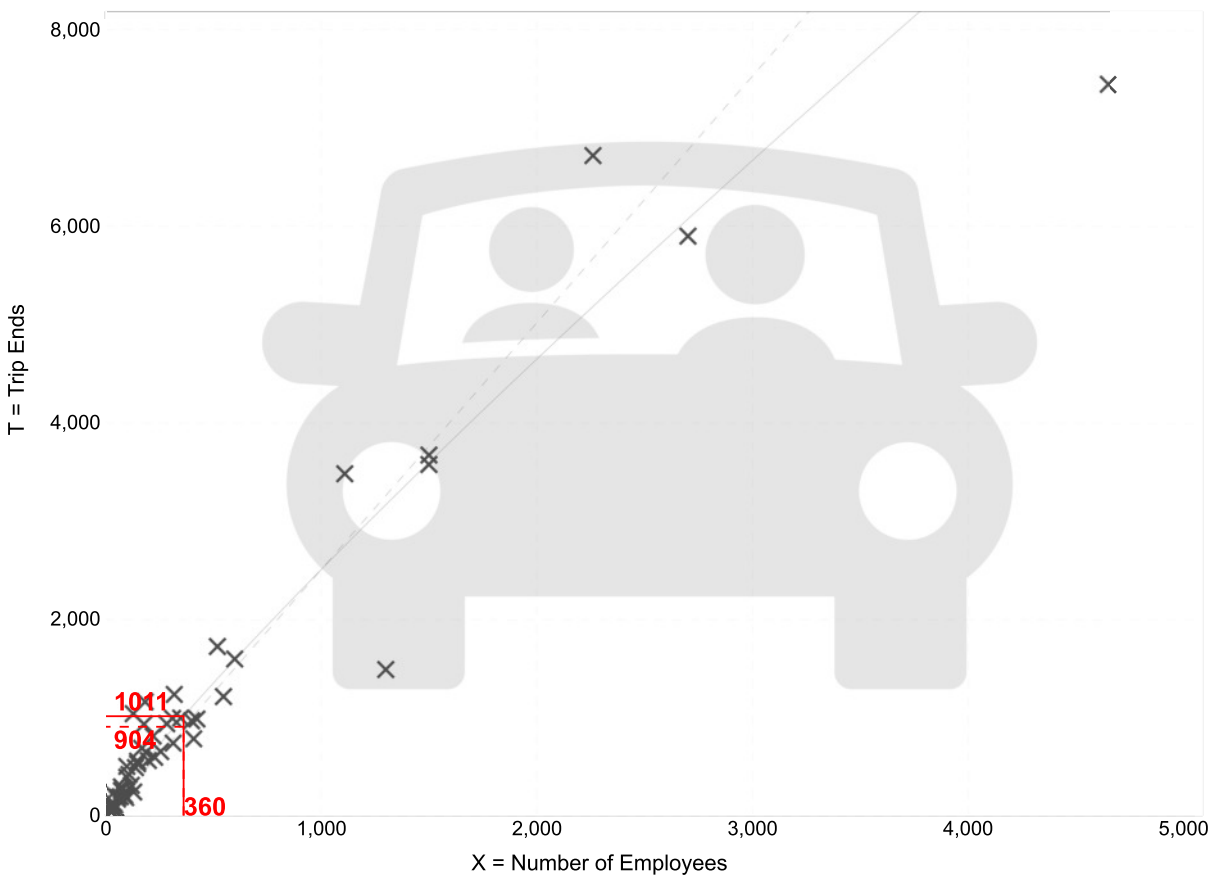
Vehicle Trip Ends vs: **Employees**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 53
Avg. Num. of Employees: 437
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
2.51	1.15 - 8.05	0.96

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.89 Ln(X) + 1.68 **R^2= 0.93**

Manufacturing
(140)

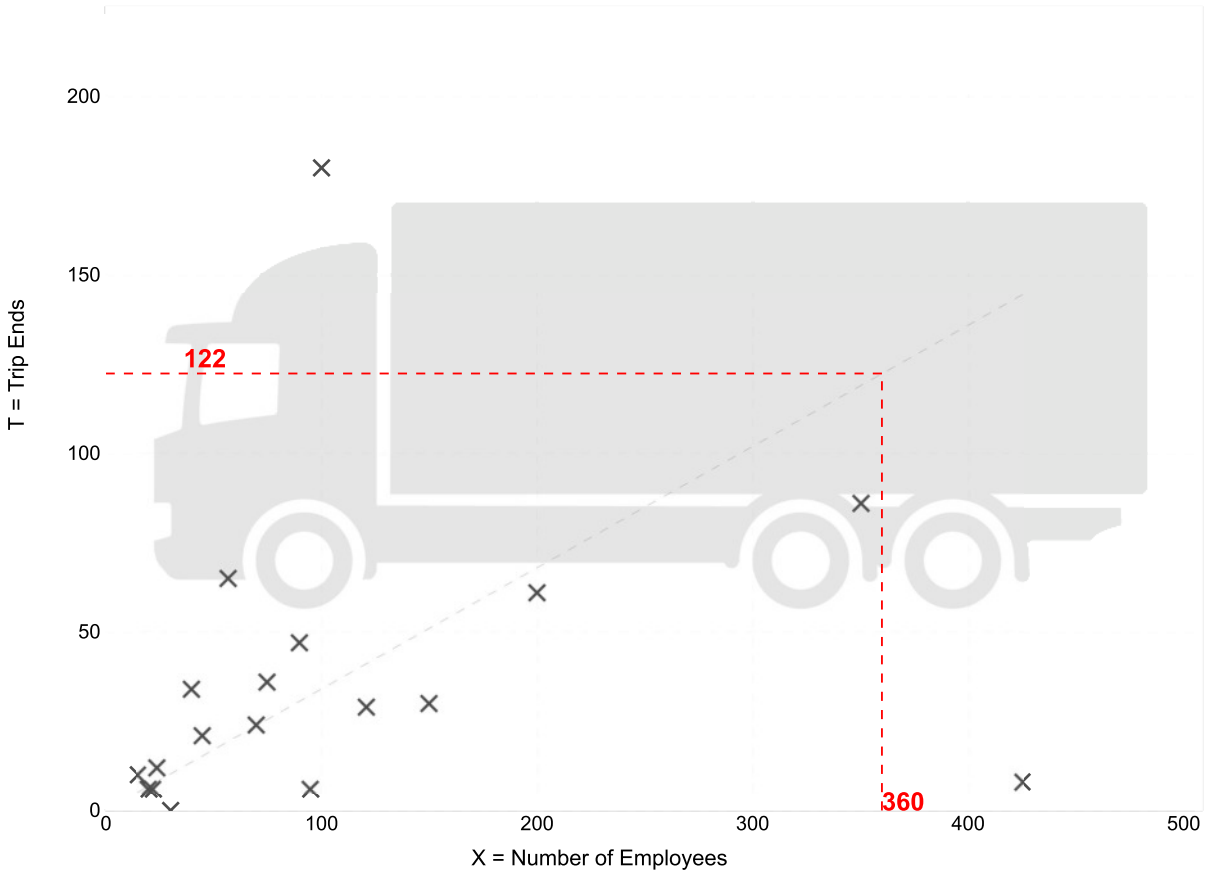
Truck Trip Ends vs: **Employees**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 18
Avg. Num. of Employees: 107
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.34	0.00 - 1.80	0.43

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

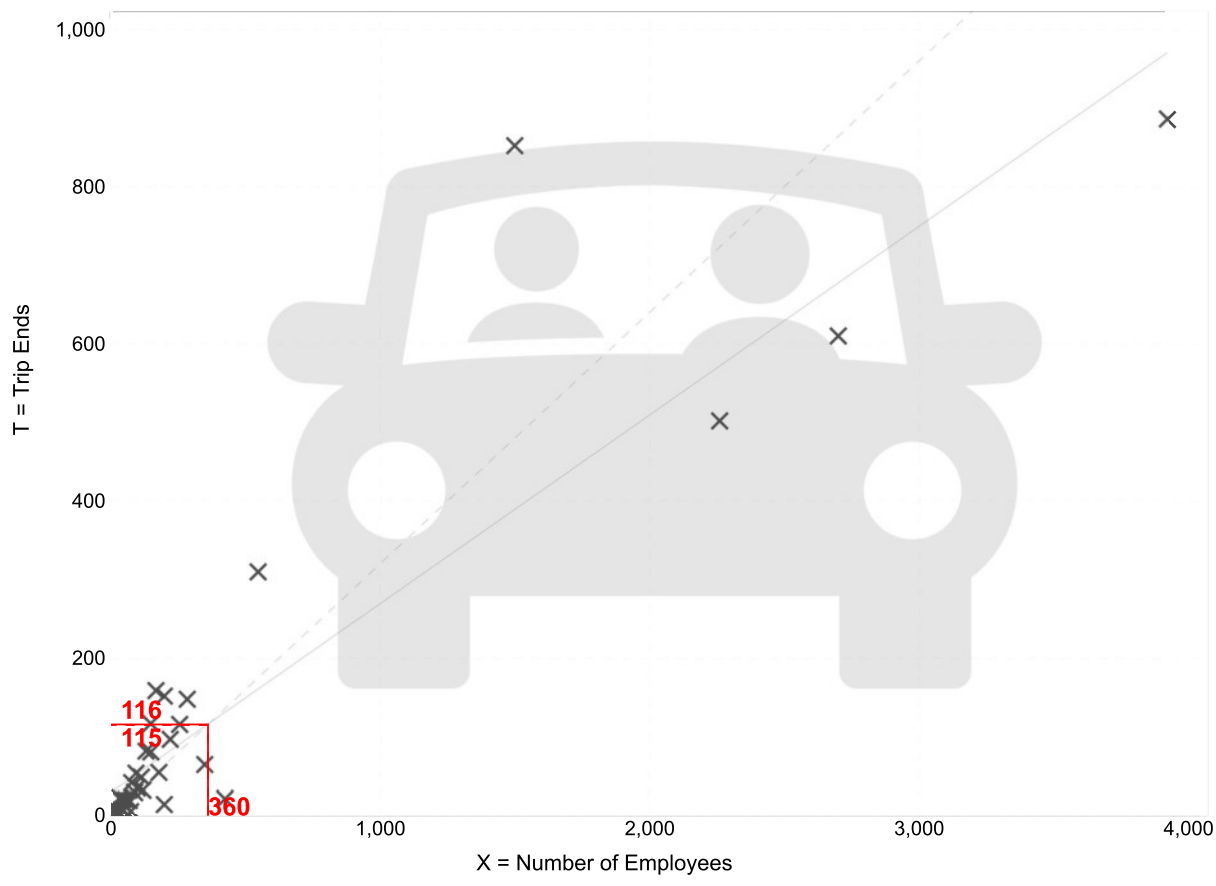
Manufacturing
(140)

Vehicle Trip Ends vs:	**Employees**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	37
Avg. Num. of Employees:	400
Directional Distribution:	73% entering, 27% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.32	0.03 - 0.94	0.18

Data Plot and Equation



Fitted Curve Equation: T = 0.24(X) + 29.47

R^2= 0.83

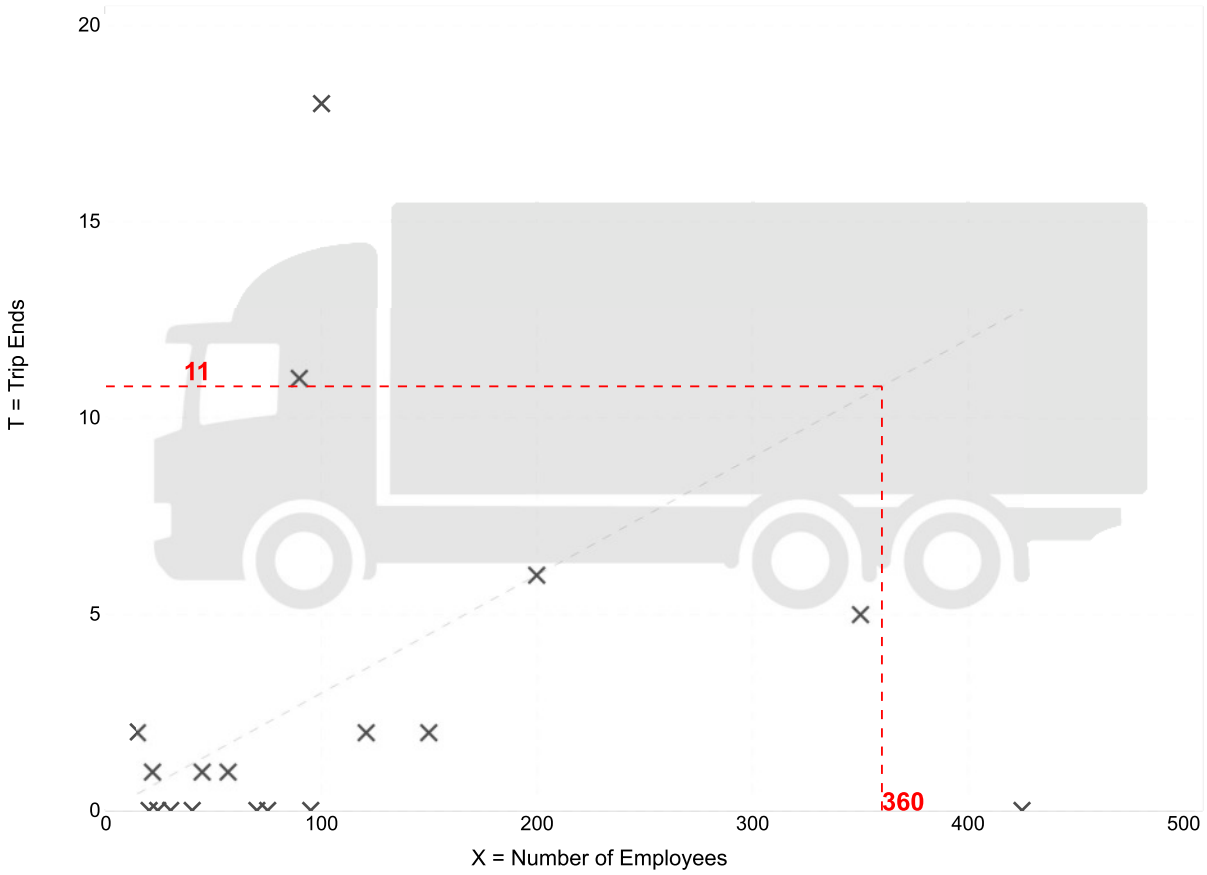
Manufacturing
(140)

Truck Trip Ends vs:	**Employees**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	18
Avg. Num. of Employees:	107
Directional Distribution:	59% entering, 41% exiting

Truck Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.03	0.00 - 0.18	0.05

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

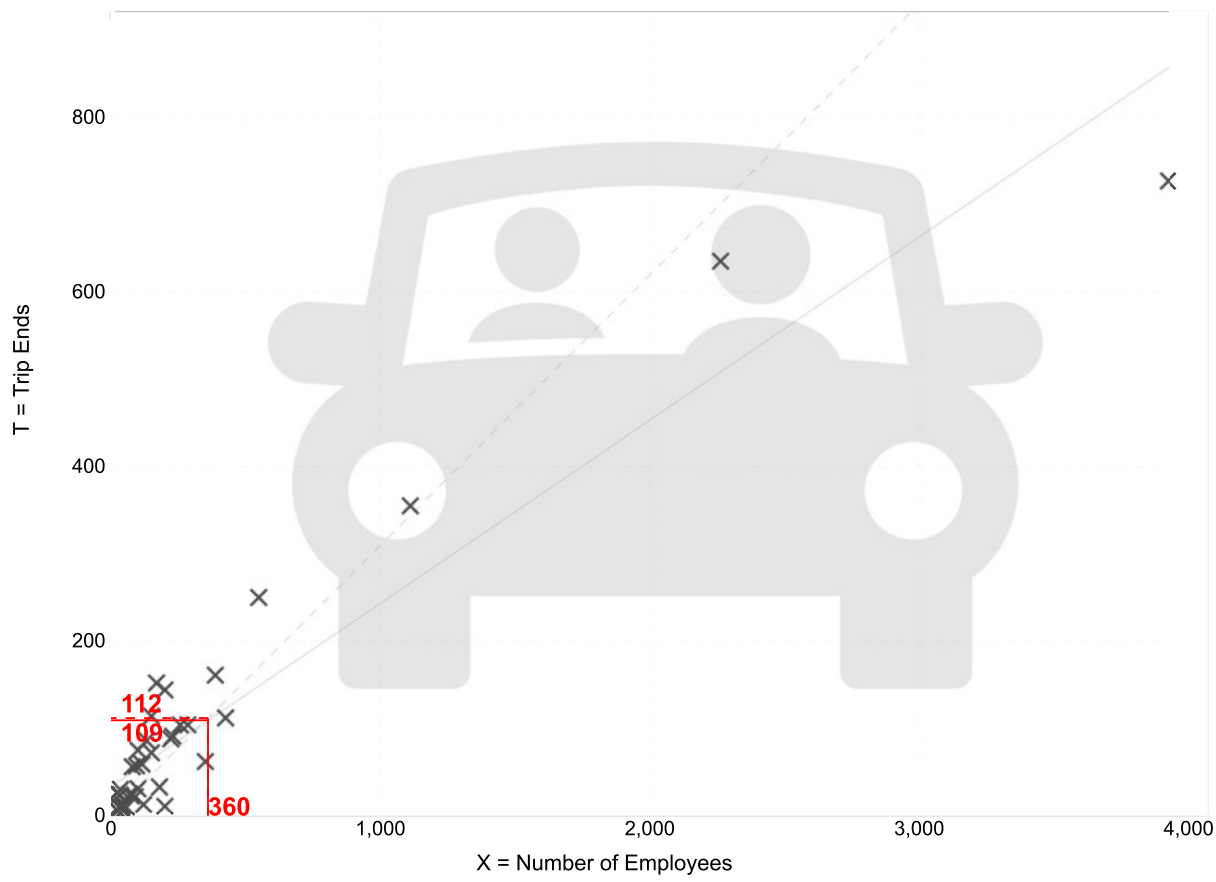
Manufacturing
(140)

Vehicle Trip Ends vs:	**Employees**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	37
Avg. Num. of Employees:	334
Directional Distribution:	37% entering, 63% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.31	0.06 - 1.18	0.17

Data Plot and Equation



Fitted Curve Equation: T = 0.21(X) + 33.45

R^2= 0.90

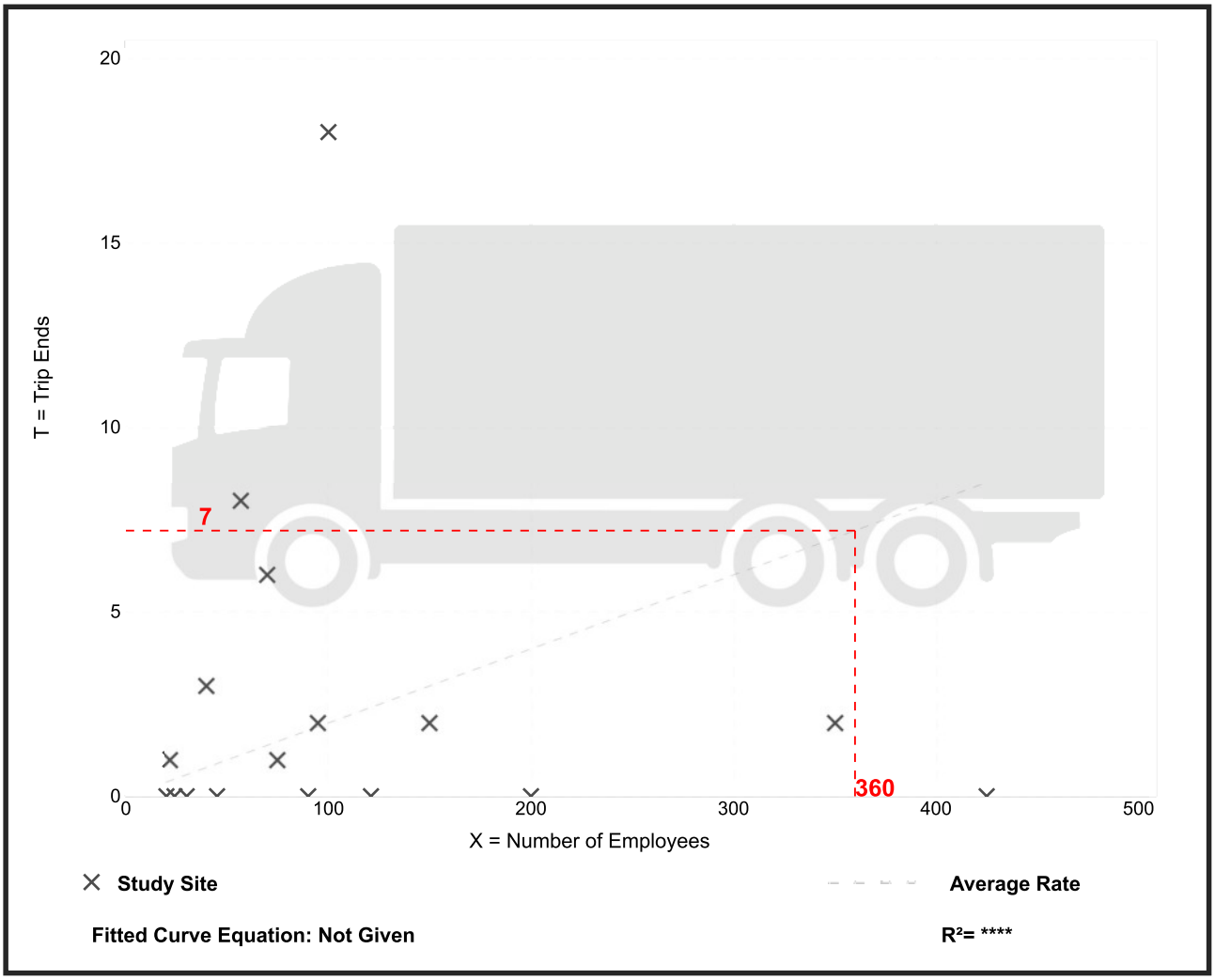
Manufacturing
(140)

Truck Trip Ends vs:	**Employees**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	17
Avg. Num. of Employees:	113
Directional Distribution:	37% entering, 63% exiting

Truck Trip Generation per Employee

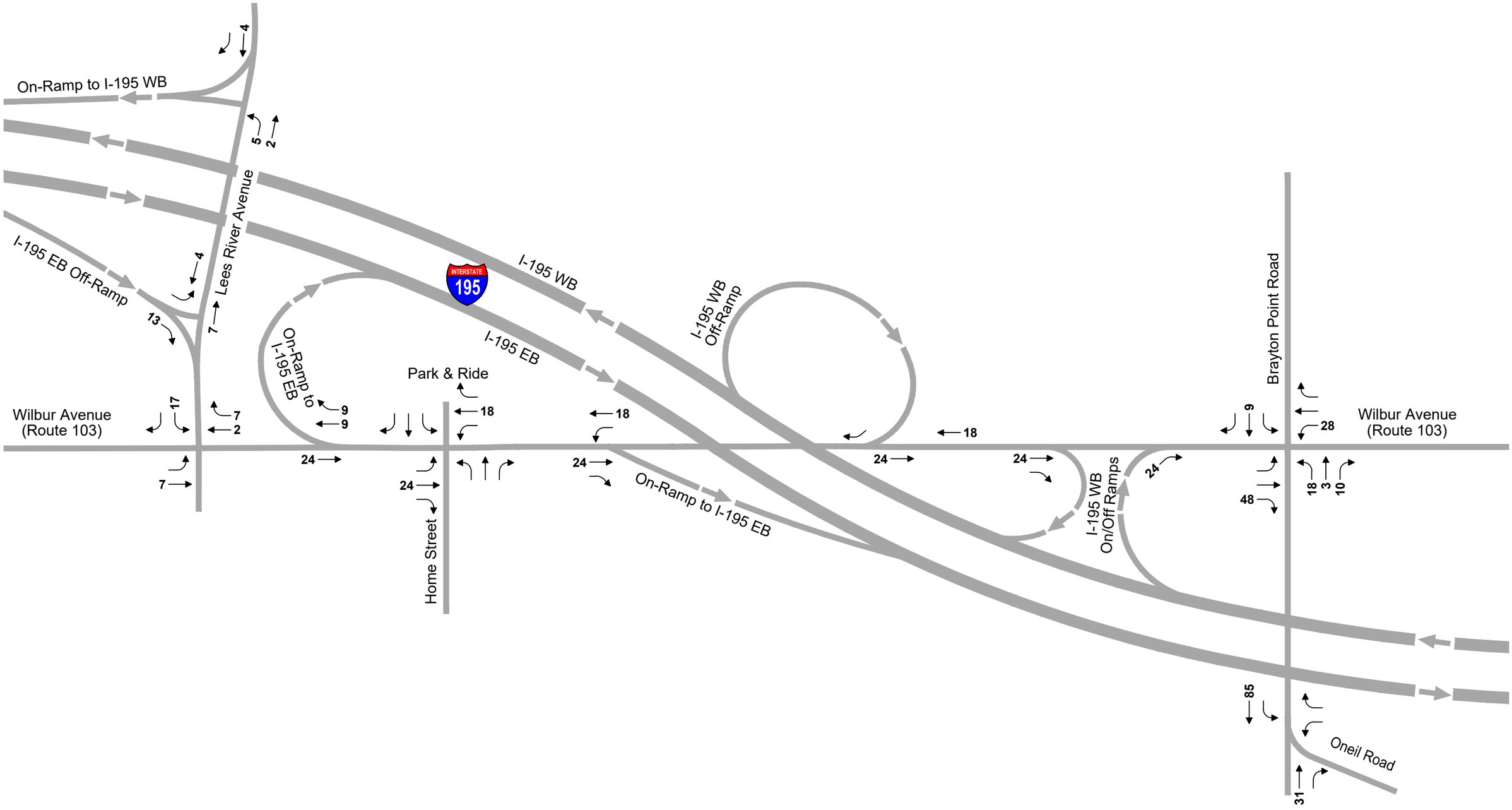
Average Rate	Range of Rates	Standard Deviation
0.02	0.00 - 0.18	0.05

Data Plot and Equation



Appendix 6 – Site Generated Traffic

\\vhb\gbl\proj\Boston\15542.00\Graphics\FIGURES\Prysmian DEIR Figures Folder\CAD\BRAYTON_Volumes.dwg

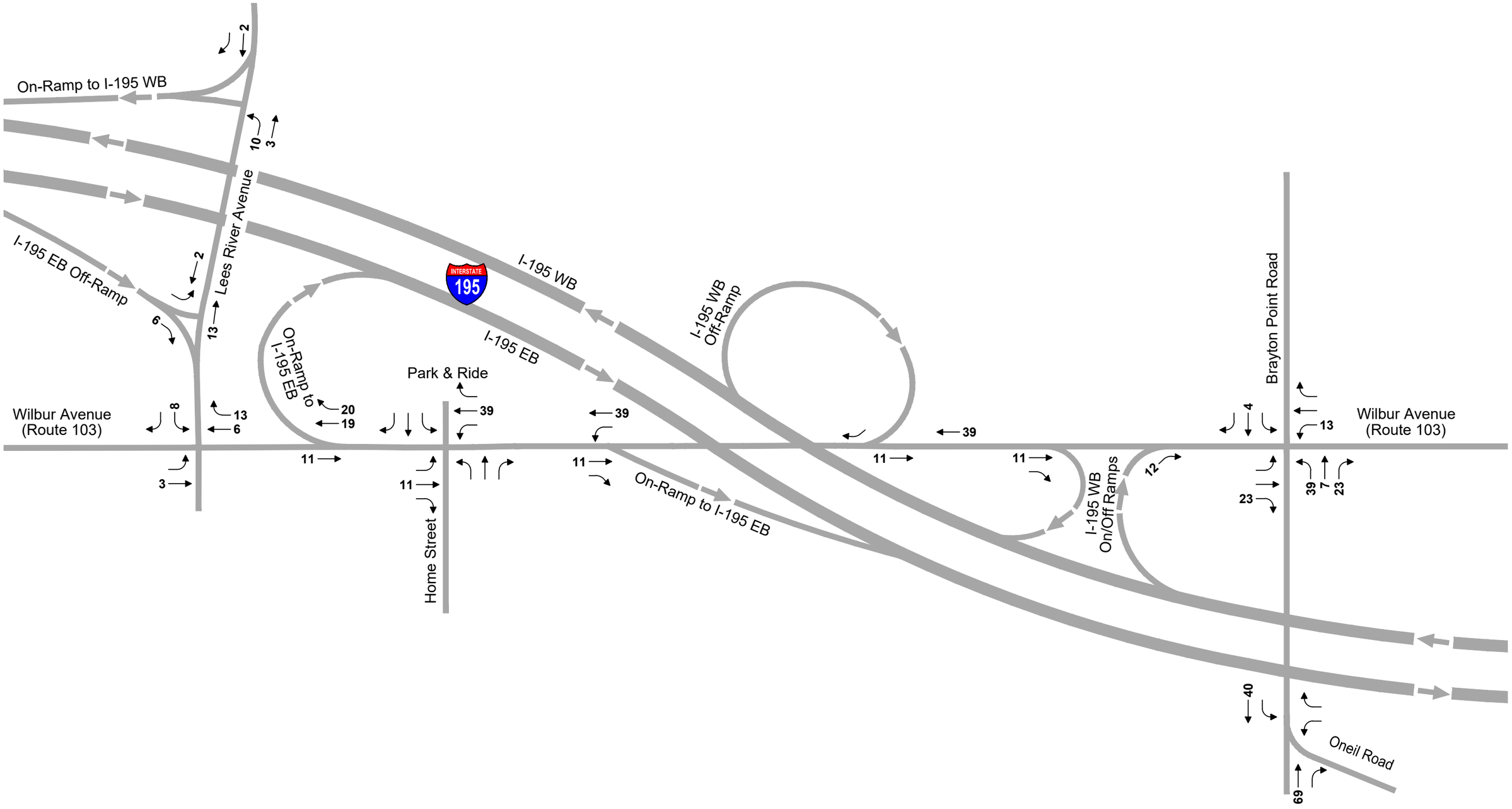


Not to Scale

Site Generated Traffic
Weekday Morning Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

\\vhb\gbl\proj\Boston\15542.00\Graphics\FIGURES\Prysmian DEIR Figures Folder\CAD\BRAYTON_Volumes.dwg



Not to Scale

Site Generated Traffic
Weekday Evening Peak Hour
Traffic Volumes

Prysmian Brayton Point
Somerset, Massachusetts

Appendix 7 – SYNCHRO Capacity Analysis



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	110	85	0	220	210	0
Future Volume (Veh/h)	110	85	0	220	210	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.87	0.87	0.70	0.70
Hourly flow rate (vph)	125	97	0	253	300	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				359		
pX, platoon unblocked						
vC, conflicting volume	553	300	300			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	553	300	300			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	87	100			
cM capacity (veh/h)	489	733	1255			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	222	253	300
Volume Left	125	0	0
Volume Right	97	0	0
cSH	572	1700	1700
Volume to Capacity	0.39	0.15	0.18
Queue Length 95th (ft)	46	0	0
Control Delay (s)	15.2	0.0	0.0
Lane LOS	C		
Approach Delay (s)	15.2	0.0	0.0
Approach LOS	C		

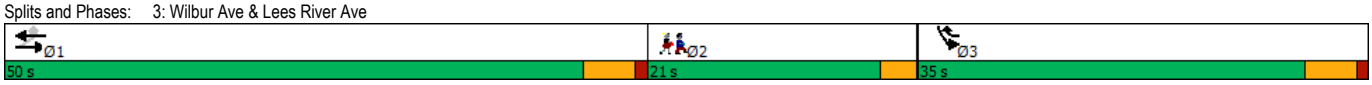
Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	29.5%	ICU Level of Service	A
Analysis Period (min)	15		

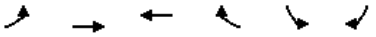
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	70	645	325	145	255	35	
Future Volume (vph)	70	645	325	145	255	35	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red				Yes		Yes	
Link Speed (mph)		47	47		37		
Link Distance (ft)		198	256		359		
Travel Time (s)		2.9	3.7		6.6		
Peak Hour Factor	0.88	0.88	0.85	0.85	0.83	0.83	
Heavy Vehicles (%)	1%	1%	5%	5%	4%	4%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	80	733	382	171	349	0	
Turn Type	Perm	NA	NA	pm+ov	Prot		
Protected Phases		1	1	3	3		2
Permitted Phases	1			1			
Detector Phase	1	1	1	3	3		
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	5.0	5.0		1.0
Minimum Split (s)	12.0	12.0	12.0	10.0	10.0		21.0
Total Split (s)	50.0	50.0	50.0	35.0	35.0		21.0
Total Split (%)	47.2%	47.2%	47.2%	33.0%	33.0%		20%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		
Lead/Lag	Lead	Lead	Lead				Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	Min	None	None		None
v/c Ratio	0.16	0.71	0.38	0.11	0.67		
Control Delay	9.8	17.1	11.0	0.1	29.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	9.8	17.1	11.0	0.1	29.1		
Queue Length 50th (ft)	15	207	83	0	143		
Queue Length 95th (ft)	44	408	164	0	208		
Internal Link Dist (ft)		118	176		279		
Turn Bay Length (ft)							
Base Capacity (vph)	615	1259	1212	1538	772		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.13	0.58	0.32	0.11	0.45		

Intersection Summary

Area Type: Other
Cycle Length: 106
Actuated Cycle Length: 70
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

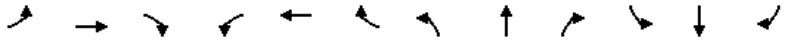
Splits and Phases: 3: Wilbur Ave & Lees River Ave





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	70	645	325	145	255	35
Future Volume (vph)	70	645	325	145	255	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1787	1881	1810	1538	1722	
Flt Permitted	0.49	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	919	1881	1810	1538	1722	
Peak-hour factor, PHF	0.88	0.88	0.85	0.85	0.83	0.83
Adj. Flow (vph)	80	733	382	171	307	42
RTOR Reduction (vph)	0	0	0	25	4	0
Lane Group Flow (vph)	80	733	382	146	345	0
Heavy Vehicles (%)	1%	1%	5%	5%	4%	4%
Turn Type	Perm	NA	NA	pm+ov	Prot	
Protected Phases		1	1	3	3	
Permitted Phases	1			1		
Actuated Green, G (s)	38.5	38.5	38.5	59.6	21.1	
Effective Green, g (s)	38.5	38.5	38.5	59.6	21.1	
Actuated g/C Ratio	0.55	0.55	0.55	0.86	0.30	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	508	1040	1001	1538	522	
v/s Ratio Prot		c0.39	0.21	0.03	c0.20	
v/s Ratio Perm	0.09			0.07		
v/c Ratio	0.16	0.70	0.38	0.10	0.66	
Uniform Delay, d1	7.6	11.4	8.8	0.8	21.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	2.4	0.3	0.0	3.4	
Delay (s)	7.8	13.7	9.1	0.8	24.6	
Level of Service	A	B	A	A	C	
Approach Delay (s)		13.2	6.6		24.6	
Approach LOS		B	A		C	

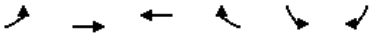
Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	13.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	895	5	5	665	15	20	0	5	15	0	5
Future Volume (Veh/h)	10	895	5	5	665	15	20	0	5	15	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.95	0.95	0.95	0.75	0.75	0.75	0.70	0.70	0.70
Hourly flow rate (vph)	12	1053	6	5	700	16	27	0	7	21	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		442										
pX, platoon unblocked												
vC, conflicting volume	716			1059			1805	1806	530	1276	1801	708
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	716			1059			1805	1806	530	1276	1801	708
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			44	100	99	83	100	98
cM capacity (veh/h)	880			653			48	77	494	120	77	377

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	538	532	721	34	28
Volume Left	12	0	5	27	21
Volume Right	0	6	16	7	7
cSH	880	1700	653	59	145
Volume to Capacity	0.01	0.31	0.01	0.58	0.19
Queue Length 95th (ft)	1	0	1	58	17
Control Delay (s)	0.4	0.0	0.2	128.8	35.8
Lane LOS	A		A	F	E
Approach Delay (s)	0.2		0.2	128.8	35.8
Approach LOS				F	E

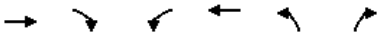
Intersection Summary					
Average Delay	3.1				
Intersection Capacity Utilization	49.9%	ICU Level of Service		A	
Analysis Period (min)	15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	330	425	0	0	260
Future Volume (Veh/h)	0	330	425	0	0	260
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.95	0.95	0.80	0.80
Hourly flow rate (vph)	0	384	447	0	0	325
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	447				831	447
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	447				831	447
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	46
cM capacity (veh/h)	1108				336	605

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	384	447	325
Volume Left	0	0	0
Volume Right	0	0	325
cSH	1700	1700	605
Volume to Capacity	0.23	0.26	0.54
Queue Length 95th (ft)	0	0	80
Control Delay (s)	0.0	0.0	17.6
Lane LOS			C
Approach Delay (s)	0.0	0.0	17.6
Approach LOS			C

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	325	0	0	430	0	200
Future Volume (Veh/h)	325	0	0	430	0	200
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.91	0.91	0.83	0.83
Hourly flow rate (vph)	374	0	0	473	0	241
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				934		
pX, platoon unblocked						
vC, conflicting volume			374		847	374
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			374		847	374
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	64
cM capacity (veh/h)			1179		330	668

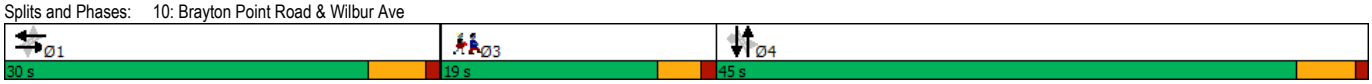
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	374	473	241
Volume Left	0	0	0
Volume Right	0	0	241
cSH	1700	1700	668
Volume to Capacity	0.22	0.28	0.36
Queue Length 95th (ft)	0	0	41
Control Delay (s)	0.0	0.0	13.4
Lane LOS			B
Approach Delay (s)	0.0	0.0	13.4
Approach LOS			B

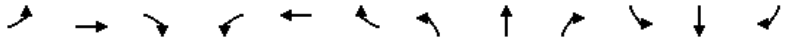
Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	215	265	30	10	170	20	55	50	25	20	25	190	
Future Volume (vph)	215	265	30	10	170	20	55	50	25	20	25	190	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	9	9	12	9	10	12	10	11	12	12	11	11	
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		47			47			32			37		
Link Distance (ft)		934			535			2810			448		
Travel Time (s)		13.5			7.8			59.9			8.3		
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	239	327	0	11	216	0	63	86	0	0	52	218	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		1			1			4			4		3
Permitted Phases	1			1			4			4		4	
Detector Phase	1	1		1	1		4	4		4	4	4	
Switch Phase													
Minimum Initial (s)	9.0	9.0		9.0	9.0		10.0	10.0		10.0	10.0	10.0	1.0
Minimum Split (s)	14.0	14.0		14.0	14.0		15.0	15.0		15.0	15.0	15.0	19.0
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	45.0	19.0
Total Split (%)	31.9%	31.9%		31.9%	31.9%		47.9%	47.9%		47.9%	47.9%	47.9%	20%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0	
Lead/Lag							Lag	Lag		Lag	Lag	Lag	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None		None	None	None	None
v/c Ratio	0.41	0.35		0.02	0.23		0.22	0.21			0.15	0.42	
Control Delay	8.7	7.0		5.0	6.0		16.4	11.8			15.2	5.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay	8.7	7.0		5.0	6.0		16.4	11.8			15.2	5.7	
Queue Length 50th (ft)	30	39		1	23		13	12			11	0	
Queue Length 95th (ft)	74	82		6	51		36	36			30	36	
Internal Link Dist (ft)		854			455			2730			368		
Turn Bay Length (ft)													
Base Capacity (vph)	582	923		521	947		1246	1695			1505	1509	
Starvation Cap Reductn	0	0		0	0		0	0			0	0	
Spillback Cap Reductn	0	0		0	0		0	0			0	0	
Storage Cap Reductn	0	0		0	0		0	0			0	0	
Reduced v/c Ratio	0.41	0.35		0.02	0.23		0.05	0.05			0.03	0.14	

Intersection Summary	
Area Type:	Other
Cycle Length: 94	
Actuated Cycle Length: 45.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 10: Brayton Point Road & Wilbur Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	265	30	10	170	20	55	50	25	20	25	190
Future Volume (vph)	215	265	30	10	170	20	55	50	25	20	25	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	12	9	10	12	10	11	12	12	11	11
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.95			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1608	1667		1593	1711		1685	1744			1779	1546
Flt Permitted	0.62	1.00		0.56	1.00		0.72	1.00			0.85	1.00
Satd. Flow (perm)	1055	1667		944	1711		1282	1744			1548	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	239	294	33	11	193	23	63	57	29	23	29	218
RTOR Reduction (vph)	0	3	0	0	3	0	0	22	0	0	0	168
Lane Group Flow (vph)	239	324	0	11	213	0	63	64	0	0	52	50
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		1			1			4			4	
Permitted Phases	1			1			4			4		4
Actuated Green, G (s)	25.0	25.0		25.0	25.0		10.3	10.3			10.3	10.3
Effective Green, g (s)	25.0	25.0		25.0	25.0		10.3	10.3			10.3	10.3
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.23	0.23			0.23	0.23
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	582	919		520	944		291	396			351	351
v/s Ratio Prot		0.19			0.12			0.04				
v/s Ratio Perm	c0.23			0.01			c0.05				0.03	0.03
v/c Ratio	0.41	0.35		0.02	0.23		0.22	0.16			0.15	0.14
Uniform Delay, d1	5.9	5.6		4.6	5.2		14.2	14.0			14.0	14.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.2		0.0	0.1		0.4	0.2			0.2	0.2
Delay (s)	6.4	5.9		4.6	5.3		14.6	14.2			14.2	14.2
Level of Service	A	A		A	A		B	B			B	B
Approach Delay (s)		6.1			5.3			14.4			14.2	
Approach LOS		A			A			B			B	

Intersection Summary				
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	45.3	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	45.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	0	0	75	20	5
Future Volume (Veh/h)	5	0	0	75	20	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	20	0	0	100	27	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	130	30	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130	30	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	868	1050	1571			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	20	100	34
Volume Left	20	0	0
Volume Right	0	0	7
cSH	868	1571	1700
Volume to Capacity	0.02	0.00	0.02
Queue Length 95th (ft)	2	0	0
Control Delay (s)	9.2	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.2	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	13.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	190	0	335	210	0
Future Volume (Veh/h)	210	190	0	335	210	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.85	0.85	0.95	0.95
Hourly flow rate (vph)	236	213	0	394	221	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				359		
pX, platoon unblocked						
vC, conflicting volume	615	221	221			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	615	221	221			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	48	74	100			
cM capacity (veh/h)	455	819	1348			

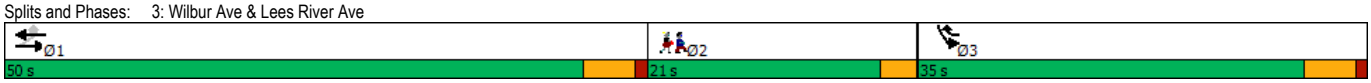
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	449	394	221
Volume Left	236	0	0
Volume Right	213	0	0
cSH	576	1700	1700
Volume to Capacity	0.78	0.23	0.13
Queue Length 95th (ft)	182	0	0
Control Delay (s)	29.8	0.0	0.0
Lane LOS	D		
Approach Delay (s)	29.8	0.0	0.0
Approach LOS	D		

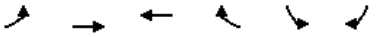
Intersection Summary			
Average Delay	12.6		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	75	630	765	260	265	125	
Future Volume (vph)	75	630	765	260	265	125	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red				Yes		Yes	
Link Speed (mph)		47	47		37		
Link Distance (ft)		198	256		359		
Travel Time (s)		2.9	3.7		6.6		
Peak Hour Factor	0.89	0.89	0.94	0.94	0.84	0.84	
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	84	708	814	277	464	0	
Turn Type	Perm	NA	NA	pm+ov	Prot		
Protected Phases		1	1	3	3		2
Permitted Phases	1			1			
Detector Phase	1	1	1	3	3		
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	5.0	5.0		1.0
Minimum Split (s)	12.0	12.0	12.0	10.0	10.0		21.0
Total Split (s)	50.0	50.0	50.0	35.0	35.0		21.0
Total Split (%)	47.2%	47.2%	47.2%	33.0%	33.0%		20%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		
Lead/Lag	Lead	Lead	Lead				Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	Min	None	None		None
v/c Ratio	0.56	0.70	0.80	0.17	0.78		
Control Delay	31.5	19.2	23.5	0.2	34.0		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	31.5	19.2	23.5	0.2	34.0		
Queue Length 50th (ft)	28	270	339	0	204		
Queue Length 95th (ft)	#99	398	#525	0	288		
Internal Link Dist (ft)		118	176		279		
Turn Bay Length (ft)							
Base Capacity (vph)	151	1011	1020	1589	637		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.56	0.70	0.80	0.17	0.73		

Intersection Summary	
Area Type:	Other
Cycle Length: 106	
Actuated Cycle Length: 83	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

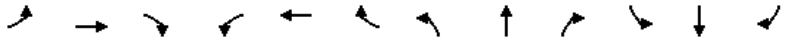
Splits and Phases: 3: Wilbur Ave & Lees River Ave





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	630	765	260	265	125
Future Volume (vph)	75	630	765	260	265	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.96	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	1863	1881	1599	1723	
Flt Permitted	0.15	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	279	1863	1881	1599	1723	
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.84	0.84
Adj. Flow (vph)	84	708	814	277	315	149
RTOR Reduction (vph)	0	0	0	33	15	0
Lane Group Flow (vph)	84	708	814	244	449	0
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Turn Type	Perm	NA	NA	pm+ov	Prot	
Protected Phases		1	1	3	3	
Permitted Phases	1			1		
Actuated Green, G (s)	45.1	45.1	45.1	73.0	27.9	
Effective Green, g (s)	45.1	45.1	45.1	73.0	27.9	
Actuated g/C Ratio	0.54	0.54	0.54	0.88	0.34	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	151	1012	1022	1599	579	
v/s Ratio Prot		0.38	c0.43	0.05	c0.26	
v/s Ratio Perm	0.30			0.10		
v/c Ratio	0.56	0.70	0.80	0.15	0.78	
Uniform Delay, d1	12.4	14.0	15.3	0.7	24.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.4	2.3	4.6	0.1	6.8	
Delay (s)	17.8	16.3	19.9	0.8	31.6	
Level of Service	B	B	B	A	C	
Approach Delay (s)		16.4	15.0		31.6	
Approach LOS		B	B		C	

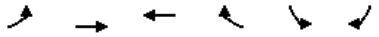
Intersection Summary				
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	80.9%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	890	5	20	1275	10	5	0	20	20	0	5
Future Volume (Veh/h)	10	890	5	20	1275	10	5	0	20	20	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.71	0.71	0.71	0.48	0.48	0.48
Hourly flow rate (vph)	11	937	5	21	1328	10	7	0	28	42	0	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		442										
pX, platoon unblocked												
vC, conflicting volume	1338			942			2346	2342	471	1894	2339	1333
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1338			942			2346	2342	471	1894	2339	1333
tC, single (s)	4.1			4.1			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			97			57	100	95	0	100	93
cM capacity (veh/h)	511			730			16	33	531	38	33	142

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	480	474	1359	35	52
Volume Left	11	0	21	7	42
Volume Right	0	5	10	28	10
cSH	511	1700	730	73	44
Volume to Capacity	0.02	0.28	0.03	0.48	1.18
Queue Length 95th (ft)	2	0	2	49	123
Control Delay (s)	0.6	0.0	1.5	93.0	338.5
Lane LOS	A		A	F	F
Approach Delay (s)	0.3		1.5	93.0	338.5
Approach LOS				F	F

Intersection Summary				
Average Delay	9.7			
Intersection Capacity Utilization	94.8%	ICU Level of Service	F	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	420	785	0	0	520
Future Volume (Veh/h)	0	420	785	0	0	520
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.91	0.91	0.89	0.89	0.95	0.95
Hourly flow rate (vph)	0	462	882	0	0	547
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	882				1344	882
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	882				1344	882
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	0
cM capacity (veh/h)	767				167	345

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	462	882	547
Volume Left	0	0	0
Volume Right	0	0	547
cSH	1700	1700	345
Volume to Capacity	0.27	0.52	1.58
Queue Length 95th (ft)	0	0	792
Control Delay (s)	0.0	0.0	304.0
Lane LOS			F
Approach Delay (s)	0.0	0.0	304.0
Approach LOS			F

Intersection Summary			
Average Delay	87.9		
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	405	0	0	790	0	300
Future Volume (Veh/h)	405	0	0	790	0	300
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.91	0.91
Hourly flow rate (vph)	455	0	0	888	0	330
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				934		
pX, platoon unblocked					0.80	
vC, conflicting volume			455		1343	455
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			455		1303	455
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	46
cM capacity (veh/h)			1111		142	609

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	455	888	330
Volume Left	0	0	0
Volume Right	0	0	330
cSH	1700	1700	609
Volume to Capacity	0.27	0.52	0.54
Queue Length 95th (ft)	0	0	81
Control Delay (s)	0.0	0.0	17.7
Lane LOS			C
Approach Delay (s)	0.0	0.0	17.7
Approach LOS			C

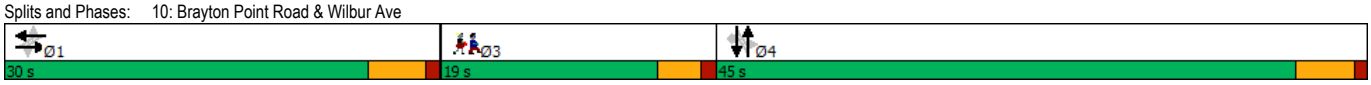
Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

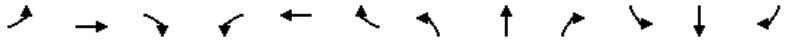
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	350	260	60	25	405	40	55	50	15	35	55	305	
Future Volume (vph)	350	260	60	25	405	40	55	50	15	35	55	305	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	9	9	12	9	10	12	10	11	12	12	11	11	
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		47			47			32			37		
Link Distance (ft)		934			535			2810			448		
Travel Time (s)		13.5			7.8			59.9			8.3		
Confl. Peds. (#/hr)							2					2	
Peak Hour Factor	0.95	0.95	0.95	0.88	0.83	0.83	0.85	0.85	0.85	0.94	0.94	0.94	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	368	337	0	28	536	0	65	77	0	0	96	324	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		1			1			4			4		3
Permitted Phases	1			1			4			4		4	
Detector Phase	1	1		1	1		4	4		4	4	4	
Switch Phase													
Minimum Initial (s)	9.0	9.0		9.0	9.0		10.0	10.0		10.0	10.0	10.0	1.0
Minimum Split (s)	14.0	14.0		14.0	14.0		15.0	15.0		15.0	15.0	15.0	19.0
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	45.0	19.0
Total Split (%)	31.9%	31.9%		31.9%	31.9%		47.9%	47.9%		47.9%	47.9%	47.9%	20%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0	
Lead/Lag							Lag	Lag		Lag	Lag	Lag	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None		None	None	None	None
v/c Ratio	1.23	0.40		0.06	0.61		0.24	0.19			0.27	0.55	
Control Delay	149.2	11.4		10.4	16.0		20.3	15.6			20.0	6.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay	149.2	11.4		10.4	16.0		20.3	15.6			20.0	6.9	
Queue Length 50th (ft)	~117	39		3	75		14	12			21	0	
Queue Length 95th (ft)	#397	189		24	#335		51	49			72	59	
Internal Link Dist (ft)		854			455			2730			368		
Turn Bay Length (ft)													
Base Capacity (vph)	300	851		455	884		1072	1547			1389	1379	
Starvation Cap Reductn	0	0		0	0		0	0			0	0	
Spillback Cap Reductn	0	0		0	0		0	0			0	0	
Storage Cap Reductn	0	0		0	0		0	0			0	0	
Reduced v/c Ratio	1.23	0.40		0.06	0.61		0.06	0.05			0.07	0.23	

Intersection Summary

Area Type: Other
Cycle Length: 94
Actuated Cycle Length: 50.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Brayton Point Road & Wilbur Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	260	60	25	405	40	55	50	15	35	55	305
Future Volume (vph)	350	260	60	25	405	40	55	50	15	35	55	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	12	9	10	12	10	11	12	12	11	11
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.96			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1608	1646		1593	1715		1645	1738			1784	1508
Flt Permitted	0.34	1.00		0.53	1.00		0.69	1.00			0.86	1.00
Satd. Flow (perm)	583	1646		887	1715		1203	1738			1562	1508
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.83	0.83	0.85	0.85	0.85	0.94	0.94	0.94
Adj. Flow (vph)	368	274	63	28	488	48	65	59	18	37	59	324
RTOR Reduction (vph)	0	6	0	0	3	0	0	14	0	0	0	255
Lane Group Flow (vph)	368	331	0	28	533	0	65	63	0	0	96	69
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		1			1			4			4	
Permitted Phases	1			1			4			4		4
Actuated Green, G (s)	25.8	25.8		25.8	25.8		11.4	11.4			11.4	11.4
Effective Green, g (s)	25.8	25.8		25.8	25.8		11.4	11.4			11.4	11.4
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.21	0.21			0.21	0.21
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	282	796		429	830		257	371			334	322
v/s Ratio Prot		0.20			0.31			0.04				
v/s Ratio Perm	c0.63			0.03			0.05				c0.06	0.05
v/c Ratio	1.30	0.42		0.07	0.64		0.25	0.17			0.29	0.22
Uniform Delay, d1	13.7	8.9		7.3	10.3		17.4	17.1			17.5	17.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	160.6	0.4		0.1	1.7		0.5	0.2			0.5	0.3
Delay (s)	174.3	9.2		7.4	12.0		17.9	17.3			18.0	17.6
Level of Service	F	A		A	B		B	B			B	B
Approach Delay (s)		95.4			11.8			17.6			17.7	
Approach LOS		F			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	45.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.94			
Actuated Cycle Length (s)	53.3	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	67.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	0	0	40	65	5
Future Volume (Veh/h)	5	0	0	40	65	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	0.71	0.71	0.87	0.87
Hourly flow rate (vph)	5	0	0	56	75	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	78	81			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	78	81			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	864	988	1529			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	5	56	81
Volume Left	5	0	0
Volume Right	0	0	6
cSH	864	1529	1700
Volume to Capacity	0.01	0.00	0.05
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.2	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.2	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	115	90	0	230	220	0
Future Volume (Veh/h)	115	90	0	230	220	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.87	0.87	0.70	0.70
Hourly flow rate (vph)	131	102	0	264	314	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				359		
pX, platoon unblocked						
vC, conflicting volume	578	314	314			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	578	314	314			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	72	86	100			
cM capacity (veh/h)	473	719	1241			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	233	264	314
Volume Left	131	0	0
Volume Right	102	0	0
cSH	556	1700	1700
Volume to Capacity	0.42	0.16	0.18
Queue Length 95th (ft)	51	0	0
Control Delay (s)	16.1	0.0	0.0
Lane LOS	C		
Approach Delay (s)	16.1	0.0	0.0
Approach LOS	C		

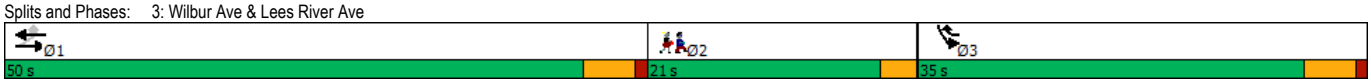
Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	30.7%	ICU Level of Service	A
Analysis Period (min)	15		

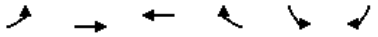
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	75	670	340	155	265	40	
Future Volume (vph)	75	670	340	155	265	40	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red				Yes		Yes	
Link Speed (mph)		47	47		37		
Link Distance (ft)		198	256		359		
Travel Time (s)		2.9	3.7		6.6		
Peak Hour Factor	0.88	0.88	0.85	0.85	0.83	0.83	
Heavy Vehicles (%)	1%	1%	5%	5%	4%	4%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	85	761	400	182	367	0	
Turn Type	Perm	NA	NA	pm+ov	Prot		
Protected Phases		1	1	3	3		2
Permitted Phases	1			1			
Detector Phase	1	1	1	3	3		
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	5.0	5.0		1.0
Minimum Split (s)	12.0	12.0	12.0	10.0	10.0		21.0
Total Split (s)	50.0	50.0	50.0	35.0	35.0		21.0
Total Split (%)	47.2%	47.2%	47.2%	33.0%	33.0%		20%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		
Lead/Lag	Lead	Lead	Lead				Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	Min	None	None		None
v/c Ratio	0.17	0.73	0.40	0.12	0.70		
Control Delay	10.2	18.0	11.4	0.2	30.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	10.2	18.0	11.4	0.2	30.8		
Queue Length 50th (ft)	17	232	93	0	155		
Queue Length 95th (ft)	47	434	174	0	220		
Internal Link Dist (ft)		118	176		279		
Turn Bay Length (ft)							
Base Capacity (vph)	558	1180	1136	1533	723		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.15	0.64	0.35	0.12	0.51		

Intersection Summary

Area Type: Other
Cycle Length: 106
Actuated Cycle Length: 73.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Wilbur Ave & Lees River Ave





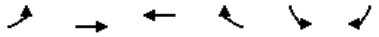
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	670	340	155	265	40
Future Volume (vph)	75	670	340	155	265	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1787	1881	1810	1538	1720	
Flt Permitted	0.47	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	889	1881	1810	1538	1720	
Peak-hour factor, PHF	0.88	0.88	0.85	0.85	0.83	0.83
Adj. Flow (vph)	85	761	400	182	319	48
RTOR Reduction (vph)	0	0	0	25	5	0
Lane Group Flow (vph)	85	761	400	157	362	0
Heavy Vehicles (%)	1%	1%	5%	5%	4%	4%
Turn Type	Perm	NA	NA	pm+ov	Prot	
Protected Phases		1	1	3	3	
Permitted Phases	1			1		
Actuated Green, G (s)	41.0	41.0	41.0	63.2	22.2	
Effective Green, g (s)	41.0	41.0	41.0	63.2	22.2	
Actuated g/C Ratio	0.56	0.56	0.56	0.86	0.30	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	497	1053	1013	1538	521	
v/s Ratio Prot		c0.40	0.22	0.03	c0.21	
v/s Ratio Perm	0.10			0.07		
v/c Ratio	0.17	0.72	0.39	0.10	0.70	
Uniform Delay, d1	7.8	11.9	9.1	0.7	22.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	2.7	0.3	0.0	4.3	
Delay (s)	8.1	14.6	9.4	0.8	26.8	
Level of Service	A	B	A	A	C	
Approach Delay (s)		13.9	6.7		26.8	
Approach LOS		B	A		C	

Intersection Summary				
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.75			
Actuated Cycle Length (s)	73.2	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	60.7%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	930	10	10	690	20	25	0	10	20	0	10
Future Volume (Veh/h)	15	930	10	10	690	20	25	0	10	20	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.95	0.95	0.95	0.75	0.75	0.75	0.70	0.70	0.70
Hourly flow rate (vph)	18	1094	12	11	726	21	33	0	13	29	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		442										
pX, platoon unblocked												
vC, conflicting volume	747			1106			1908	1905	553	1354	1900	736
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	747			1106			1908	1905	553	1354	1900	736
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			15	100	97	72	100	96
cM capacity (veh/h)	857			627			39	65	477	102	66	361

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	565	559	758	46	43
Volume Left	18	0	11	33	29
Volume Right	0	12	21	13	14
cSH	857	1700	627	52	133
Volume to Capacity	0.02	0.33	0.02	0.88	0.32
Queue Length 95th (ft)	2	0	1	94	32
Control Delay (s)	0.6	0.0	0.5	214.2	44.4
Lane LOS	A		A	F	E
Approach Delay (s)	0.3		0.5	214.2	44.4
Approach LOS				F	E

Intersection Summary					
Average Delay			6.3		
Intersection Capacity Utilization			55.5%	ICU Level of Service	B
Analysis Period (min)			15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↗
Traffic Volume (veh/h)	0	345	445	0	0	270
Future Volume (Veh/h)	0	345	445	0	0	270
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.95	0.95	0.80	0.80
Hourly flow rate (vph)	0	401	468	0	0	338
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	468				869	468
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	468				869	468
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	43
cM capacity (veh/h)	1088				319	589

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	401	468	338
Volume Left	0	0	0
Volume Right	0	0	338
cSH	1700	1700	589
Volume to Capacity	0.24	0.28	0.57
Queue Length 95th (ft)	0	0	91
Control Delay (s)	0.0	0.0	19.0
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.0
Approach LOS			C

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	340	0	0	455	0	210
Future Volume (Veh/h)	340	0	0	455	0	210
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.91	0.91	0.83	0.83
Hourly flow rate (vph)	391	0	0	500	0	253
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				934		
pX, platoon unblocked						
vC, conflicting volume			391		891	391
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			391		891	391
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	61
cM capacity (veh/h)			1162		310	653

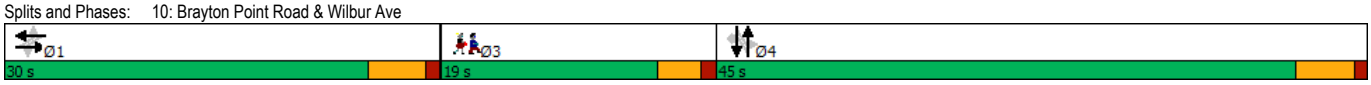
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	391	500	253
Volume Left	0	0	0
Volume Right	0	0	253
cSH	1700	1700	653
Volume to Capacity	0.23	0.29	0.39
Queue Length 95th (ft)	0	0	46
Control Delay (s)	0.0	0.0	14.0
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.0
Approach LOS			B

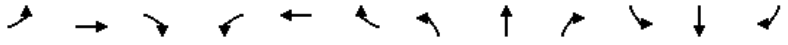
Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	225	275	35	15	180	25	60	55	30	25	30	200	
Future Volume (vph)	225	275	35	15	180	25	60	55	30	25	30	200	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	9	9	12	9	10	12	10	11	12	12	11	11	
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		47			47			32			37		
Link Distance (ft)		934			535			2810			448		
Travel Time (s)		13.5			7.8			59.9			8.3		
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	250	345	0	17	233	0	69	97	0	0	63	230	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		1			1			4			4		3
Permitted Phases	1			1			4			4		4	
Detector Phase	1	1		1	1		4	4		4	4	4	
Switch Phase													
Minimum Initial (s)	9.0	9.0		9.0	9.0		10.0	10.0		10.0	10.0	10.0	1.0
Minimum Split (s)	14.0	14.0		14.0	14.0		15.0	15.0		15.0	15.0	15.0	19.0
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	45.0	19.0
Total Split (%)	31.9%	31.9%		31.9%	31.9%		47.9%	47.9%		47.9%	47.9%	47.9%	20%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0	
Lead/Lag							Lag	Lag		Lag	Lag	Lag	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None		None	None	None	None
v/c Ratio	0.44	0.38		0.03	0.25		0.24	0.23			0.18	0.43	
Control Delay	9.3	7.3		5.2	6.1		16.7	11.7			15.5	5.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay	9.3	7.3		5.2	6.1		16.7	11.7			15.5	5.7	
Queue Length 50th (ft)	32	41		2	25		15	13			13	0	
Queue Length 95th (ft)	81	90		8	56		38	39			35	36	
Internal Link Dist (ft)		854			455			2730			368		
Turn Bay Length (ft)													
Base Capacity (vph)	571	920		512	943		1233	1689			1473	1507	
Starvation Cap Reductn	0	0		0	0		0	0			0	0	
Spillback Cap Reductn	0	0		0	0		0	0			0	0	
Storage Cap Reductn	0	0		0	0		0	0			0	0	
Reduced v/c Ratio	0.44	0.38		0.03	0.25		0.06	0.06			0.04	0.15	

Intersection Summary	
Area Type:	Other
Cycle Length: 94	
Actuated Cycle Length: 45.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 10: Brayton Point Road & Wilbur Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	275	35	15	180	25	60	55	30	25	30	200
Future Volume (vph)	225	275	35	15	180	25	60	55	30	25	30	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	12	9	10	12	10	11	12	12	11	11
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.95			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1608	1664		1593	1707		1685	1740			1778	1546
Flt Permitted	0.61	1.00		0.55	1.00		0.72	1.00			0.84	1.00
Satd. Flow (perm)	1039	1664		928	1707		1270	1740			1519	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	250	306	39	17	205	28	69	63	34	29	34	230
RTOR Reduction (vph)	0	3	0	0	3	0	0	26	0	0	0	177
Lane Group Flow (vph)	250	342	0	17	230	0	69	71	0	0	63	53
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		1			1			4			4	
Permitted Phases	1			1			4			4		4
Actuated Green, G (s)	25.0	25.0		25.0	25.0		10.4	10.4			10.4	10.4
Effective Green, g (s)	25.0	25.0		25.0	25.0		10.4	10.4			10.4	10.4
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.23	0.23			0.23	0.23
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	572	916		511	939		290	398			347	354
v/s Ratio Prot		0.21			0.13			0.04				
v/s Ratio Perm	c0.24			0.02			c0.05				0.04	0.03
v/c Ratio	0.44	0.37		0.03	0.24		0.24	0.18			0.18	0.15
Uniform Delay, d1	6.0	5.8		4.7	5.3		14.3	14.1			14.1	14.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.3		0.0	0.1		0.4	0.2			0.3	0.2
Delay (s)	6.6	6.0		4.7	5.4		14.7	14.3			14.3	14.2
Level of Service	A	A		A	A		B	B			B	B
Approach Delay (s)		6.3			5.4			14.5			14.2	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	45.4	Sum of lost time (s)	14.0
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	0	0	80	25	10
Future Volume (Veh/h)	10	0	0	80	25	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	40	0	0	107	33	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	146	40	46			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	146	40	46			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	100	100			
cM capacity (veh/h)	851	1038	1555			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	107	46
Volume Left	40	0	0
Volume Right	0	0	13
cSH	851	1555	1700
Volume to Capacity	0.05	0.00	0.03
Queue Length 95th (ft)	4	0	0
Control Delay (s)	9.4	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.4	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	14.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	220	200	0	350	220	0
Future Volume (Veh/h)	220	200	0	350	220	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.85	0.85	0.95	0.95
Hourly flow rate (vph)	247	225	0	412	232	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				359		
pX, platoon unblocked						
vC, conflicting volume	644	232	232			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	644	232	232			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	44	72	100			
cM capacity (veh/h)	437	807	1336			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	472	412	232
Volume Left	247	0	0
Volume Right	225	0	0
cSH	559	1700	1700
Volume to Capacity	0.84	0.24	0.14
Queue Length 95th (ft)	223	0	0
Control Delay (s)	36.9	0.0	0.0
Lane LOS	E		
Approach Delay (s)	36.9	0.0	0.0
Approach LOS	E		

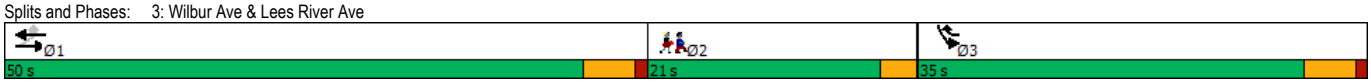
Intersection Summary			
Average Delay	15.6		
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

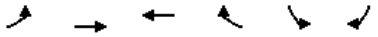
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	80	655	795	270	275	130	
Future Volume (vph)	80	655	795	270	275	130	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red				Yes		Yes	
Link Speed (mph)		47	47		37		
Link Distance (ft)		198	256		359		
Travel Time (s)		2.9	3.7		6.6		
Peak Hour Factor	0.89	0.89	0.94	0.94	0.84	0.84	
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	90	736	846	287	482	0	
Turn Type	Perm	NA	NA	pm+ov	Prot		
Protected Phases		1	1	3	3		2
Permitted Phases	1			1			
Detector Phase	1	1	1	3	3		
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	5.0	5.0		1.0
Minimum Split (s)	12.0	12.0	12.0	10.0	10.0		21.0
Total Split (s)	50.0	50.0	50.0	35.0	35.0		21.0
Total Split (%)	47.2%	47.2%	47.2%	33.0%	33.0%		20%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		
Lead/Lag	Lead	Lead	Lead				Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	Min	None	None		None
v/c Ratio	0.75	0.74	0.84	0.18	0.79		
Control Delay	57.7	20.8	26.4	0.2	34.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	57.7	20.8	26.4	0.2	34.8		
Queue Length 50th (ft)	36	288	363	0	216		
Queue Length 95th (ft)	#126	423	#611	0	302		
Internal Link Dist (ft)		118	176		279		
Turn Bay Length (ft)							
Base Capacity (vph)	120	999	1008	1599	630		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.75	0.74	0.84	0.18	0.77		

Intersection Summary

Area Type: Other
Cycle Length: 106
Actuated Cycle Length: 84
Natural Cycle: 130
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Wilbur Ave & Lees River Ave





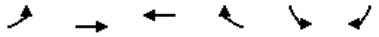
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	655	795	270	275	130
Future Volume (vph)	80	655	795	270	275	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.96	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	1863	1881	1599	1723	
Flt Permitted	0.12	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	223	1863	1881	1599	1723	
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.84	0.84
Adj. Flow (vph)	90	736	846	287	327	155
RTOR Reduction (vph)	0	0	0	34	14	0
Lane Group Flow (vph)	90	736	846	253	468	0
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Turn Type	Perm	NA	NA	pm+ov	Prot	
Protected Phases		1	1	3	3	
Permitted Phases	1			1		
Actuated Green, G (s)	45.0	45.0	45.0	73.9	28.9	
Effective Green, g (s)	45.0	45.0	45.0	73.9	28.9	
Actuated g/C Ratio	0.54	0.54	0.54	0.88	0.34	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	119	999	1008	1599	593	
v/s Ratio Prot		0.40	c0.45	0.05	c0.27	
v/s Ratio Perm	0.40			0.10		
v/c Ratio	0.76	0.74	0.84	0.16	0.79	
Uniform Delay, d1	15.2	14.9	16.4	0.7	24.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.9	3.1	6.5	0.1	7.3	
Delay (s)	40.0	18.0	22.9	0.8	32.0	
Level of Service	D	B	C	A	C	
Approach Delay (s)		20.4	17.3		32.0	
Approach LOS		C	B		C	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	83.9	Sum of lost time (s)	13.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	925	10	25	1325	15	10	0	25	25	0	10
Future Volume (Veh/h)	15	925	10	25	1325	15	10	0	25	25	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.71	0.71	0.71	0.48	0.48	0.48
Hourly flow rate (vph)	16	974	11	26	1380	16	14	0	35	52	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		442										
pX, platoon unblocked												
vC, conflicting volume	1396			985			2472	2460	492	1994	2457	1388
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1396			985			2472	2460	492	1994	2457	1388
tC, single (s)	4.1			4.1			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			96			0	100	93	0	100	84
cM capacity (veh/h)	486			703			12	27	514	31	27	130

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	503	498	1422	49	73
Volume Left	16	0	26	14	52
Volume Right	0	11	16	35	21
cSH	486	1700	703	39	39
Volume to Capacity	0.03	0.29	0.04	1.27	1.85
Queue Length 95th (ft)	3	0	3	125	193
Control Delay (s)	1.0	0.0	2.3	398.3	623.6
Lane LOS	A		A	F	F
Approach Delay (s)	0.5		2.3	398.3	623.6
Approach LOS				F	F

Intersection Summary				
Average Delay	27.0			
Intersection Capacity Utilization	101.8%	ICU Level of Service	G	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Volume (veh/h)	0	435	815	0	0	540
Future Volume (Veh/h)	0	435	815	0	0	540
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.91	0.91	0.89	0.89	0.95	0.95
Hourly flow rate (vph)	0	478	916	0	0	568
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	916				1394	916
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	916				1394	916
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	0
cM capacity (veh/h)	745				156	330

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	478	916	568
Volume Left	0	0	0
Volume Right	0	0	568
cSH	1700	1700	330
Volume to Capacity	0.28	0.54	1.72
Queue Length 95th (ft)	0	0	893
Control Delay (s)	0.0	0.0	364.5
Lane LOS			F
Approach Delay (s)	0.0	0.0	364.5
Approach LOS			F

Intersection Summary			
Average Delay	105.5		
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	420	0	0	825	0	315
Future Volume (Veh/h)	420	0	0	825	0	315
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.91	0.91
Hourly flow rate (vph)	472	0	0	927	0	346
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				934		
pX, platoon unblocked					0.78	
vC, conflicting volume			472		1399	472
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			472		1370	472
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	42
cM capacity (veh/h)			1095		127	596

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	472	927	346
Volume Left	0	0	0
Volume Right	0	0	346
cSH	1700	1700	596
Volume to Capacity	0.28	0.55	0.58
Queue Length 95th (ft)	0	0	93
Control Delay (s)	0.0	0.0	19.1
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.1
Approach LOS			C

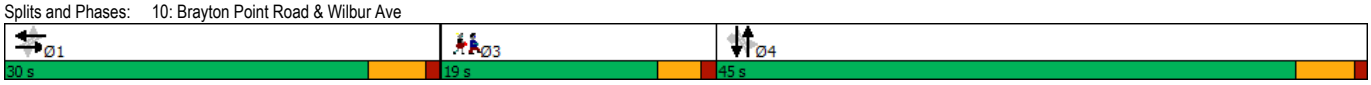
Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

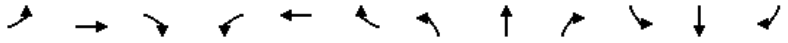
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	365	270	65	30	420	45	60	55	20	40	60	320	
Future Volume (vph)	365	270	65	30	420	45	60	55	20	40	60	320	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	9	9	12	9	10	12	10	11	12	12	11	11	
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		47			47			32			37		
Link Distance (ft)		934			535			2810			448		
Travel Time (s)		13.5			7.8			59.9			8.3		
Confl. Peds. (#/hr)							2					2	
Peak Hour Factor	0.95	0.95	0.95	0.88	0.83	0.83	0.85	0.85	0.85	0.94	0.94	0.94	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	384	352	0	34	560	0	71	89	0	0	107	340	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		1			1			4			4		3
Permitted Phases	1			1			4			4		4	
Detector Phase	1	1		1	1		4	4		4	4	4	
Switch Phase													
Minimum Initial (s)	9.0	9.0		9.0	9.0		10.0	10.0		10.0	10.0	10.0	1.0
Minimum Split (s)	14.0	14.0		14.0	14.0		15.0	15.0		15.0	15.0	15.0	19.0
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	45.0	19.0
Total Split (%)	31.9%	31.9%		31.9%	31.9%		47.9%	47.9%		47.9%	47.9%	47.9%	20%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0	
Lead/Lag							Lag	Lag		Lag	Lag	Lag	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None		None	None	None	None
v/c Ratio	1.38	0.42		0.08	0.64		0.26	0.21			0.30	0.56	
Control Delay	210.2	11.9		10.8	17.1		20.4	15.0			20.2	6.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay	210.2	11.9		10.8	17.1		20.4	15.0			20.2	6.8	
Queue Length 50th (ft)	~132	42		4	80		15	14			23	0	
Queue Length 95th (ft)	#358	205		28	#369		55	53			79	60	
Internal Link Dist (ft)		854			455			2730			368		
Turn Bay Length (ft)													
Base Capacity (vph)	279	847		439	879		1057	1533			1361	1377	
Starvation Cap Reductn	0	0		0	0		0	0			0	0	
Spillback Cap Reductn	0	0		0	0		0	0			0	0	
Storage Cap Reductn	0	0		0	0		0	0			0	0	
Reduced v/c Ratio	1.38	0.42		0.08	0.64		0.07	0.06			0.08	0.25	

Intersection Summary

Area Type: Other
Cycle Length: 94
Actuated Cycle Length: 50.5
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Brayton Point Road & Wilbur Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	365	270	65	30	420	45	60	55	20	40	60	320
Future Volume (vph)	365	270	65	30	420	45	60	55	20	40	60	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	12	9	10	12	10	11	12	12	11	11
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.96			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1608	1644		1593	1713		1645	1728			1783	1508
Flt Permitted	0.32	1.00		0.51	1.00		0.69	1.00			0.84	1.00
Satd. Flow (perm)	546	1644		861	1713		1191	1728			1536	1508
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.83	0.83	0.85	0.85	0.85	0.94	0.94	0.94
Adj. Flow (vph)	384	284	68	34	506	54	71	65	24	43	64	340
RTOR Reduction (vph)	0	6	0	0	3	0	0	19	0	0	0	266
Lane Group Flow (vph)	384	346	0	34	557	0	71	70	0	0	107	74
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		1			1			4			4	
Permitted Phases	1			1			4			4		4
Actuated Green, G (s)	25.9	25.9		25.9	25.9		11.6	11.6			11.6	11.6
Effective Green, g (s)	25.9	25.9		25.9	25.9		11.6	11.6			11.6	11.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.22	0.22			0.22	0.22
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	263	794		416	827		257	373			332	326
v/s Ratio Prot		0.21			0.33			0.04				
v/s Ratio Perm	c0.70			0.04			0.06				c0.07	0.05
v/c Ratio	1.46	0.44		0.08	0.67		0.28	0.19			0.32	0.23
Uniform Delay, d1	13.9	9.1		7.5	10.6		17.5	17.2			17.7	17.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	226.9	0.4		0.1	2.2		0.6	0.2			0.6	0.4
Delay (s)	240.7	9.4		7.5	12.8		18.1	17.4			18.3	17.7
Level of Service	F	A		A	B		B	B			B	B
Approach Delay (s)		130.1			12.5			17.7			17.8	
Approach LOS		F			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	58.8	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.05			
Actuated Cycle Length (s)	53.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	69.6%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	0	0	45	70	10
Future Volume (Veh/h)	10	0	0	45	70	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	0.71	0.71	0.87	0.87
Hourly flow rate (vph)	10	0	0	63	80	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	148	86	91			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	148	86	91			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	848	979	1517			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	10	63	91
Volume Left	10	0	0
Volume Right	0	0	11
cSH	848	1517	1700
Volume to Capacity	0.01	0.00	0.05
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.3	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.3	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	14.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	115	105	0	235	225	0
Future Volume (Veh/h)	115	105	0	235	225	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.87	0.87	0.70	0.70
Hourly flow rate (vph)	131	119	0	270	321	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				359		
pX, platoon unblocked						
vC, conflicting volume	591	321	321			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	591	321	321			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	72	83	100			
cM capacity (veh/h)	465	713	1233			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	250	270	321
Volume Left	131	0	0
Volume Right	119	0	0
cSH	557	1700	1700
Volume to Capacity	0.45	0.16	0.19
Queue Length 95th (ft)	58	0	0
Control Delay (s)	16.6	0.0	0.0
Lane LOS	C		
Approach Delay (s)	16.6	0.0	0.0
Approach LOS	C		

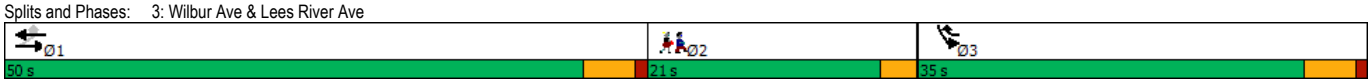
Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A
Analysis Period (min)	15		

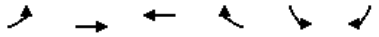
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	75	675	340	160	285	40	
Future Volume (vph)	75	675	340	160	285	40	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red				Yes		Yes	
Link Speed (mph)		47	47		37		
Link Distance (ft)		198	256		359		
Travel Time (s)		2.9	3.7		6.6		
Peak Hour Factor	0.88	0.88	0.85	0.85	0.83	0.83	
Heavy Vehicles (%)	1%	1%	5%	5%	4%	4%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	85	767	400	188	391	0	
Turn Type	Perm	NA	NA	pm+ov	Prot		
Protected Phases		1	1	3	3		2
Permitted Phases	1			1			
Detector Phase	1	1	1	3	3		
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	5.0	5.0		1.0
Minimum Split (s)	12.0	12.0	12.0	10.0	10.0		21.0
Total Split (s)	50.0	50.0	50.0	35.0	35.0		21.0
Total Split (%)	47.2%	47.2%	47.2%	33.0%	33.0%		20%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		
Lead/Lag	Lead	Lead	Lead				Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	Min	None	None		None
v/c Ratio	0.18	0.74	0.40	0.12	0.72		
Control Delay	10.8	19.2	12.0	0.2	31.4		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	10.8	19.2	12.0	0.2	31.4		
Queue Length 50th (ft)	19	261	103	0	169		
Queue Length 95th (ft)	47	440	174	0	236		
Internal Link Dist (ft)		118	176		279		
Turn Bay Length (ft)							
Base Capacity (vph)	531	1136	1093	1526	697		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.16	0.68	0.37	0.12	0.56		

Intersection Summary

Area Type: Other
Cycle Length: 106
Actuated Cycle Length: 76
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

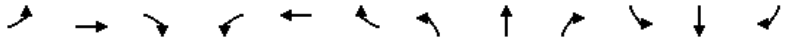
Splits and Phases: 3: Wilbur Ave & Lees River Ave





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	675	340	160	285	40
Future Volume (vph)	75	675	340	160	285	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1787	1881	1810	1538	1721	
Flt Permitted	0.47	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	880	1881	1810	1538	1721	
Peak-hour factor, PHF	0.88	0.88	0.85	0.85	0.83	0.83
Adj. Flow (vph)	85	767	400	188	343	48
RTOR Reduction (vph)	0	0	0	25	5	0
Lane Group Flow (vph)	85	767	400	163	386	0
Heavy Vehicles (%)	1%	1%	5%	5%	4%	4%
Turn Type	Perm	NA	NA	pm+ov	Prot	
Protected Phases		1	1	3	3	
Permitted Phases	1			1		
Actuated Green, G (s)	41.9	41.9	41.9	65.8	23.9	
Effective Green, g (s)	41.9	41.9	41.9	65.8	23.9	
Actuated g/C Ratio	0.55	0.55	0.55	0.87	0.32	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	486	1039	1000	1538	542	
v/s Ratio Prot		c0.41	0.22	0.03	c0.22	
v/s Ratio Perm	0.10			0.07		
v/c Ratio	0.17	0.74	0.40	0.11	0.71	
Uniform Delay, d1	8.4	12.8	9.7	0.7	22.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	3.0	0.4	0.0	4.7	
Delay (s)	8.6	15.8	10.1	0.8	27.6	
Level of Service	A	B	B	A	C	
Approach Delay (s)		15.1	7.1		27.6	
Approach LOS		B	A		C	

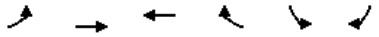
Intersection Summary				
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	75.8	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	62.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	955	10	10	710	20	25	0	10	20	0	10
Future Volume (Veh/h)	15	955	10	10	710	20	25	0	10	20	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.95	0.95	0.95	0.75	0.75	0.75	0.70	0.70	0.70
Hourly flow rate (vph)	18	1124	12	11	747	21	33	0	13	29	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		442										
pX, platoon unblocked												
vC, conflicting volume	768			1136			1960	1956	568	1390	1952	758
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	768			1136			1960	1956	568	1390	1952	758
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			7	100	97	70	100	96
cM capacity (veh/h)	842			611			35	61	466	96	61	350

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	580	574	779	46	43
Volume Left	18	0	11	33	29
Volume Right	0	12	21	13	14
cSH	842	1700	611	48	126
Volume to Capacity	0.02	0.34	0.02	0.96	0.34
Queue Length 95th (ft)	2	0	1	101	34
Control Delay (s)	0.6	0.0	0.5	252.5	47.9
Lane LOS	A		A	F	E
Approach Delay (s)	0.3		0.5	252.5	47.9
Approach LOS				F	E

Intersection Summary					
Average Delay			7.1		
Intersection Capacity Utilization			56.6%	ICU Level of Service	B
Analysis Period (min)			15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	370	460	0	0	270
Future Volume (Veh/h)	0	370	460	0	0	270
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.95	0.95	0.80	0.80
Hourly flow rate (vph)	0	430	484	0	0	338
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	484				914	484
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	484				914	484
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	41
cM capacity (veh/h)	1074				299	577

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	430	484	338
Volume Left	0	0	0
Volume Right	0	0	338
cSH	1700	1700	577
Volume to Capacity	0.25	0.28	0.59
Queue Length 95th (ft)	0	0	94
Control Delay (s)	0.0	0.0	19.7
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.7
Approach LOS			C

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	365	0	0	470	0	235
Future Volume (Veh/h)	365	0	0	470	0	235
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.91	0.91	0.83	0.83
Hourly flow rate (vph)	420	0	0	516	0	283
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				934		
pX, platoon unblocked						
vC, conflicting volume			420		936	420
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			420		936	420
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	55
cM capacity (veh/h)			1134		292	629

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	420	516	283
Volume Left	0	0	0
Volume Right	0	0	283
cSH	1700	1700	629
Volume to Capacity	0.25	0.30	0.45
Queue Length 95th (ft)	0	0	58
Control Delay (s)	0.0	0.0	15.3
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.3
Approach LOS			C

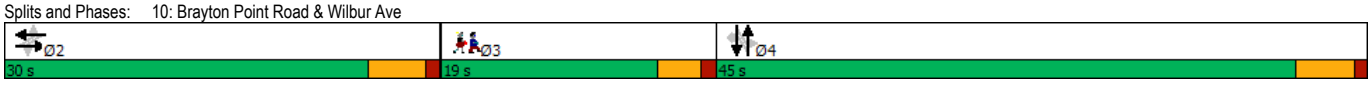
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	225	275	80	40	180	25	75	55	40	25	35	200	
Future Volume (vph)	225	275	80	40	180	25	75	55	40	25	35	200	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	9	9	12	9	10	12	10	11	12	12	11	11	
Storage Length (ft)	75		0	0		0	75		0	0		0	
Storage Lanes	1		0	1		0	1		0	0		1	
Taper Length (ft)	25			25			25			25			
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		47			47			32			37		
Link Distance (ft)		934			535			2810			448		
Travel Time (s)		13.5			7.8			59.9			8.3		
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	250	395	0	45	233	0	86	109	0	0	69	230	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		2			2			4			4		3
Permitted Phases	2			2			4			4		4	
Detector Phase	2	2		2	2		4	4		4	4	4	
Switch Phase													
Minimum Initial (s)	9.0	9.0		9.0	9.0		10.0	10.0		10.0	10.0	10.0	1.0
Minimum Split (s)	14.0	14.0		14.0	14.0		15.0	15.0		15.0	15.0	15.0	19.0
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	45.0	19.0
Total Split (%)	31.9%	31.9%		31.9%	31.9%		47.9%	47.9%		47.9%	47.9%	47.9%	20%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0	
Lead/Lag							Lag	Lag		Lag	Lag	Lag	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None		None	None	None	None
v/c Ratio	0.44	0.44		0.10	0.25		0.29	0.25			0.19	0.43	
Control Delay	9.8	8.2		6.1	6.5		17.2	10.8			15.3	5.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay	9.8	8.2		6.1	6.5		17.2	10.8			15.3	5.4	
Queue Length 50th (ft)	32	48		5	25		19	13			15	0	
Queue Length 95th (ft)	90	116		18	62		45	40			37	35	
Internal Link Dist (ft)		854			455			2730			368		
Turn Bay Length (ft)	75						75						
Base Capacity (vph)	566	900		468	935		1188	1621			1446	1468	
Starvation Cap Reductn	0	0		0	0		0	0			0	0	
Spillback Cap Reductn	0	0		0	0		0	0			0	0	
Storage Cap Reductn	0	0		0	0		0	0			0	0	
Reduced v/c Ratio	0.44	0.44		0.10	0.25		0.07	0.07			0.05	0.16	

Intersection Summary

Area Type: Other
Cycle Length: 94
Actuated Cycle Length: 45.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Brayton Point Road & Wilbur Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	275	80	40	180	25	75	55	40	25	35	200
Future Volume (vph)	225	275	80	40	180	25	75	55	40	25	35	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	12	9	10	12	10	11	12	12	11	11
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1608	1636		1593	1707		1685	1720			1781	1546
Flt Permitted	0.61	1.00		0.51	1.00		0.71	1.00			0.85	1.00
Satd. Flow (perm)	1039	1636		857	1707		1263	1720			1537	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	250	306	89	45	205	28	86	63	46	29	40	230
RTOR Reduction (vph)	0	7	0	0	3	0	0	35	0	0	0	176
Lane Group Flow (vph)	250	388	0	45	230	0	86	74	0	0	69	54
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		4
Actuated Green, G (s)	25.0	25.0		25.0	25.0		10.8	10.8			10.8	10.8
Effective Green, g (s)	25.0	25.0		25.0	25.0		10.8	10.8			10.8	10.8
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.24	0.24			0.24	0.24
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	567	893		467	931		297	405			362	364
v/s Ratio Prot		0.24			0.13			0.04				
v/s Ratio Perm	c0.24			0.05			c0.07				0.04	0.04
v/c Ratio	0.44	0.43		0.10	0.25		0.29	0.18			0.19	0.15
Uniform Delay, d1	6.2	6.2		5.0	5.5		14.4	14.0			14.0	13.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.3		0.1	0.1		0.5	0.2			0.3	0.2
Delay (s)	6.8	6.5		5.1	5.6		14.9	14.2			14.3	14.1
Level of Service	A	A		A	A		B	B			B	B
Approach Delay (s)		6.6			5.5			14.5			14.1	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	45.8	Sum of lost time (s)	14.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	0	0	80	25	95
Future Volume (Veh/h)	40	0	0	80	25	95
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	160	0	0	107	33	127
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	204	96	160			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	204	96	160			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	80	100	100			
cM capacity (veh/h)	790	965	1413			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	160	107	160
Volume Left	160	0	0
Volume Right	0	0	127
cSH	790	1413	1700
Volume to Capacity	0.20	0.00	0.09
Queue Length 95th (ft)	19	0	0
Control Delay (s)	10.7	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.7	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	17.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	220	205	0	365	220	0
Future Volume (Veh/h)	220	205	0	365	220	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.85	0.85	0.95	0.95
Hourly flow rate (vph)	247	230	0	429	232	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				359		
pX, platoon unblocked						
vC, conflicting volume	661	232	232			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	661	232	232			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	42	72	100			
cM capacity (veh/h)	427	807	1336			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	477	429	232
Volume Left	247	0	0
Volume Right	230	0	0
cSH	553	1700	1700
Volume to Capacity	0.86	0.25	0.14
Queue Length 95th (ft)	236	0	0
Control Delay (s)	39.7	0.0	0.0
Lane LOS	E		
Approach Delay (s)	39.7	0.0	0.0
Approach LOS	E		

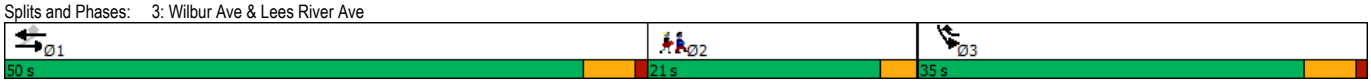
Intersection Summary			
Average Delay	16.6		
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

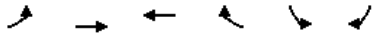
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	80	660	800	285	285	130	
Future Volume (vph)	80	660	800	285	285	130	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Right Turn on Red				Yes		Yes	
Link Speed (mph)		47	47		37		
Link Distance (ft)		198	256		359		
Travel Time (s)		2.9	3.7		6.6		
Peak Hour Factor	0.89	0.89	0.94	0.94	0.84	0.84	
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	90	742	851	303	494	0	
Turn Type	Perm	NA	NA	pm+ov	Prot		
Protected Phases		1	1	3	3		2
Permitted Phases	1			1			
Detector Phase	1	1	1	3	3		
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	5.0	5.0		1.0
Minimum Split (s)	12.0	12.0	12.0	10.0	10.0		21.0
Total Split (s)	50.0	50.0	50.0	35.0	35.0		21.0
Total Split (%)	47.2%	47.2%	47.2%	33.0%	33.0%		20%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		
Lead/Lag	Lead	Lead	Lead				Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	Min	None	None		None
v/c Ratio	0.83	0.75	0.85	0.19	0.80		
Control Delay	72.4	21.5	27.5	0.3	35.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	72.4	21.5	27.5	0.3	35.1		
Queue Length 50th (ft)	38	291	367	0	224		
Queue Length 95th (ft)	#131	430	#618	0	312		
Internal Link Dist (ft)		118	176		279		
Turn Bay Length (ft)							
Base Capacity (vph)	109	989	998	1588	625		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.83	0.75	0.85	0.19	0.79		

Intersection Summary

Area Type: Other
Cycle Length: 106
Actuated Cycle Length: 84.7
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

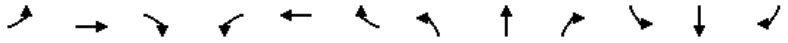
Splits and Phases: 3: Wilbur Ave & Lees River Ave





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	660	800	285	285	130
Future Volume (vph)	80	660	800	285	285	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.96	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	1863	1881	1599	1725	
Flt Permitted	0.11	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	207	1863	1881	1599	1725	
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.84	0.84
Adj. Flow (vph)	90	742	851	303	339	155
RTOR Reduction (vph)	0	0	0	36	14	0
Lane Group Flow (vph)	90	742	851	267	480	0
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Turn Type	Perm	NA	NA	pm+ov	Prot	
Protected Phases		1	1	3	3	
Permitted Phases	1			1		
Actuated Green, G (s)	45.0	45.0	45.0	74.7	29.7	
Effective Green, g (s)	45.0	45.0	45.0	74.7	29.7	
Actuated g/C Ratio	0.53	0.53	0.53	0.88	0.35	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	109	989	999	1599	604	
v/s Ratio Prot		0.40	c0.45	0.06	c0.28	
v/s Ratio Perm	0.44			0.11		
v/c Ratio	0.83	0.75	0.85	0.17	0.79	
Uniform Delay, d1	16.6	15.5	17.0	0.7	24.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	39.1	3.4	7.4	0.1	7.5	
Delay (s)	55.6	18.9	24.4	0.8	32.3	
Level of Service	E	B	C	A	C	
Approach Delay (s)		22.9	18.2		32.3	
Approach LOS		C	B		C	

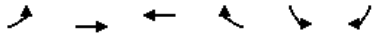
Intersection Summary			
HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	84.7	Sum of lost time (s)	13.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	935	10	25	1360	15	10	0	25	25	0	10
Future Volume (Veh/h)	15	935	10	25	1360	15	10	0	25	25	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.71	0.71	0.71	0.48	0.48	0.48
Hourly flow rate (vph)	16	984	11	26	1417	16	14	0	35	52	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		442										
pX, platoon unblocked												
vC, conflicting volume	1433			995			2520	2506	498	2036	2504	1425
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1433			995			2520	2506	498	2036	2504	1425
tC, single (s)	4.1			4.1			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			96			0	100	93	0	100	83
cM capacity (veh/h)	470			697			11	25	510	29	25	123

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	508	503	1459	49	73
Volume Left	16	0	26	14	52
Volume Right	0	11	16	35	21
cSH	470	1700	697	35	37
Volume to Capacity	0.03	0.30	0.04	1.39	1.99
Queue Length 95th (ft)	3	0	3	131	199
Control Delay (s)	1.0	0.0	2.6	464.8	698.9
Lane LOS	A		A	F	F
Approach Delay (s)	0.5		2.6	464.8	698.9
Approach LOS				F	F

Intersection Summary					
Average Delay			30.1		
Intersection Capacity Utilization			103.6%	ICU Level of Service	G
Analysis Period (min)			15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Volume (veh/h)	0	450	855	0	0	540
Future Volume (Veh/h)	0	450	855	0	0	540
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.91	0.91	0.89	0.89	0.95	0.95
Hourly flow rate (vph)	0	495	961	0	0	568
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	961				1456	961
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	961				1456	961
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	0
cM capacity (veh/h)	716				143	311

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	495	961	568
Volume Left	0	0	0
Volume Right	0	0	568
cSH	1700	1700	311
Volume to Capacity	0.29	0.57	1.83
Queue Length 95th (ft)	0	0	945
Control Delay (s)	0.0	0.0	412.9
Lane LOS			F
Approach Delay (s)	0.0	0.0	412.9
Approach LOS			F

Intersection Summary			
Average Delay	115.9		
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	435	0	0	865	0	325
Future Volume (Veh/h)	435	0	0	865	0	325
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.91	0.91
Hourly flow rate (vph)	489	0	0	972	0	357
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				934		
pX, platoon unblocked					0.77	
vC, conflicting volume			489		1461	489
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			489		1450	489
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	39
cM capacity (veh/h)			1079		113	583

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	489	972	357
Volume Left	0	0	0
Volume Right	0	0	357
cSH	1700	1700	583
Volume to Capacity	0.29	0.57	0.61
Queue Length 95th (ft)	0	0	103
Control Delay (s)	0.0	0.0	20.4
Lane LOS			C
Approach Delay (s)	0.0	0.0	20.4
Approach LOS			C

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	365	270	90	40	420	45	100	60	40	40	65	320	
Future Volume (vph)	365	270	90	40	420	45	100	60	40	40	65	320	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	9	9	12	9	10	12	10	11	12	12	11	11	
Storage Length (ft)	0		0	0		0	75		0	0		0	
Storage Lanes	1		0	1		0	1		0	0		1	
Taper Length (ft)	25			25			25			25			
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		47			47			32			37		
Link Distance (ft)		934			535			2810			448		
Travel Time (s)		13.5			7.8			59.9			8.3		
Confl. Peds. (#/hr)							2					2	
Peak Hour Factor	0.95	0.95	0.95	0.88	0.83	0.83	0.85	0.85	0.85	0.94	0.94	0.94	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	384	379	0	45	560	0	118	118	0	0	112	340	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		2			2			4			4		3
Permitted Phases	2			2			4			4		4	
Detector Phase	2	2		2	2		4	4		4	4	4	
Switch Phase													
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	10.0	1.0
Minimum Split (s)	22.5	22.5		22.5	22.5		15.0	15.0		15.0	15.0	15.0	19.0
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	45.0	19.0
Total Split (%)	31.9%	31.9%		31.9%	31.9%		47.9%	47.9%		47.9%	47.9%	47.9%	20%
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		5.0	5.0			5.0	5.0	
Lead/Lag							Lag	Lag		Lag	Lag	Lag	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	Min	Min		Min	Min		None	None		None	None	None	None
v/c Ratio	1.45	0.45		0.11	0.64		0.39	0.25			0.29	0.53	
Control Delay	244.8	13.3		12.2	18.2		21.6	13.0			18.9	6.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay	244.8	13.3		12.2	18.2		21.6	13.0			18.9	6.0	
Queue Length 50th (ft)	~143	49		5	86		26	16			24	0	
Queue Length 95th (ft)	#392	241		38	#400		83	59			81	57	
Internal Link Dist (ft)		854			455			2730			368		
Turn Bay Length (ft)							75						
Base Capacity (vph)	264	834		401	871		998	1429			1295	1323	
Starvation Cap Reductn	0	0		0	0		0	0			0	0	
Spillback Cap Reductn	0	0		0	0		0	0			0	0	
Storage Cap Reductn	0	0		0	0		0	0			0	0	
Reduced v/c Ratio	1.45	0.45		0.11	0.64		0.12	0.08			0.09	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 94

Actuated Cycle Length: 52.4

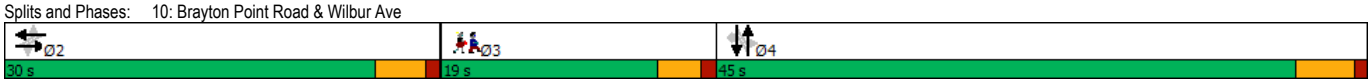
Natural Cycle: 100

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Brayton Point Road & Wilbur Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	365	270	90	40	420	45	100	60	40	40	65	320
Future Volume (vph)	365	270	90	40	420	45	100	60	40	40	65	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	12	9	10	12	10	11	12	12	11	11
Total Lost time (s)	4.5	4.5		4.5	4.5		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.96		1.00	0.99		1.00	0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1608	1629		1593	1713		1646	1693			1784	1508
Flt Permitted	0.31	1.00		0.47	1.00		0.68	1.00			0.85	1.00
Satd. Flow (perm)	522	1629		791	1713		1186	1693			1542	1508
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.83	0.83	0.85	0.85	0.85	0.94	0.94	0.94
Adj. Flow (vph)	384	284	95	45	506	54	118	71	47	43	69	340
RTOR Reduction (vph)	0	9	0	0	3	0	0	33	0	0	0	259
Lane Group Flow (vph)	384	370	0	45	557	0	118	85	0	0	112	81
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		4
Actuated Green, G (s)	26.6	26.6		26.6	26.6		13.3	13.3			13.3	13.3
Effective Green, g (s)	26.6	26.6		26.6	26.6		13.3	13.3			13.3	13.3
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.24	0.24			0.24	0.24
Clearance Time (s)	4.5	4.5		4.5	4.5		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	250	780		379	821		284	405			369	361
v/s Ratio Prot		0.23			0.33			0.05				
v/s Ratio Perm	c0.74			0.06			c0.10				0.07	0.05
v/c Ratio	1.54	0.47		0.12	0.68		0.42	0.21			0.30	0.23
Uniform Delay, d1	14.4	9.7		8.0	11.1		17.8	16.9			17.3	17.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	260.3	0.5		0.1	2.2		1.0	0.3			0.5	0.3
Delay (s)	274.8	10.2		8.1	13.4		18.8	17.1			17.8	17.3
Level of Service	F	B		A	B		B	B			B	B
Approach Delay (s)		143.3			13.0			18.0			17.4	
Approach LOS		F			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	62.9	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.10			
Actuated Cycle Length (s)	55.5	Sum of lost time (s)	13.5	
Intersection Capacity Utilization	69.0%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	0	0	45	70	50
Future Volume (Veh/h)	75	0	0	45	70	50
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	0.71	0.71	0.87	0.87
Hourly flow rate (vph)	75	0	0	63	80	57
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	172	108	137			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	172	108	137			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	91	100	100			
cM capacity (veh/h)	823	951	1459			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	75	63	137
Volume Left	75	0	0
Volume Right	0	0	57
cSH	823	1459	1700
Volume to Capacity	0.09	0.00	0.08
Queue Length 95th (ft)	7	0	0
Control Delay (s)	9.8	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	17.6%	ICU Level of Service	A
Analysis Period (min)	15		