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PROPOSED RESIDENTIAL DEVELOPMENT 144 SEEKONK STREET NORFOLK, MASSACHUSETTS

Traffic Impact and Access Study



October 23, 2019

Prepared for Andrews Engineering, Inc.



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INTRODUCTION

WSP assessed the traffic impacts associated with the development of the now 84-unit residential development project proposed at 144 Seekonk Street in Norfolk, Massachusetts. The development will be accessed via a new driveway that will intersect Seekonk Street and form an unsignalized intersection.

The following traffic analysis concentrates on the weekday AM (7:00 to 9:00 AM) and weekday PM (4:00 to 6:00 PM) commuter peak periods, the critical time periods for a residential development. WSP analyzed the existing conditions and future (2026) no-build and build transportation conditions, calculated the number of trips associated with the proposed residential development, distributed generated vehicles trips to the study roadway network, determined the traffic impact of the proposed development, and visited the site to determine stopping and intersection sight distances at the proposed driveway.

EXISTING CONDITIONS

ROADWAY GEOMETRY

Seekonk Street primarily runs north and south near the development site and curves horizontally at approximately 185 feet south of the proposed driveway. Seekonk Street intersects Cleveland Street north of the proposed driveway and Fruit Street south of the proposed driveway at unsignalized intersections. The posted speed limit on Seekonk Street is 35 miles per hour (mph) in both directions. However, there are warning signs indicating an intersection ahead with associated 25 mph speed advisory plate limits, as shown in Figure 1.

These signs are visible from well beyond the proposed driveway at 144 Seekonk St and encourage drivers to reduce their speed to 25 mph, which is 10 mph under posted speed limit of 35 mph. While additional speed data was not gathered, anecdotal car-following observations indicated vehicle speeds were between 27 and 33 miles per hour on the morning of October 15, 2019.



Figure 1: Warning Sign Located just south of Proposed Driveway. Similar Sign Is In Place North of Cleveland Street

The proposed development site is served by a single driveway. A full description of the site access driveway is provided at the end of this study report.

TRAFFIC VOLUME DATA

The traffic counts were collected as part of the originally performed traffic impact study in January 2017. The volumes were grown at 1% annually to determine the 2019 existing conditions volumes.

An automatic traffic recorder (ATR) collected traffic volumes and speed data on Seekonk Street on Wednesday, November 30, 2016 and Thursday, December 1, 2016. Approximately, 3,100 vehicles (1,700 northbound and 1,400 southbound) passed the locations of the proposed site driveways. The weekday AM peak hour occurred from 7:00 to 8:00 AM when approximately 420 vehicles (340 northbound and 80 southbound) passed the proposed site driveways. The weekday PM peak hour occurred from 4:30 to 5:30 PM when approximately 300 vehicles (210 southbound and 90 northbound) passed the proposed site driveways. During the morning, the majority of traffic (80 percent) on Seekonk Street proceeded northbound. During the evening, following commuting traffic patterns, the traffic reversed direction and the majority of traffic (70 percent) proceeded southbound). WSP averaged these values and arrived at a distribution of 75% to and from the north and 25% to and from the south during the AM and PM peak periods.



During the data collection, vehicle speeds were captured. The 85th percentile speeds were consistent during the AM and PM peak hours for vehicles approaching from north at 41 mph. The 85th percentile speeds during the AM and PM peak hour were consistent for vehicles approaching from the south at 40 mph.

As part of the original study, WSP researched traffic volume data from MassDOT permanent count stations within the area to determine an appropriate seasonal traffic volume adjustment. Continuous count data was taken from the closest permanent count stations; 6126, located on Interstate 495 in Franklin just south of Route 140 and 6127, located on Interstate 495 in Wrentham just north of Route 1A. Based on 6127, November traffic volumes are historically 3 percent lower than average month volumes and December volumes are historically 7 percent lower than average month. Traffic volumes were increased by 5 percent to represent average monthly conditions. The monthly traffic factors from the permanent counts stations mentioned above are attached in Appendix A.

The 2016 ATR counts and calculated 2019 weekday AM and weekday PM peak hour traffic volumes can be found in the Appendix.

In lieu of additional count data, the team sought to utilize recent data from other studies as a supplement source of information. After the October 2, 2019, ZBA Meeting, the development team e-mailed the Norfolk Town Planner to ask about any recent or upcoming developments in the vicinity of 144 Seekonk Street, in order to leverage this in the analysis.

The revised traffic study includes the Seekonk Street at Cleveland Street intersection and incorporates traffic volume data from The Enclave¹ development located on Village Green, southwest of 144 Seekonk Street. The study included the Seekonk Street at Cleveland Street intersection in the existing, future no-build, and future build analyses. The 2017 existing conditions volumes were grown by 2% to use in the existing conditions volumes and the 2024 build conditions traffic volumes at the Seekonk Street at Cleveland Street intersection (from The Enclave) were included in this 144 Seekonk Street and were increased by 10% and combined with the 144 Seekonk Street study volumes to inform 2026 No-Build and Build Conditions analysis.

The analysis for the Fruit Street at Seekonk Street intersection uses count data from the 84 Cleveland Street residential development,² which counted the Cleveland Street at Fruit Street intersection. This count data was used in concert with the volumes collected for this study to project turning movement counts at the Cleveland Street at Fruit Street intersection, which were included in the existing conditions as well as 2026 No-Build and Build analyses. The original 2016 volumes on Fruit Street were increased by 3% for input into the existing conditions and by 20% for the future conditions analyses.

VOLUME ADJUSTMENTS

To account for additional background growth, the 2019 volumes were adjusted to 2026 No-build volumes using an annual background growth factor of 1%. This was applied to the site driveway at Seekonk Street intersection as well as the Cleveland Street at Seekonk Street intersection. For the

¹ The Enclave Traffic Impact and Access Study: <http://www.virtualnorfolk.org/assets/files/boards-and-committees/zoning-board-of-appeals/40b-projects/the-enclave/exhibit/enclave-exhibit-5-traffic-report.pdf>

² <http://www.virtualnorfolk.org/boards-committees/zoning-board-of-appeals/40b-projects/lakeland-farms.htm>



2026 Build Conditions, the volumes along Seekonk Street were increased by 10% to account for additional background growth as a sensitivity or stress test.

MULTIMODAL OBSERVATIONS

Seekonk Street has an effective pavement width of approximately 22 feet with no adjacent sidewalk between the proposed site driveway and Main Street to the south. To the north there is a sidewalk that begins at the Medfield line and continues north to MA-27 (High Street). Despite the lack of sidewalk, there is anecdotal evidence that some who live along Seekonk Street walk and jog along it, and some who use it consistently for this purpose. The clear zone along Seekonk Street has more flat area for walking and jogging further south towards Main Street than it does along Seekonk Street near the proposed driveway.

There is no transit service along Seekonk Street, and the nearest significant transit facility is the MBTA's Norfolk Commuter Rail Station, which is an approximately 2.0 mile walk to the station from the intersection of the site driveway and Seekonk Street.

Based on the count data from 2016, there were no more than 13 cyclists or pedestrians counted along Seekonk Street (in both directions) for the entire day.



SITE RELATED TRAFFIC

WSP calculated the net increase in traffic expected as a result of the proposed 144 Seekonk Street residential development. The trips associated with the 84-units were calculated using the Institute of Transportation Engineer’s (ITE) Trip Generation Manual, 10th Edition. The appropriate Land Use Code (LUC) for the residential units is LUC 210, Single Family – Detached Housing.

Table 1: ITE Trip Generation

Project Trip Generation			
	In	Out	Total
Weekday Daily	397	397	794
AM Peak Hour (Adjacent Street)	16	47	63
PM Peak Hour (Adjacent Street)	52	31	83

Trip generation based on Trip Generation, 10th Edition, published by Institute of Transportation Engineers in 2017. Assumes 84 units of LUC 210, Single-Family Detached Housing.

As shown in Table 1, with 84 units, the proposed development is now expected to generate 794 vehicle trips over the course of a weekday. The proposed development is anticipated to generate 63 vehicle trips during the weekday AM peak hour (16 in and 47 out) and 83 vehicle trips during the weekday PM peak hour (52 in and 31 out).

The trip generation of the proposed development was distributed at the proposed driveway intersection based on existing traffic patterns and engineering judgment. Approximately, 75 percent of the site traffic is expected to travel to and from north of the site along Seekonk Street and the remaining 25 percent of the site traffic is expected to travel to and from south of the site. The trip generation associated with the proposed development was added to the 2026 No-Build condition peak hour traffic volumes to determine the 2026 Build condition peak hour traffic volumes. The traffic existing and future conditions traffic diagrams can be found in Appendix B.



INTERSECTION OPERATIONS

METHODOLOGY

The traffic operations at the proposed driveway intersection with Seekonk Street were determined in the existing conditions as well as the 2026 No Build and Build conditions. Additional discussion is included for other nearby site intersections. Analysis was based on methodologies outlined in the Highway Capacity Manual (HCM). Level of Service (LOS) and delays were calculated and are summarized below.

LOS is a calculation of control delay for an intersection. LOS is an indication of driver discomfort, frustration, fuel consumption, and lost time. LOS is defined by an index from A (free flow) to F (long delays). Control delay and LOS values are listed in Table 2.

For unsignalized intersections, delay values apply only to the controlled movements, since the main street movements are not restricted. Control delay is the elapsed time for deceleration, queue time, stopped delay, and final acceleration. Average control delay for unsignalized intersections is a function of capacity of the approach and the degree of saturation. Synchro 9 software was used as the analysis tool for determining the unsignalized LOS at the proposed driveway intersection. Synchro implements the methods of the Highway Capacity Manual (HCM) to analyze intersection capacity and determine LOS.

Table 2: Level of Service Criteria

Average Delay (seconds)	
Level of Service	Unsignalized Intersections
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and < 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Source: 2010 HCM

OPERATIONS RESULTS

The operations of the study area intersections were determined. Table 3 summarizes the LOS and average delay per vehicle at the stop controlled site driveway approach at unsignalized intersection.



Table 3: 2019 Existing Conditions Intersection Operations Summary

	2019 Existing		2026 No Build		2026 Build	
	Delay	LOS	Delay	LOS	Delay	LOS
Seekonk Street at Driveway – WB (unsignalized)						
AM Peak Hour	NA	NA	NA	NA	12.4	B
PM Peak Hour	NA	NA	NA	NA	10.1	B
Seekonk Street at Cleveland Street – EB (unsignalized)						
AM Peak Hour	14.1	B	20.8	C	23.9	C
PM Peak Hour	11.2	B	11.8	B	12.7	B
Seekonk Street at Fruit Street – EB (unsignalized)						
AM Peak Hour	10.8	B	12.1	B	12.4	B
PM Peak Hour	10.3	B	10.8	B	11.0	B

Delays in seconds per vehicle

2019 Existing (NA): No existing intersection at site

2019 Build: Delays if project were completed in 2019

2026 Build: Existing plus 7 years per the MassDOT TIA guidance + Additional 10% volume increase

144 SEEKONK STREET SITE DRIVEWAY

The site driveway approach (westbound) at unsignalized intersection is expected to operate at LOS B during the 2026 Build Conditions in the AM and PM peak hour. As mentioned, the Seekonk Street and site driveway volumes were increased by 10% in the 2026 Build Conditions to simulate a “stress test” of additional background growth.

SEEKONK STREET AT CLEVELAND STREET

The analysis indicates that even with the added trips from the 144 Seekonk Street residential development, increasing Cleveland Street and Seekonk Street traffic volumes to account for background growth, and then increasing each facility by another 10%, the Cleveland Street approach (eastbound) at Seekonk Street is projected to operate acceptably at LOS C and at LOS B during the AM Peak and PM peak hours respectively in 2026 Build conditions.

As shown in the table, the Cleveland Street approach delays are projected to increase from 14.1 seconds/vehicle in the existing conditions AM peak hour to 20.8 seconds/vehicle in the 2026 No Build Conditions. The Synchro models project that the 144 Seekonk Street development would increase 2026 AM delays at the intersection by another 3.1 seconds per vehicle.

In the PM peak hour, delays are projected to increase less, increasing from 11.2 seconds/vehicle in the existing conditions AM peak hour to 11.8 in the 2026 No Build Conditions and 12.7 seconds/vehicle in the 2026 Build Conditions.



SEEKONK STREET AT FRUIT STREET

In lieu of count data for the Seekonk Street at Fruit Street intersection, count data from the 84 Cleveland Street residential development in Norfolk was used to develop volumes for the intersection. This study had volumes for the Cleveland Street at Fruit Street intersection, which is proximate to the Seekonk Street at Fruit Street intersection. These volumes were used in concert with the traffic count data collected for the 144 Seekonk Street project to estimate turning movement volumes at the Seekonk Street at Fruit Street intersection in the 2019 Existing Conditions as well as 2026 No Build and Build Conditions.

The 2016 volumes collected as part of that study were grown by 3% for the existing conditions and grown by 20% (to the 2026 No Build and Build Conditions) and then entered into the respective Synchro models. The turning movement distribution from Fruit Street to Seekonk Street was estimated, based on the prevailing travel pattern along Seekonk Street, and based on these volumes.

As shown in the table, the level of service on the unsignalized fruit street approach is projected to be LOS B in the existing, future no build, and future build conditions. In addition, the table indicates that delays are expected to increase by less than 1.0 seconds between the 2026 No Build and Build Conditions.

SOUTH STREET AT MA 27 (HIGH STREET) - MEDFIELD, MA

The South Street at MA 27 (High Street) intersection is located in the town of Medfield 2.5 miles from the proposed driveway. The signal (and its related timing and operations) at the intersection are not under the Town of Norfolk's jurisdiction. In addition, its operations are influenced by not only travel patterns and land uses located along multiple Seekonk Street cross streets, but also by Medfield and Walpole commute patterns.

The team corresponded with the Medfield Town Planner to attempt to obtain recent count data or traffic analyses that included the South Street at MA-27 intersection, and received a response that there were no recent studies in the area. Based on the revised site plan that includes 84 units, the development is projected to generate 63 trips in the morning peak hour, 47 of which are projected to turn north towards the South Street at MA-27 intersection, which equates to approximately 1-2 additional vehicles per signal cycle. Observations made at 7:50 AM on the morning of October 15 showed northbound queues on South Street at the intersection of 12-15 vehicles; however, no cycle failures (based on queueing) were observed during the multiple cycles observed.

SEEKONK STREET AT MAIN STREET - NORFOLK, MA

Based on the trip distribution, which indicates that most trips from the proposed development will turn right onto northbound Seekonk Street, there are only projected to be 14 and 10 trips in the 2026 AM and PM peak hours, respectively, headed south towards the Seekonk Street at Main Street intersection. Even if all of these vehicles reach Main Street, this is equivalent to only one vehicle every 5 and 6 minutes, which should not adversely affect the stop controlled intersection's operations.



SIGHT DISTANCES

WSP has reviewed the available sight lines approaching the proposed driveway to access the proposed development and compared them to industry standards. WSP measured the available sight lines approaching and from the proposed site driveway in July, 2019. WSP remeasured the available sight lines approaching and from the proposed site driveway in October, 2019, to confirm the prior measurements and evaluate which shrubbery and trees would need to be removed to meet acceptable intersection sight distance. Figures for both Stopping Sight and Intersection Sight distance are included in Appendix C.

STOPPING SIGHT DISTANCE

The American Association of State Highway and Transportation Officials (AASHTO) calculates the requirements for Stopping Sight Distance (SSD). SSD is the critical measurement of sight lines as the distance a vehicle needs to come to a complete stop to avoid a collision when traveling at a certain speed. For a 35-mph zone, the minimum required SSD is 250 feet based on AASHTO guidelines, and for a 40-mph zone, the minimum SSD is 305 feet.

Based on ATR speed data, the 85th percentile speeds for vehicles approaching the site driveway were 40 mph from the north and 41 mph from the south along Seekonk Street. The minimum required SSD for 40-mph speeds is 305 feet based on AASHTO guidelines.

Since the ATR speed data was collected in 2016, warning signs (located approximately 100 feet south of the driveway and just north of the Seekonk Street at Cleveland Street intersection) were installed on Seekonk Street encouraging drivers to reduced speed to 25 mph. It is likely vehicle speeds along Seekonk Street in the vicinity of the proposed driveway have been reduced. To remain conservative, WSP compared to the available sight lines to the required SSD and ISD for the higher 2016 prevailing speeds (40 mph).

Approaching the driveway from the north along Seekonk Street, a motorist can see an object at the site driveway from approximately 450+ feet away. Approaching the site driveway from the south along Seekonk Street, SSD is clear to approximately 320 feet if the shrubbery (in ROW) shown in the lower left red box in Figure 2 is trimmed. These shrubs and overhanging tree branch are located approximately 130 feet south of the proposed driveway along Seekonk St. The available SSD meets the requirements in both directions for a 40-mph speed zone.

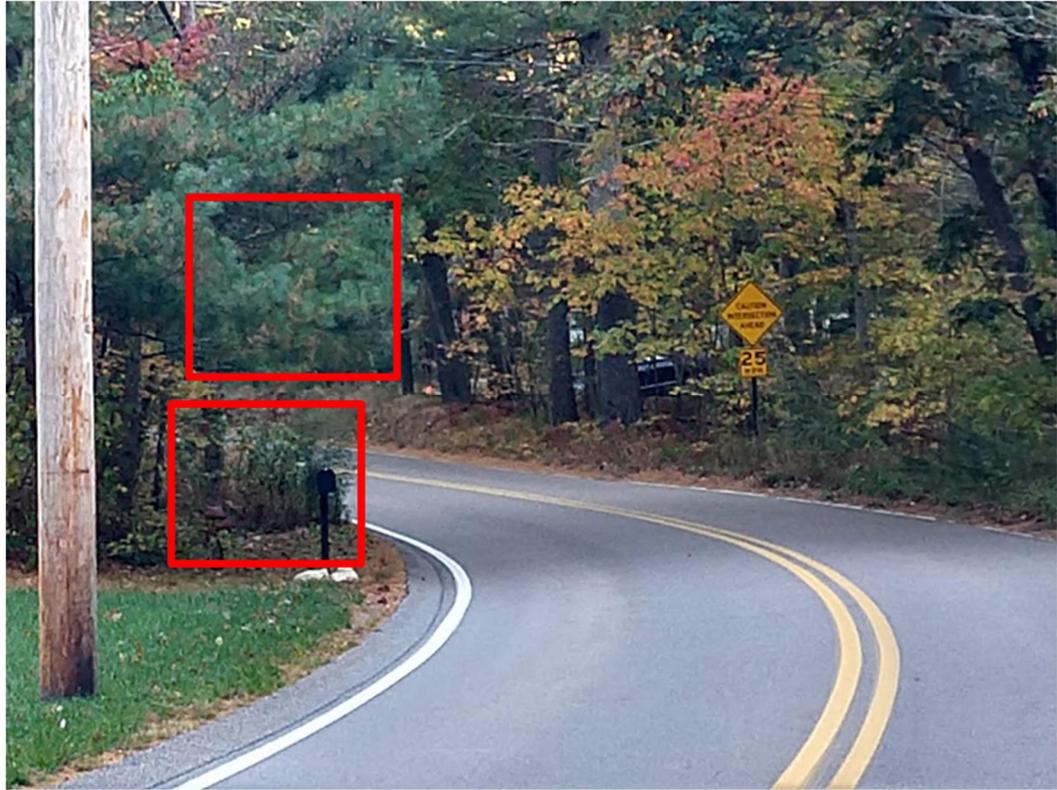


Figure 2: Northbound View Along Seekonk St from Approximately 310 Feet South of Proposed Driveway

INTERSECTION SIGHT DISTANCE

Intersection sight distance (ISD) is the sight distance needed to allow drivers to safely turn onto or cross a roadway from an intersection street or driveway. ISD must equal SSD to ensure vehicles on the main road can see vehicles on the driveway as they prepare to turn or cross. AASHTO provides a recommended (but not required) ISD that ensures vehicles on the main road do not have to adjust their travel speed. Based on the prevailing vehicle speeds on Seekonk Street, the recommended ISD at 40 mph is 445 feet.

Measuring from the driveway centerline and 14.5 feet behind the proposed stop bar, the ISD to the north is blocked by a cluster of trees on property and then also blocked by shrubs within City of Norfolk Right of Way (ROW) approximately 115 feet north of the proposed driveway, as shown in Appendix C. If the trees and shrubbery located to the north of the driveway within the proposed property line and the trees and shrubbery within the City ROW are removed (see Appendix) the available ISD would increase to approximately 325+ feet.

ISD to the south is available for 40 feet but is then blocked by a cluster of trees located just south of the proposed access drive and existing shrubbery and pine trees to the south. If the trees located on property and shrubbery near the fire hydrant on the west side of Seekonk Street (located approximately 130 feet south of the proposed driveway) are removed, the available ISD would increase to approximately 390 feet after which it is limited by roadway curvature.



If the aforementioned trees and shrubs (shown in Appendix C) are removed or trimmed, the proposed driveway will meet the required ISD distance of 305 feet (equal to SSD on Seekonk Street) but not the recommended ISD distance of 445 feet.

SAFETY ANALYSIS

WSP researched crash data collected along a segment of Seekonk Street begin a quarter mile north of the proposed site driveway and extending a quarter mile south to the south of the proposed driveway. WSP collected the five most recent years available from MassDOT (2014-2018). The crash data for the segment of Seekonk Street in the vicinity of the proposed driveway is summarized in Table 4. There were a total of 5 crashes between 2014 and 2018.



Table 4: 2014 -2018 Crash Analysis

Location/Year	Segement of Seekonk Street
2014	1
2015	2
2016	1
2017	1
2018	0
Totals	5
Collision Manner	
Angle	0
Rear End	1
Sideswipe (same dir)	0
Sideswipe (opp dir)	0
Head On	0
Single Vehicle	4
Unknown	0
Pedestrian	0
Crash Severity	
Property Damage	4
Non-fatal Injury	1
Fatal Injury	0
Unknown	0
Road Conditions	
Dry	4
Wet	0
Snowy/Icy	1
Unknown	0
Light Conditions	
Daylight	3
Dark (lighted road)	0
Dark (non-lighted road)	2
Dawn/Dusk	0
Unknown	0

As shown in Table 4, a total of 5 crashes occurred in the vicinity of the proposed driveway between 2014 and 2018. A single crash occurred in 2014, 2016, and 2017, two crashes occurred in 2015, and no crashes occurred in 2018. Four of the five crashes resulted in property damage only with the remaining crash resulting in a minor injury.

The crash rate for the segment of Seekonk Street was calculated in terms of million vehicle miles traveled (MVMT). Seekonk Street is classified as an urban minor arterial roadway located within



MassDOT District 5³. The average crash rate per MVMT for an urban minor arterial roadway in Massachusetts is 3.80⁴. The average crash rate for the half mile segment of Seekonk Street in the vicinity of the proposed driveway is 1.77 per MVMT. The segment crash rate along Seekonk Street is less than 50% that of the comparable MassDOT crash rate for similarly classified roadways.

³ <https://gis.massdot.state.ma.us/roadinventory/>

⁴ <https://www.mass.gov/service-details/intersection-and-roadway-crash-rate-data-for-analysis>



DRIVEWAY AND ROUNDABOUT DESIGN ASSESSMENT

The proposed development features an approximately 1,115-foot-long driveway that provides access to all 84 units in the development to Seekonk Street. The first approximately 200 feet of the driveway features an eight-foot (8 foot) center median and 23 foot lanes. The next approximately 440 feet of driveway features 12 foot lanes and leads to a loop (essentially a roundabout with two approaches) that allows cars, emergency vehicles, and buses to turn around.

This roundabout has approximately 25 foot lanes and a 50-foot center island. This design can accommodate a school bus and a fire equipment. Just west of the roundabout is a wider paved area with space for a school bus stop and a shelter for children to wait for the bus.

Just east of the proposed roundabout is an area with seven (7) angle parking spaces on the north side of the proposed driveway. These parking spaces would be connected via sidewalk to the bus stop, to allow parents to briefly park and walk their children to the bus stop. The sidewalk will continue on the north side of the driveway to Seekonk Street. The angle parking area is protected from the main driveway by a raised median. To allow drivers and children to safely exit the vehicle.

Just east of the angle parking area on the south side of the driveway are 10 head in parking spaces that will be located near the mail drop. These will be connected to the development via another sidewalk.

The central island can also be designed to be mountable, to accommodate larger vehicles

The proposed driveway design width meets section 18.2.3.4.1.1 of the Massachusetts Fire Code which states that “Fire department access roads constructed in the boulevard-style shall be allowed where each lane is less than 20’ but not less than 10’ when they do not provide access to a building or structure.”⁵

Despite the driveway’s length, the roundabout provides an opportunity for vehicles to turn around, and the lack of median for the majority of the driveway allows for contraflow passing if there is a blockage.

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https://www.mass.gov/files/documents/2018/02/02/FEA_527%20CMR_2015_%20unofficial%20Effective%20January%201%2C%202018%20_1.pdf



CONCLUSIONS

The proposed residential development is anticipated to generate 794 vehicle trips over the course of a weekday, 63 vehicle trips during the AM peak hour, and 83 vehicle trips during the PM peak hour. The unsignalized intersection at the proposed driveway is expected to operate with acceptable delays during both AM peak and PM peak hours at LOS A or LOS B for build condition in 2026. In addition, the Cleveland Street at Seekonk Street Fruit Street at Seekonk Street intersections were found to operate at acceptable levels of service, even with a 10% increases in volume

If the identified trees on property and shrubbery within ROW are moved, the proposed driveway meets the required SSD lengths in both directions for a 40-mph speed zone. Meeting the AASHTO intersection sight distance is desirable, but not required for a site, and the sight lines from the proposed driveway does meet the SSD distance in both directions by trimming the tree branches or removing trees as recommended.



APPENDIX A: TRAFFIC COUNT DATA



PRECISION
D A T A
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Invoice

Date	Invoice #
12/2/2016	165400

Bill To
Parsons Brinkerhoff Attn: Linda Nicholson 75 Arlington Street Boston, MA 02116

Engineer	Client Job #	Terms	Job Location
J. Conley	TBA	Net 60 Days	Norfolk, MA

Description	Hours/Quantity	Rate	Amount
(1) 48 HR ATR (Class, Speed & Volume) Wed 11/30 thru Thurs 12/1/16	1	270.00	270.00

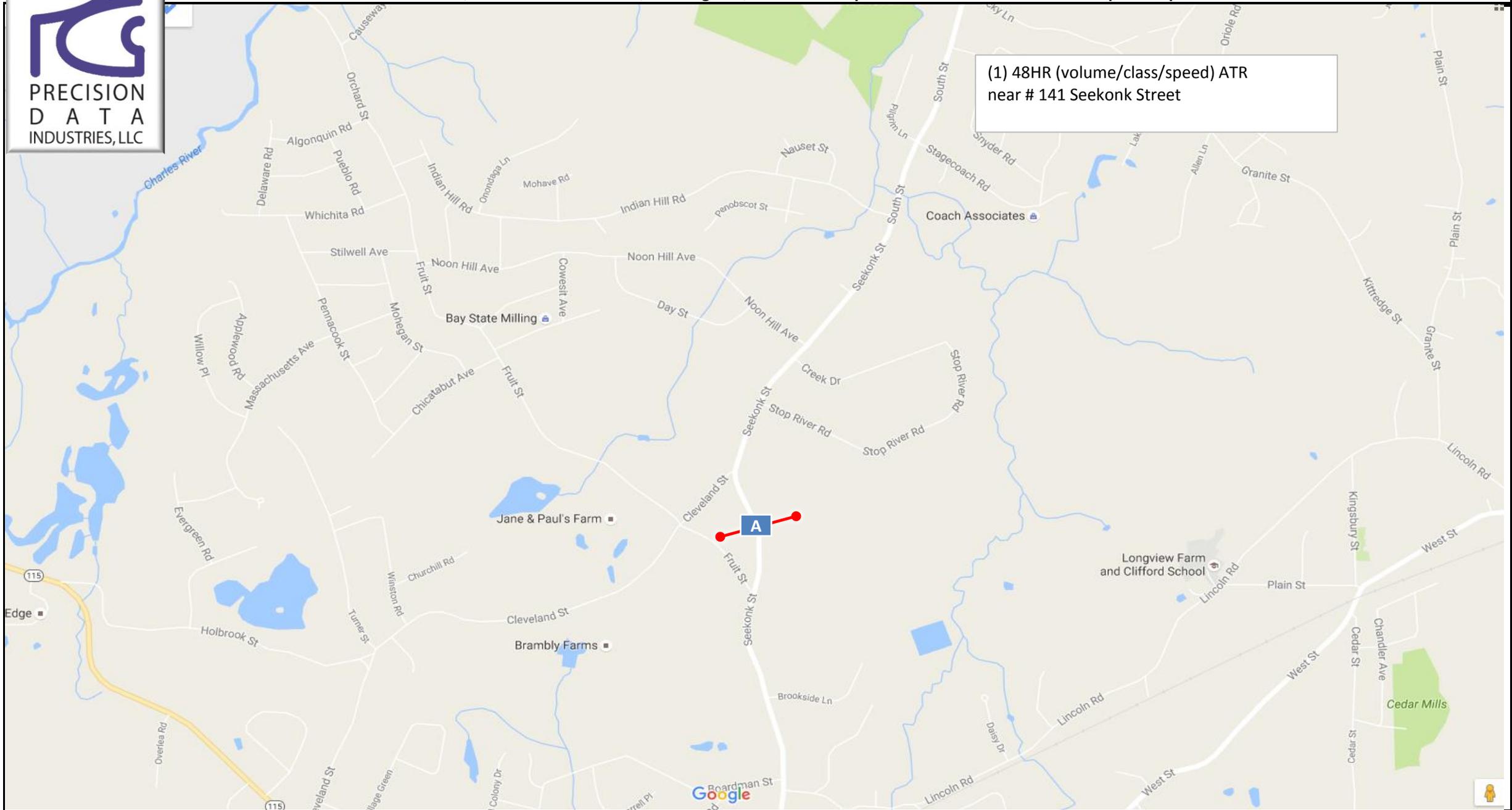
"Traffic Counts with Precision" Thank you for your business	Total	\$270.00
	Balance Due	\$270.00



Location Map: 165400 Norfolk, MA

Precision Data Industries, LLC 46 Morton Street, Framingham, MA 01702 ph: 508-875-0100 email: datarequests@pdillc.com

(1) 48HR (volume/class/speed) ATR
near # 141 Seekonk Street



Client: WSP-Parson Brinckerhoff	Engineer: J. Conley	Site Code: TBA	Date:	PDI Job # 165400	City, State: Norfolk, MA
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PRECISION
D A T A
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Seekonk Street
@ #141 Seekonk Street
City, State: Norfolk, MA
Client: WSP/ J. Conley
SB

165400 A Class
Site Code:

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/30/1														
6	0	3	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
06:00	1	20	12	1	1	0	0	0	0	0	0	0	0	35
07:00	0	57	18	0	0	0	0	0	0	0	0	0	0	75
08:00	0	47	15	2	1	0	0	0	0	0	0	0	0	65
09:00	0	43	20	0	6	0	0	0	0	0	0	0	0	69
10:00	1	34	15	1	2	0	0	0	1	0	0	0	0	54
11:00	1	33	12	0	3	0	0	0	0	0	0	0	0	49
12 PM	2	35	16	0	8	1	0	0	0	0	0	0	0	62
13:00	0	56	21	1	9	0	0	0	0	0	0	0	0	87
14:00	0	54	28	1	3	0	0	1	0	0	0	0	0	87
15:00	0	86	42	0	11	0	0	0	0	0	0	0	0	139
16:00	0	155	42	1	3	0	0	0	0	0	0	0	0	201
17:00	2	142	34	0	6	1	0	0	0	0	0	0	0	185
18:00	0	98	22	0	3	0	0	0	0	0	0	0	0	123
19:00	1	51	11	0	1	0	0	0	0	0	0	0	0	64
20:00	0	24	5	0	0	0	0	0	0	0	0	0	0	29
21:00	0	18	1	0	4	0	0	0	0	0	0	0	0	23
22:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
23:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
Percent	0.6%	70.9%	23.1%	0.5%	4.6%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	09:00	08:00	09:00				10:00					07:00
Vol.	1	57	20	2	6				1					75
PM Peak	12:00	16:00	15:00	13:00	15:00	12:00		14:00						16:00
Vol.	2	155	42	1	11	1		1						201



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Seekonk Street
@ #141 Seekonk Street
City, State: Norfolk, MA
Client: WSP/ J. Conley
SB

165400 A Class
Site Code:

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12/01/1														
6	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	2	0	0	2	0	0	0	0	0	0	0	0	4
06:00	0	19	9	1	1	0	0	0	0	0	0	0	0	30
07:00	0	56	20	0	2	0	0	0	0	0	0	0	0	78
08:00	0	56	16	1	1	1	0	0	0	0	0	0	0	75
09:00	0	32	12	0	5	0	0	0	0	0	0	0	0	49
10:00	0	35	16	1	2	1	0	0	0	0	0	0	0	55
11:00	0	42	20	0	6	0	0	0	0	0	0	0	0	68
12 PM	0	34	9	0	2	0	0	0	0	0	0	0	0	45
13:00	0	32	10	0	9	0	0	0	0	0	0	0	0	51
14:00	3	72	30	0	4	0	0	0	0	0	0	0	0	109
15:00	2	83	54	1	8	0	0	1	0	0	0	0	0	149
16:00	0	112	47	0	5	0	0	1	0	0	0	0	0	165
17:00	1	147	45	0	7	0	0	0	0	0	0	0	0	200
18:00	0	109	17	0	3	1	0	0	0	0	0	0	0	130
19:00	0	63	18	0	2	0	0	0	0	0	0	0	0	83
20:00	0	37	6	0	1	0	0	0	0	0	0	0	0	44
21:00	0	27	2	0	0	0	0	0	0	0	0	0	0	29
22:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
23:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Percent	0.4%	70.7%	23.8%	0.3%	4.4%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00	06:00	11:00	08:00								07:00
Vol.		56	20	1	6	1								78
PM Peak	14:00	17:00	15:00	15:00	13:00	18:00		15:00						17:00
Vol.	3	147	54	1	9	1		1						200



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
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Seekonk Street
@ #141 Seekonk Street
City, State: Norfolk, MA
Client: WSP/ J. Conley
NB

165400 A Class
Site Code:

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/30/1														
6	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
05:00	0	35	7	0	3	0	0	0	0	0	0	0	0	45
06:00	0	143	43	1	3	1	0	2	0	0	0	0	0	193
07:00	1	265	58	3	7	0	0	0	0	0	0	0	0	334
08:00	1	145	33	1	5	1	1	0	0	0	0	0	0	187
09:00	0	65	19	1	6	0	0	0	1	0	0	0	0	92
10:00	1	48	22	1	2	0	0	1	0	0	0	0	0	75
11:00	0	44	6	0	6	0	0	0	0	0	0	0	0	56
12 PM	1	50	17	0	2	2	0	0	0	0	0	0	0	72
13:00	1	43	16	0	5	0	0	0	0	0	0	0	0	65
14:00	0	47	15	1	3	1	0	0	0	0	0	0	0	67
15:00	0	52	15	2	0	0	0	0	0	0	0	0	0	69
16:00	1	58	14	0	2	0	0	0	0	0	0	0	0	75
17:00	0	71	19	0	1	0	1	0	0	0	0	0	0	92
18:00	0	59	9	0	1	0	0	0	0	0	0	0	0	69
19:00	0	22	5	0	0	0	0	0	0	0	0	0	0	27
20:00	0	35	6	0	0	0	0	0	0	0	0	0	0	41
21:00	0	19	3	0	0	0	0	0	0	0	0	0	0	22
22:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Percent	0.4%	76.1%	19.3%	0.6%	2.9%	0.3%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	07:00	07:00	06:00	08:00	06:00	09:00					07:00
Vol.	1	265	58	3	7	1	1	2	1					334
PM Peak	12:00	17:00	17:00	15:00	13:00	12:00	17:00							17:00
Vol.	1	71	19	2	5	2	1							92



PRECISION
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165400 A Speed
Site Code:

Start Time	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49	50	54	55	59	60	64	65	69	70	9999	Total	85th % ile	Ave Speed	
11/30/16	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	38	36		
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
04:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	38	37	
05:00	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	41	33	
06:00	1	1	0	1	9	16	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	40	35	
07:00	0	2	0	0	12	39	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	41	37	
08:00	0	0	1	3	18	28	12	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	41	36	
09:00	0	0	0	6	14	34	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	40	36	
10:00	0	0	0	3	11	30	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	40	36	
11:00	1	0	0	0	12	25	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	40	36	
12 PM	0	0	0	1	11	39	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	39	37	
13:00	0	0	0	0	19	53	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	39	37	
14:00	0	0	0	1	20	53	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	38	36	
15:00	0	0	1	10	28	72	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139	40	36	
16:00	0	3	3	11	91	81	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	201	37	34	
17:00	0	0	0	9	79	84	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185	38	35	
18:00	1	0	0	9	49	57	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	37	34	
19:00	0	0	0	1	12	42	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	38	37	
20:00	0	0	0	0	7	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	39	37	
21:00	0	1	1	2	5	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	38	34	
22:00	0	0	0	1	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	38	34	
23:00	0	0	0	0	2	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	40	37	
Total	3	7	7	58	406	697	191	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1378			
%	0.2%	0.5%	0.5%	4.2%	29.5%	50.6%	13.9%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak	06:00	07:00	05:00	09:00	08:00	07:00	07:00	08:00		08:00																	07:00		
Vol.	1	2	1	6	18	39	22	2		1																	75		
PM Peak	18:00	16:00	16:00	16:00	16:00	17:00	15:00	12:00																			16:00		
Vol.	1	3	3	11	91	84	28	1																			201		

Stats

15th Percentile : 30 MPH
50th Percentile : 35 MPH
85th Percentile : 38 MPH
95th Percentile : 42 MPH

Mean Speed(Average) : 36 MPH
10 MPH Pace Speed : 30-39 MPH
Number in Pace : 1103
Percent in Pace : 80.0%
Number of Vehicles > 35 MPH : 758
Percent of Vehicles > 35 MPH : 55.0%



PRECISION
D A T A
INDUSTRIES, LLC

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Start Time	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49	50	54	55	59	60	64	65	69	70	9999	Total	85th % ile	Ave Speed	
12/01/16	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	38	32	
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	38	37	
02:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	33	32	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
04:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	42	37	
05:00	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	41	38	
06:00	1	0	1	0	0	6	16	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	40	36	
07:00	0	0	0	1	17	43	14	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	40	37	
08:00	0	0	0	1	10	43	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	41	38	
09:00	0	0	0	3	8	26	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	40	37	
10:00	0	1	0	2	19	24	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	39	35	
11:00	0	0	1	1	7	33	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	42	38	
12 PM	0	0	0	2	10	25	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	39	36	
13:00	0	0	0	3	10	28	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	40	36	
14:00	2	0	0	1	20	66	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	40	37	
15:00	0	0	0	3	28	87	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149	40	37	
16:00	0	0	0	0	24	116	24	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165	39	37	
17:00	0	0	1	0	38	108	51	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	41	37	
18:00	0	0	0	0	13	77	36	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	41	38	
19:00	0	0	0	2	16	41	23	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	41	37	
20:00	0	0	0	0	10	21	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	41	38	
21:00	0	0	1	3	1	10	12	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	43	38	
22:00	0	0	0	0	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	42	39	
23:00	0	0	1	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	45	39	
Total	4	1	5	22	240	783	313	27	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1397			
%	0.3%	0.1%	0.4%	1.6%	17.2%	56.0%	22.4%	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak	00:00	10:00	06:00	09:00	10:00	07:00	11:00	08:00	07:00																		07:00		
Vol.	1	1	1	3	19	43	25	3	1																		78		
PM Peak	14:00		17:00	13:00	17:00	16:00	17:00	18:00	21:00																		17:00		
Vol.	2		1	3	38	116	51	4	1																		200		

Stats

- 15th Percentile : 32 MPH
- 50th Percentile : 36 MPH
- 85th Percentile : 41 MPH
- 95th Percentile : 43 MPH

- Mean Speed(Average) : 37 MPH
- 10 MPH Pace Speed : 35-44 MPH
- Number in Pace : 1096
- Percent in Pace : 78.5%
- Number of Vehicles > 35 MPH : 968
- Percent of Vehicles > 35 MPH : 69.3%



PRECISION
DATA
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Start Time	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49	50	54	55	59	60	64	65	69	70	9999	Total	85th %ile	Ave Speed	
11/30/16	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	31	24	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	33	32	
03:00	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	38	36	
04:00	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	46	42	
05:00	0	0	0	0	5	15	18	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	44	40	
06:00	0	1	0	0	44	112	34	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193	40	37	
07:00	0	0	1	3	66	188	71	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	334	40	37	
08:00	5	6	6	2	33	88	44	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187	41	35	
09:00	0	0	3	4	29	32	21	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	41	36	
10:00	0	1	0	6	15	34	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	41	36	
11:00	0	0	1	1	20	21	12	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	40	36	
12 PM	0	0	0	4	14	42	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	39	36	
13:00	0	2	0	0	16	37	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	39	36	
14:00	0	0	0	2	19	33	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	40	36	
15:00	1	0	0	0	22	40	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	38	35	
16:00	0	1	2	10	31	25	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	37	33	
17:00	1	1	1	11	40	34	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	37	33	
18:00	2	0	0	9	29	22	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	38	33	
19:00	0	0	0	3	12	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	37	34	
20:00	0	0	0	1	22	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	37	34	
21:00	0	0	0	0	7	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	38	36	
22:00	0	0	0	1	3	8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	38	36	
23:00	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	38	34	
Total	9	13	15	58	431	777	282	23	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1613			
%	0.6%	0.8%	0.9%	3.6%	26.7%	48.2%	17.5%	1.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak	08:00	08:00	08:00	10:00	07:00	07:00	07:00	05:00	05:00																		07:00		
Vol.	5	6	6	6	66	188	71	6	1																		334		
PM Peak	18:00	13:00	16:00	17:00	17:00	12:00	12:00	14:00																			17:00		
Vol.	2	2	2	11	40	42	11	2																			92		

Stats

15th Percentile : 30 MPH
50th Percentile : 35 MPH
85th Percentile : 40 MPH
95th Percentile : 43 MPH

Mean Speed(Average) : 36 MPH
10 MPH Pace Speed : 30-39 MPH
Number in Pace : 1208
Percent in Pace : 74.9%
Number of Vehicles > 35 MPH : 932
Percent of Vehicles > 35 MPH : 57.8%



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Seekonk Street
@ #141 Seekonk Street
City, State: Norfolk, MA
Client: WSP/ J. Conley
NB

165400 A Speed
Site Code:

Start Time	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49	50	54	55	59	60	64	65	69	70	9999	Total	85th %ile	Ave Speed	
12/01/																													
16	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	33	32	
01:00	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	41	31	
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	38	37	
03:00	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	2	42	37	
04:00	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	42	40	
05:00	0	0	0	0	0	3	14	18	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	43	40	
06:00	0	1	0	1	31	130	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195	39	37	
07:00	0	0	1	0	71	208	57	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	345	40	37	
08:00	0	0	1	5	44	150	37	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	239	39	37	
09:00	0	0	0	5	38	42	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	38	35	
10:00	0	0	0	1	19	29	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	39	36	
11:00	0	0	0	0	12	32	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	40	37	
12 PM	0	1	0	3	10	42	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	40	37	
13:00	0	2	0	2	13	39	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	40	36	
14:00	0	0	0	3	24	41	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	39	36	
15:00	0	0	1	1	16	49	14	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	39	37	
16:00	0	1	1	1	13	29	8	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	41	37	
17:00	0	0	1	7	16	45	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	40	36	
18:00	1	1	1	0	11	33	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	41	37	
19:00	0	1	0	0	13	38	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	41	37	
20:00	1	0	0	0	13	26	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	41	37	
21:00	0	0	1	1	5	17	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	40	37	
22:00	0	0	0	0	3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	41	37	
23:00	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	42	36	
Total	2	7	10	30	357	974	316	27	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1729			
%	0.1%	0.4%	0.6%	1.7%	20.6%	56.3%	18.3%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak		06:00	01:00	08:00	07:00	07:00	07:00	07:00	05:00																		07:00		
Vol.		1	2	5	71	208	57	7	1																	345			
PM Peak	18:00	13:00	15:00	17:00	14:00	15:00	18:00	19:00	16:00																		17:00		
Vol.	1	2	1	7	24	49	20	3	3																	87			

Stats

- 15th Percentile : 31 MPH
- 50th Percentile : 36 MPH
- 85th Percentile : 40 MPH
- 95th Percentile : 43 MPH

- Mean Speed(Average) : 37 MPH
- 10 MPH Pace Speed : 30-39 MPH
- Number in Pace : 1331
- Percent in Pace : 77.0%
- Number of Vehicles > 35 MPH : 1128
- Percent of Vehicles > 35 MPH : 65.3%



PRECISION
D A T A
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Seekonk Street
@ #141 Seekonk Street
City, State: Norfolk, MA
Client: WSP/ J. Conley

165400 A Volume
Site Code:

Start Time	SB		NB		Combin ed		11/30/20 16 Wed							
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.								
12:00	3	15	0	15	3	30								
12:15	0	11	0	27	0	38								
12:30	0	21	2	15	2	36								
12:45	1	15	62	1	3	15	72	2	7	30	134			
01:00	0	17		0	20	37								
01:15	0	24		0	14	38								
01:30	0	16		0	19	35								
01:45	0	30	87	0	12	65	0	0	42	152				
02:00	0	23		2	17	40								
02:15	0	17		0	15	32								
02:30	0	24		0	18	42								
02:45	0	23	87	0	2	17	67	0	2	40	154			
03:00	0	26		1	17	43								
03:15	0	39		4	20	59								
03:30	0	43		0	15	58								
03:45	0	31	139	0	5	17	69	0	5	48	208			
04:00	0	47		1	17	64								
04:15	0	34		1	19	53								
04:30	0	60		1	18	78								
04:45	2	60	201	1	4	21	75	3	6	81	276			
05:00	1	49		5	24	73								
05:15	1	40		10	29	69								
05:30	1	45		11	26	71								
05:45	1	51	185	19	45	13	92	20	49	64	277			
06:00	4	33		26	21	54								
06:15	6	37		41	17	54								
06:30	12	31		61	18	49								
06:45	13	22	123	65	193	13	69	78	228	35	192			
07:00	19	24		66	5	29								
07:15	16	21		102	8	29								
07:30	18	15		84	8	23								
07:45	22	75	4	64	82	334	6	27	104	409	10	91		
08:00	19	9		49	18	27								
08:15	15	5		65	9	14								
08:30	18	5		33	10	15								
08:45	13	65	10	29	40	187	4	41	53	252	14	70		
09:00	17	7		25	7	14								
09:15	19	5		27	3	8								
09:30	15	6		24	8	14								
09:45	18	69	5	23	16	92	4	22	34	161	9	45		
10:00	11	1		22	6	7								
10:15	12	5		19	2	7								
10:30	11	2		15	2	4								
10:45	20	54	3	11	19	75	4	14	39	129	7	25		
11:00	10	3		15	3	6								
11:15	13	2		13	1	3								
11:30	11	3		17	0	3								
11:45	15	49	2	10	11	56	0	4	26	105	2	14		
Total	357	1021	996	617	1353	1638								
Percent	26.4%	62.3%	73.6%	37.7%										
Day Total		1378		1613		2991								
Peak	07:00	-	04:30	-	07:00	-	04:45	-	07:00	-	04:30	-	-	-
Vol.	75	-	209	-	334	-	100	-	409	-	301	-	-	-
P.H.F.	0.852		0.871		0.819		0.862		0.867		0.929			



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Seekonk Street
@ #141 Seekonk Street
City, State: Norfolk, MA
Client: WSP/ J. Conley

165400 A Volume
Site Code:

Start Time	SB		NB		Combin ed		12/1/2016 Thu						
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.							
12:00	3	9	0	26	3	35							
12:15	1	13	0	17	1	30							
12:30	1	11	0	17	1	28							
12:45	1	6	12	45	1	14	74	7	26	119			
01:00	1	17	0	13	1	30							
01:15	0	9	2	18	2	27							
01:30	0	11	2	22	2	33							
01:45	0	1	14	51	0	4	18	71	0	5	32	122	
02:00	0	19	0	12	0	31							
02:15	1	28	1	24	2	52							
02:30	0	27	0	23	0	50							
02:45	0	1	35	109	0	1	24	83	0	2	59	192	
03:00	0	28	0	20	0	48							
03:15	0	28	0	28	0	56							
03:30	0	44	0	14	0	58							
03:45	0	0	49	149	2	2	20	82	2	2	69	231	
04:00	1	42	4	18	5	60							
04:15	0	37	0	11	0	48							
04:30	1	39	2	20	3	59							
04:45	2	4	47	165	1	7	9	58	3	11	56	223	
05:00	1	51	4	30	5	81							
05:15	0	55	13	26	13	81							
05:30	1	58	9	17	10	75							
05:45	2	4	36	200	11	37	14	87	13	41	50	287	
06:00	1	40	27	18	28	58							
06:15	8	23	53	19	61	42							
06:30	8	33	50	14	58	47							
06:45	13	30	34	130	65	195	17	68	78	225	51	198	
07:00	22	26	80	21	102	47							
07:15	18	15	104	16	122	31							
07:30	17	23	90	19	107	42							
07:45	21	78	19	83	71	345	14	70	92	423	33	153	
08:00	13	10	73	21	86	31							
08:15	18	9	69	17	87	26							
08:30	18	12	54	9	72	21							
08:45	26	75	13	44	43	239	5	52	69	314	18	96	
09:00	7	11	33	16	40	27							
09:15	16	6	23	10	39	16							
09:30	11	7	25	3	36	10							
09:45	15	49	5	29	13	94	2	31	28	143	7	60	
10:00	10	3	14	3	24	6							
10:15	12	3	14	1	26	4							
10:30	14	2	17	5	31	7							
10:45	19	55	3	11	13	58	1	10	32	113	4	21	
11:00	10	2	9	2	19	4							
11:15	19	3	20	1	39	4							
11:30	16	2	11	0	27	2							
11:45	23	68	3	10	16	56	1	4	39	124	4	14	
Total	371	1026	1039	690	1410	1716							
Percent	26.3%	59.8%	73.7%	40.2%									
Day Total		1397		1729		3126							
Peak	07:00	-	04:45	-	07:00	-	02:30	-	07:00	-	04:45	-	-
Vol.	78	-	211	-	345	-	95	-	423	-	293	-	-
P.H.F.	0.886		0.909		0.829		0.848		0.867		0.904		



APPENDIX B: TRIP GENERATION DATA AND TURNING MOVEMENT COUNT VOLUMES

TRIP GENERATION WORKSHEET

x= 84 Dwelling Units

LUC: Single-Family Detached Housing (210)

WEEKDAY

Average Rate = 9.44
 Total Trips = 792.96

Fitted Curve Equation = $\text{Ln}(T) = 0.92 * \text{Ln}(X) + 2.71$
 Total Trips = 885.68

AM PEAK HOUR of ADJACENT STREET

Average Rate = 0.74
 Total Trips = 62.16
 25% of Trips In = 16
 75% of Trips Out = 47

Fitted Curve Equation = $T = 0.71 * X + 4.80$
 Total Trips = 64.44
 25% of Trips In = 16
 75% of Trips Out = 48

PM PEAK HOUR of ADJACENT STREET

Average Rate = 0.99
 Total Trips = 83.16
 63% of Trips In = 52
 37% of Trips Out = 31

Fitted Curve Equation = $\text{Ln}(T) = 0.96 * \text{Ln}(X) + 0.20$
 Total Trips = 85.93
 63% of Trips In = 54
 37% of Trips Out = 32

AM PEAK HOUR of GENERATOR

Average Rate = 0.76
 Total Trips = 63.84
 26% of Trips In = 17
 74% of Trips Out = 47

Fitted Curve Equation = $\text{Ln}(T) = 0.91 * \text{Ln}(X) + 0.20$
 Total Trips = 68.86
 26% of Trips In = 18
 74% of Trips Out = 51

PM PEAK HOUR of GENERATOR

Average Rate = 1.00
 Total Trips = 84.00
 64% of Trips In = 54
 36% of Trips Out = 30

Fitted Curve Equation = $\text{Ln}(T) = 0.94 * \text{Ln}(X) + 0.34$
 Total Trips = 90.47
 64% of Trips In = 58
 36% of Trips Out = 33

SATURDAY

Average Rate = 9.54
 Total Trips = 801.36

Fitted Curve Equation = $\text{Ln}(T) = 0.94 * \text{Ln}(X) + 2.56$
 Total Trips = 832.95

PEAK HOUR of GENERATOR

Average Rate = 0.93
 Total Trips = 78.12
 54% of Trips In = 42
 46% of Trips Out = 36

Fitted Curve Equation = $T = 0.84 (X) + 17.99$
 Total Trips = 88.55
 54% of Trips In = 48
 46% of Trips Out = 41

SUNDAY

Average Rate = 8.55
 Total Trips = 718.2

Fitted Curve Equation = $T = 8.87 (X) - 65.12$
 Total Trips = 679.96

PEAK HOUR of GENERATOR

Average Rate = 0.85
 Total Trips = 71.4
 53% of Trips In = 38
 47% of Trips Out = 34

Fitted Curve Equation = $T = 0.79 (X) + 11.02$
 Total Trips = 77.38
 53% of Trips In = 41
 47% of Trips Out = 36

ITE TRIP GENERATION

10TH EDITION



Weekday AM Peak Hour

Nov/Dec Seasonal Adjustment 3 to 7 percent lower
 December Seasonal Adjustment avg. 5% 1.05

Growth Factor 1.01
 Total Growth 1.03 1.07 In 16
 (2016-2019) (2019-2026) Out 47
 Total 63

Seekonk Street @ Driveway	Raw Counts	2016 Historic	2019 Existing	Trips	2026 No Build	2026 Build	2026 Build +10%*
EB L		0	0		0	0	
EB T		0	0		0	0	
EB R		0	0		0	0	
WB L		0	0	12	12	13	14
WB T		0	0		0	0	
WB R		0	0	35	35	38	41
NB L		0	0		0	0	
NB T	340	357	368		368	394	433
NB R		0	0	4	4	4	5
SB L		0	0	12	12	13	15
SB T	80	84	87		87	93	102
SB R		0	0		0	0	

* Volumes adjusted upward by 10% to account for additional growth not captured since 2016 counts

Seekonk Street @ Cleveland Street	Raw Counts	2016 Historic	2019 Existing	Trips	2026 No Build	2024 Build**	2026 Build*
EB L		186	192			218	240
EB T							
EB R		3				3	5
WB L							
WB T							
WB R							
NB L		1	1			0	5
NB T		279	287			301	470^
NB R							
SB L							
SB T		67	69			72	80
SB R		27	28			32	35

* Volumes adjusted upward by 10% to account for additional growth not captured since 2016 counts

** Volumes from 2024 Enclave Study (performed by others)

^ Increased volume significantly based on 2016 count data at 144 Seekonk Street Driveway, subsequent growth, and trip generation

Seekonk Street @ Fruit Street	Raw Counts	2016 Historic	2019 Existing	Trips	2026 No Build	2024 Build**	2026 Build*
EB L		30	31		42		42
EB T							
EB R		25	26		24		24
WB L							
WB T							
WB R							
NB L		12	12		19		19
NB T		320	320		391		395
NB R							
SB L							
SB T		80	82		96		110
SB R		10	10		6		6

Weekday PM Peak Hour

Nov/Dec Seasonal Adjustment 3 to 7 percent lower
 December Seasonal Adjustment avg. 5% 1.05

Growth Factor 1.01
 Total Growth 1.03 1.07 In 52
 (2016-2019) (2019-2026) Out 31
 Total 83

Seekonk Street @ Driveway	Raw Counts	2016 Historic	2019 Existing	Trips	2026 No Build	2026 Build	2026 Build +10%*
EB L		0	0			0	
EB T		0	0			0	
EB R		0	0			0	
WB L		0	0	8		9	10
WB T		0	0			0	
WB R		0	0	23		25	27
NB L		0	0			0	
NB T	90	95	98			105	116
NB R		0	0	13		14	15
SB L		0	0	39		42	45
SB T	210	221	228			244	268
SB R		0	0			0	

* Volumes adjusted upward by 10% to account for additional growth not captured since 2016 counts

Seekonk Street @ Cleveland Street	Raw Counts	2016 Historic	2019 Existing	Trips	2026 No Build	2024 Build**	2026 Build* +10%
EB L		36	37		55	47	55
EB T							
EB R		0	0		5	0	5
WB L							
WB T							
WB R							
NB L		1	1		5	1	5
NB T		81	83		111	88	140^
NB R							
SB L							
SB T		196	202			212	233
SB R		127	131			152	167

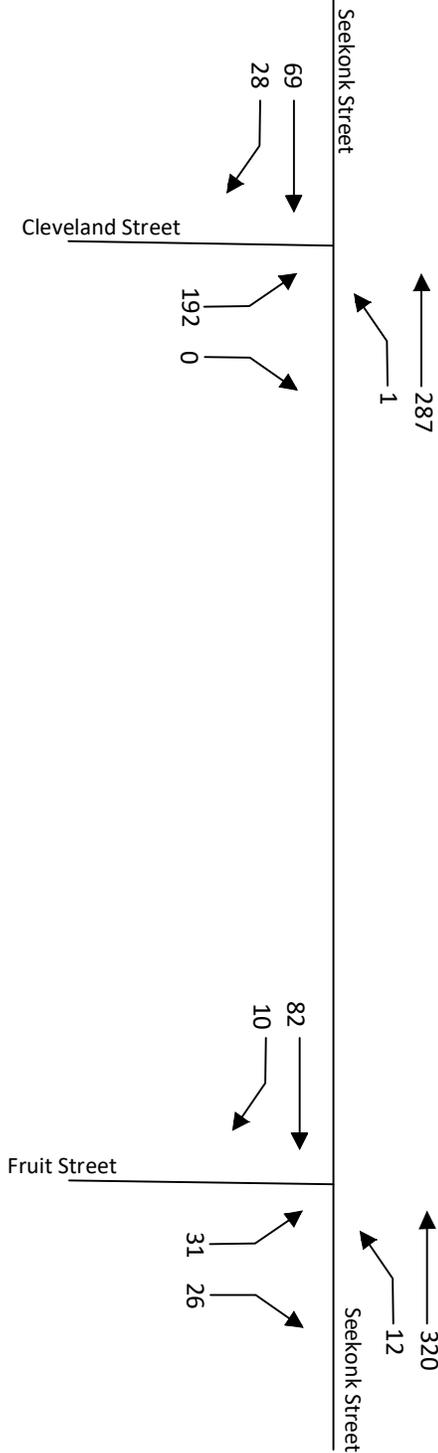
* Volumes adjusted upward by 10% to account for additional growth not captured since 2016 counts

** Volumes from 2024 Enclave Study (performed by others)

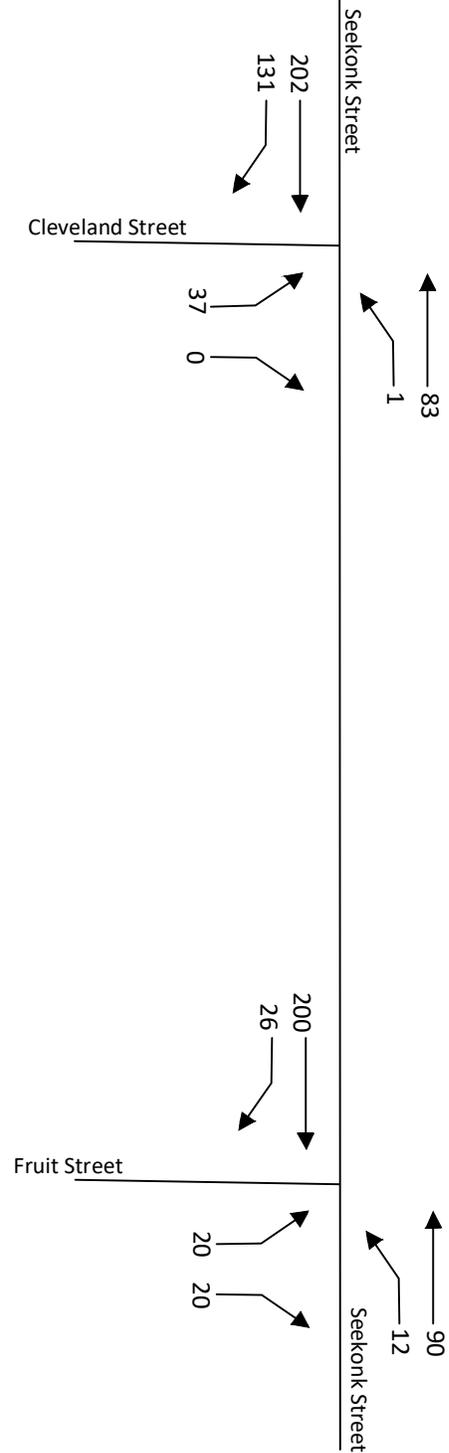
^ Increased volume significantly based on 2016 count data at 144 Seekonk Street Driveway, subsequent growth, and trip generation

Seekonk Street @ Fruit Street	Raw Counts	2016 Historic	2019 Existing	Trips	2026 No Build	2026 Build*
EB L		19	20		23	23
EB T						
EB R		19	20		23	23
WB L						
WB T						
WB R						
NB L		12	12		14	14
NB T		90	90		93	108
NB R						
SB L						
SB T		200	200		238	248
SB R		25	26		30	30

AM PEAK



PM PEAK



DRAWN BY A. DALLY

CHECKED BY P. CHERRY

APPROVED BY P. CHERRY

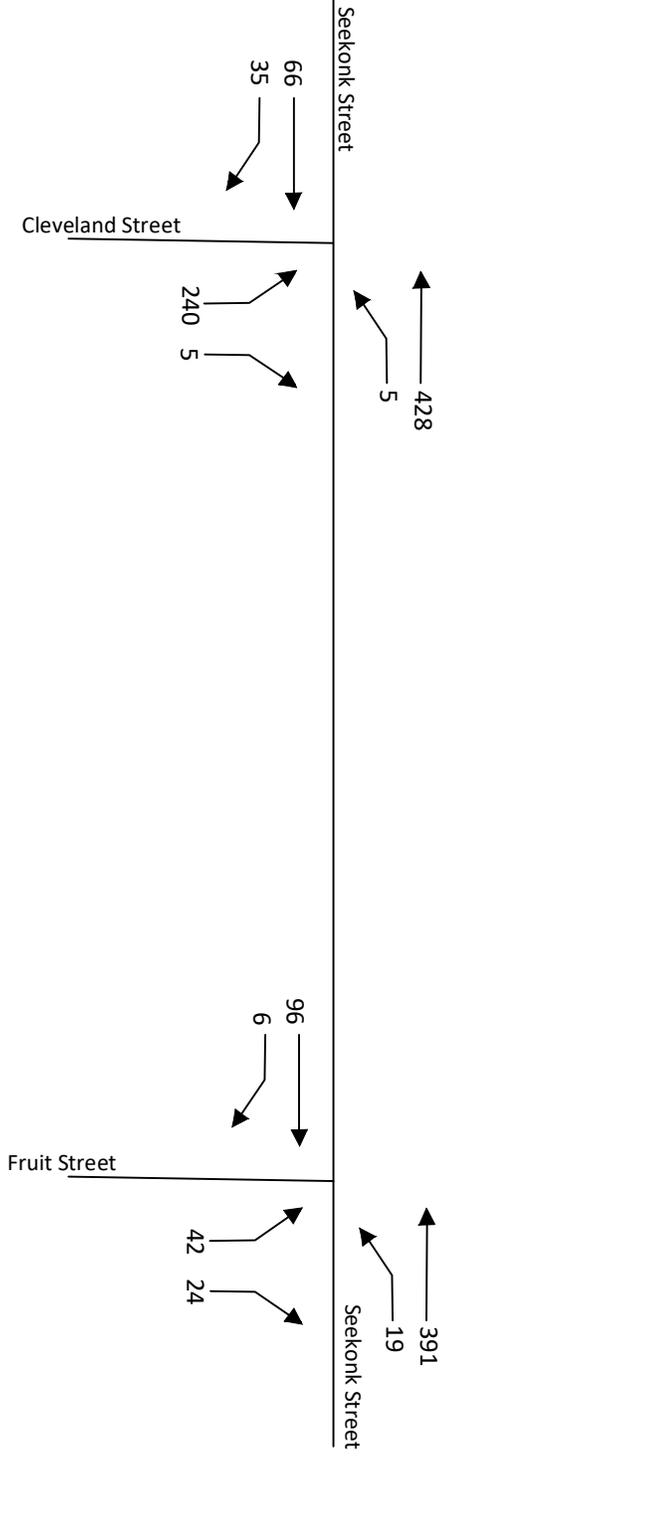
144 SEEKONK STREET
2016 EXISTING VOLUMES
NORFOLK

SCALE: NOT TO SCALE

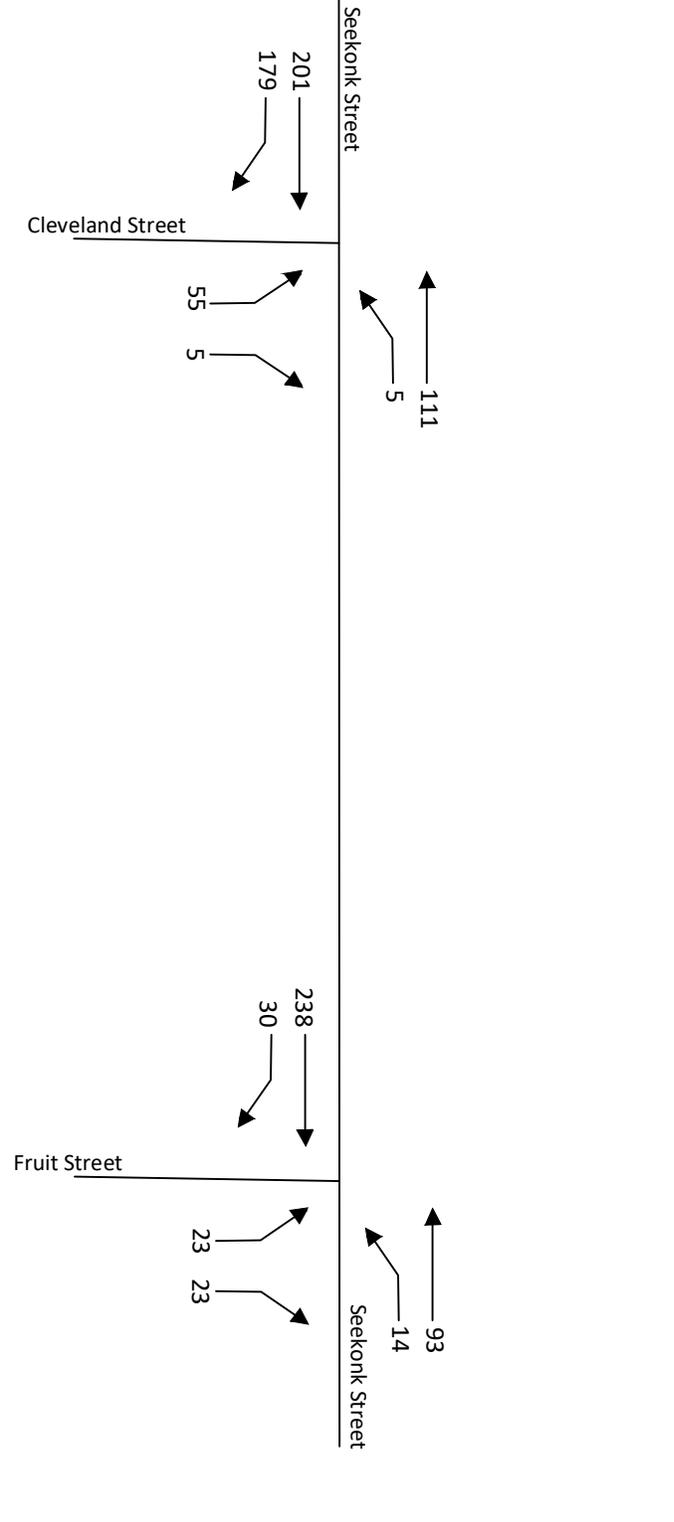
DISTRICT: 5

DATE: OCT 2019

AM PEAK



PM PEAK



DRAWN BY A. DALLY

CHECKED BY P. CHERRY

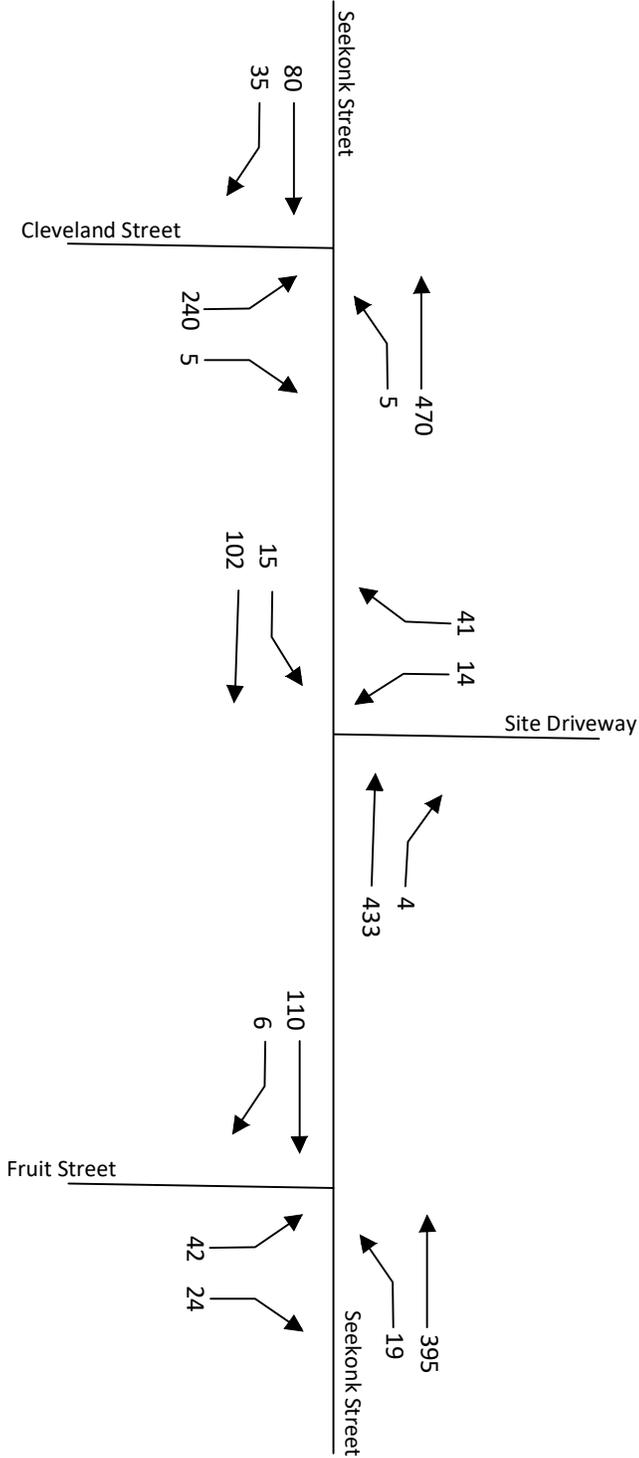
APPROVED BY P. CHERRY

144 SEEKONK STREET
 2026 NO BUILD VOLUMES
 NORFOLK

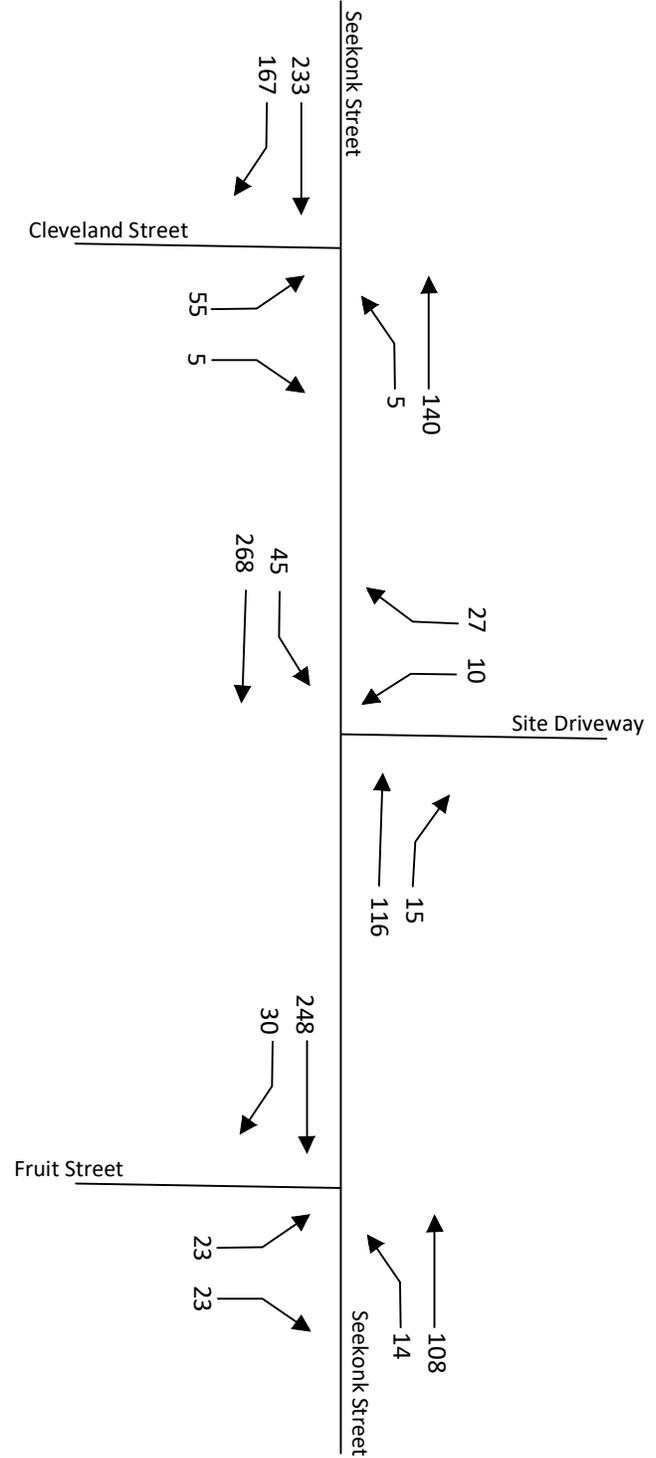
SCALE: NOT TO SCALE
 DISTRICT: 5
 DATE: OCT 2019



AM PEAK



PM PEAK



DRAWN BY A. DALLY
 CHECKED BY P. CHERRY
 APPROVED BY P. CHERRY

144 SEEKONK STREET
 2026 BUILD VOLUMES
 NORFOLK

SCALE: NOT TO SCALE
 DISTRICT: 5
 DATE: OCT 2019





APPENDIX C: STOPPING SIGHT AND INTERSECTION SIGHT TRIANGLE FIGURES

LEGEND

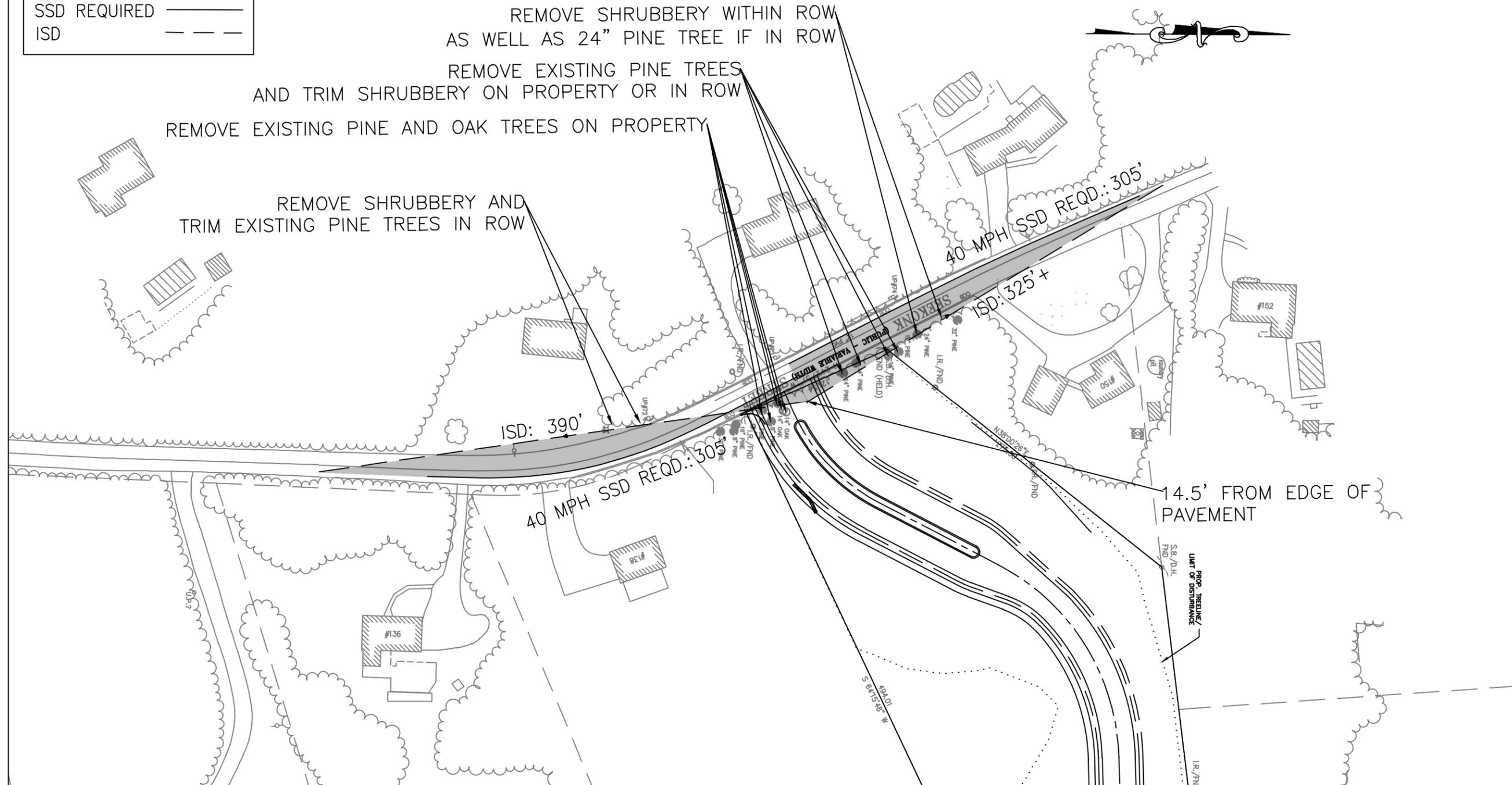
- SSD AVAILABLE -----
- SSD REQUIRED _____
- ISD - - - - -

REMOVE SHRUBBERY WITHIN ROW
AS WELL AS 24" PINE TREE IF IN ROW

REMOVE EXISTING PINE TREES
AND TRIM SHRUBBERY ON PROPERTY OR IN ROW

REMOVE EXISTING PINE AND OAK TREES ON PROPERTY

REMOVE SHRUBBERY AND
TRIM EXISTING PINE TREES IN ROW



SURVEY BY ANDREWS SURVEYING & ENGINEERING

DRAWN BY A. DALLY

CHECKED BY P. CHERRY

APPROVED BY P. CHERRY

144 SEEKONK STREET
INTERSECTION SIGHT DISTANCE
NORFOLK

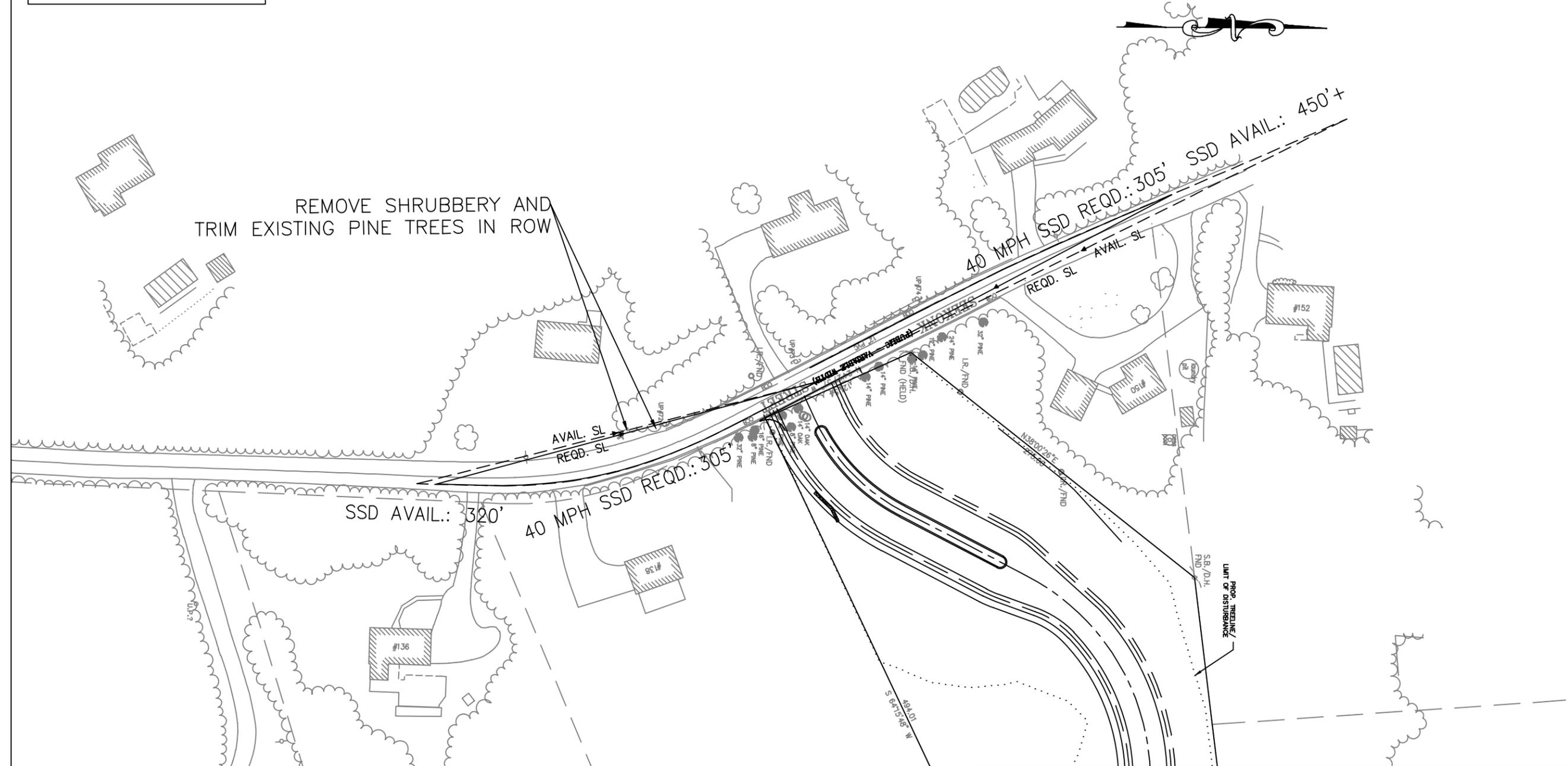
SCALE: AS NOTED
DISTRICT: 5

DATE: OCT 2019

LEGEND	
SSD AVAILABLE	-----
SSD REQUIRED	—————
ISD	- - - - -



REMOVE SHRUBBERY AND TRIM EXISTING PINE TREES IN ROW



SURVEY BY	ANDREWS SURVEYING & ENGINEERING
DRAWN BY	A. DALLY
CHECKED BY	P. CHERRY
APPROVED BY	P. CHERRY

144 SEEKONK STREET
STOPPING SIGHT DISTANCE
NORFOLK

SCALE: AS NOTED
DISTRICT: 5
DATE: OCT 2019



APPENDIX D: SYNCHRO REPORTS

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			TT	TT	
Traffic Vol, veh/h	186	0	1	279	67	27
Future Vol, veh/h	186	0	1	279	67	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	208	0	1	312	75	30

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	404	90	105	0	0
Stage 1	90	-	-	-	-
Stage 2	314	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	603	968	1486	-	-
Stage 1	934	-	-	-	-
Stage 2	741	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	602	968	1486	-	-
Mov Cap-2 Maneuver	602	-	-	-	-
Stage 1	933	-	-	-	-
Stage 2	741	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	602	-	-
HCM Lane V/C Ratio	0.001	-	0.346	-	-
HCM Control Delay (s)	7.4	0	14.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.5	-	-

Intersection

Int Delay, s/veh 1.5

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	12	320	80	10	30	25
Future Vol, veh/h	12	320	80	10	30	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	348	90	11	34	28

Major/Minor

	Major1	Major2	Minor2		
Conflicting Flow All	101	0	0	470	96
Stage 1	-	-	-	96	-
Stage 2	-	-	-	374	-
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	1491	-	-	552	960
Stage 1	-	-	-	928	-
Stage 2	-	-	-	696	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1491	-	-	546	960
Mov Cap-2 Maneuver	-	-	-	546	-
Stage 1	-	-	-	918	-
Stage 2	-	-	-	696	-

Approach

	NB	SB	SE
HCM Control Delay, s	0.3	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt

	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1491	-	679	-	-
HCM Lane V/C Ratio	0.009	-	0.091	-	-
HCM Control Delay (s)	7.4	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	36	0	1	81	196	127
Future Vol, veh/h	36	0	1	81	196	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	0	1	91	219	142

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	383	290	361	0	-	0
Stage 1	290	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	620	749	1198	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	931	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	619	749	1198	-	-	-
Mov Cap-2 Maneuver	619	-	-	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1198	-	619	-	-
HCM Lane V/C Ratio	0.001	-	0.065	-	-
HCM Control Delay (s)	8	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection

Int Delay, s/veh 1.4

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	10	90	200	10	19	19
Future Vol, veh/h	10	90	200	10	19	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	98	217	11	21	21

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	228	0	-	0	343
Stage 1	-	-	-	-	223
Stage 2	-	-	-	-	120
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1340	-	-	-	653
Stage 1	-	-	-	-	814
Stage 2	-	-	-	-	905
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1340	-	-	-	647
Mov Cap-2 Maneuver	-	-	-	-	647
Stage 1	-	-	-	-	807
Stage 2	-	-	-	-	905

Approach	NB	SB	SE
HCM Control Delay, s	0.8	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1340	-	722	-	-
HCM Lane V/C Ratio	0.008	-	0.059	-	-
HCM Control Delay (s)	7.7	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

144 Seekonk Street Development
 1: Seekonk St & Driveway

2026 No Build
 Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	405	0	0	95
Future Vol, veh/h	0	0	405	0	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	471	0	0	110

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	581	471	0	0	471	0
Stage 1	471	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	476	593	-	-	1091	-
Stage 1	628	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	476	593	-	-	1091	-
Mov Cap-2 Maneuver	476	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	915	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1091
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection						
Int Delay, s/veh	6.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	240	5	5	428	66	35
Future Vol, veh/h	240	5	5	428	66	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	261	5	5	465	72	38

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	567	91	110	0	0
Stage 1	91	-	-	-	-
Stage 2	476	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	485	967	1480	-	-
Stage 1	933	-	-	-	-
Stage 2	625	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	483	967	1480	-	-
Mov Cap-2 Maneuver	483	-	-	-	-
Stage 1	933	-	-	-	-
Stage 2	622	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.9	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1480	-	488	-	-
HCM Lane V/C Ratio	0.004	-	0.546	-	-
HCM Control Delay (s)	7.4	0	20.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	3.2	-	-

144 Seekonk Street Development
3: Seekonk St & Fruit Street

2026 No Build
Timing Plan: AM Peak

Intersection

Int Delay, s/veh 1.6

Movement NBL NBT SBT SBR SEL SER

Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	16	391	96	5	35	20
Future Vol, veh/h	16	391	96	5	35	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	425	104	7	46	26

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	111	0	-	0	575	108
Stage 1	-	-	-	-	108	-
Stage 2	-	-	-	-	467	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1479	-	-	-	480	946
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	631	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1479	-	-	-	471	946
Mov Cap-2 Maneuver	-	-	-	-	471	-
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	619	-

Approach NB SB SE

HCM Control Delay, s	0.3	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt NBL NBT SELn1 SBT SBR

Capacity (veh/h)	1479	-	576	-	-
HCM Lane V/C Ratio	0.014	-	0.125	-	-
HCM Control Delay (s)	7.5	0	12.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection

Int Delay, s/veh 1.5

Movement WBL WBR NBT NBR SBL SBT

Lane Configurations	W	W	N	N	S	S
Traffic Vol, veh/h	9	25	108	14	42	250
Future Vol, veh/h	9	25	108	14	42	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	29	126	16	49	291

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	523	134	0	0	142	0
Stage 1	134	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	514	915	-	-	1441	-
Stage 1	892	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	493	915	-	-	1441	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	657	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s	10.1	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt NBT NBRWBLn1 SBL SBT

Capacity (veh/h)	-	-	746	1441	-
HCM Lane V/C Ratio	-	-	0.053	0.034	-
HCM Control Delay (s)	-	-	10.1	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	55	5	5	140	233	167
Future Vol, veh/h	55	5	5	140	233	167
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	5	5	152	253	182

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	506	344	435	0	-	0
Stage 1	344	-	-	-	-	-
Stage 2	162	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	526	699	1125	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	867	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	523	699	1125	-	-	-
Mov Cap-2 Maneuver	523	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	867	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1125	-	534	-	-
HCM Lane V/C Ratio	0.005	-	0.122	-	-
HCM Control Delay (s)	8.2	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection

Int Delay, s/veh 1.4

Movement NBL NBT SBT SBR SEL SER

Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	12	108	248	25	19	19
Future Vol, veh/h	12	108	248	25	19	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	117	270	33	25	25

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	303	0	-	0	436	287
Stage 1	-	-	-	-	287	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1258	-	-	-	578	752
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1258	-	-	-	570	752
Mov Cap-2 Maneuver		-	-	-	570	-
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	879	-

Approach NB SB SE

HCM Control Delay, s	0.9	0	11
HCM LOS			B

Minor Lane/Major Mvmt NBL NBT SELn1 SBT SBR

Capacity (veh/h)	1258	-	648	-	-
HCM Lane V/C Ratio	0.012	-	0.076	-	-
HCM Control Delay (s)	7.9	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

144 Seekonk Street Development
1: Seekonk St & Driveway

2026 Build
AM Peak

Intersection

Int Delay, s/veh 1.3

Movement WBL WBR NBT NBR SBL SBT

Lane Configurations						
Traffic Vol, veh/h	13	38	405	4	14	95
Future Vol, veh/h	13	38	405	4	14	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	44	471	5	16	110

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	616	473	0	0	476	0
Stage 1	473	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	454	591	-	-	1086	-
Stage 1	627	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	447	591	-	-	1086	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	627	-	-	-	-	-
Stage 2	870	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s	12.4	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt NBT NBRWBLn1 SBL SBT

Capacity (veh/h)	-	-	546	1086	-
HCM Lane V/C Ratio	-	-	0.109	0.015	-
HCM Control Delay (s)	-	-	12.4	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection						
Int Delay, s/veh	7.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	240	5	5	470	80	35
Future Vol, veh/h	240	5	5	470	80	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	261	5	5	511	87	38

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	628	106	125	0	0
Stage 1	106	-	-	-	-
Stage 2	522	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	447	948	1462	-	-
Stage 1	918	-	-	-	-
Stage 2	595	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	445	948	1462	-	-
Mov Cap-2 Maneuver	445	-	-	-	-
Stage 1	918	-	-	-	-
Stage 2	592	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.9	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1462	-	450	-	-
HCM Lane V/C Ratio	0.004	-	0.592	-	-
HCM Control Delay (s)	7.5	0	23.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	3.7	-	-

Intersection

Int Delay, s/veh 1.6

Movement NBL NBT SBT SBR SEL SER

Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	16	395	110	5	35	20
Future Vol, veh/h	16	395	110	5	35	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	429	120	7	46	26

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	126	0	-	0	594	123
Stage 1	-	-	-	-	123	-
Stage 2	-	-	-	-	471	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1460	-	-	-	468	928
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	628	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1460	-	-	-	459	928
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	616	-

Approach NB SB SE

HCM Control Delay, s	0.3	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt NBL NBT SELn1 SBT SBR

Capacity (veh/h)	1460	-	562	-	-
HCM Lane V/C Ratio	0.014	-	0.128	-	-
HCM Control Delay (s)	7.5	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection

Int Delay, s/veh 1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	25	108	14	42	250
Future Vol, veh/h	9	25	108	14	42	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	29	126	16	49	291

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	522	134	0
Stage 1	134	-	-
Stage 2	388	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	515	915	-
Stage 1	892	-	-
Stage 2	686	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	494	915	-
Mov Cap-2 Maneuver	494	-	-
Stage 1	892	-	-
Stage 2	658	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	747	1441
HCM Lane V/C Ratio	-	-	0.053	0.034
HCM Control Delay (s)	-	-	10.1	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	55	5	5	140	233	167
Future Vol, veh/h	55	5	5	140	233	167
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	5	5	152	253	182

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	507	344	435	0	-	0
Stage 1	344	-	-	-	-	-
Stage 2	163	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	525	699	1125	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	522	699	1125	-	-	-
Mov Cap-2 Maneuver	522	-	-	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	862	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1125	-	533	-	-
HCM Lane V/C Ratio	0.005	-	0.122	-	-
HCM Control Delay (s)	8.2	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection

Int Delay, s/veh 1.4

Movement NBL NBT SBT SBR SEL SER

Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	12	108	248	25	19	19
Future Vol, veh/h	12	108	248	25	19	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	117	270	33	25	25

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	302	0	-	0	435	286
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1259	-	-	-	578	753
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1259	-	-	-	570	753
Mov Cap-2 Maneuver	-	-	-	-	570	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	867	-

Approach NB SB SE

HCM Control Delay, s	0.9	0	11
HCM LOS			B

Minor Lane/Major Mvmt NBL NBT SELn1 SBT SBR

Capacity (veh/h)	1259	-	649	-	-
HCM Lane V/C Ratio	0.012	-	0.076	-	-
HCM Control Delay (s)	7.9	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-