Section 5.0 Traffic Information



10.0 TRANSPORTATION

MDM Transportation Consultants, Inc. (MDM) has prepared an evaluation of transportation impacts for the proposed evaluation for the expansion of the existing Exelon Generating Station to be located adjacent to the existing station located at 9 Summer Street (Route 126) Medway, Massachusetts. Specifically, the evaluation (a) documented existing traffic conditions along major roadways providing access to the site; (b) estimated traffic generation characteristics of the Proposed Project under peak operating conditions and during peak construction; (c) provided a qualitative assessment of traffic impacts relative to existing conditions; and (d) identified access improvements and on-site circulation/traffic management improvements, and a construction traffic management plan that supports the proposed operational needs of the Proposed Project while minimizing impact to adjacent roadways.

As demonstrated in the sections below, key findings of the traffic impact assessment are as follows with the technical data included in Attachment G:

- *Baseline Traffic Characteristics.* Summer Street in the immediate study area carries approximately 7,885 vpd with 710 vehicles during the peak hour which represents 9% of the daily traffic volumes. West Street in the immediate study area is a low volume roadway that carries approximately 880 vehicles per day ("vpd") with up to 98 vehicles during the peak hour which represents approximately 11% of the daily traffic volumes.
- Nominal Trip Generation. Under a worst case operational scenario with <u>both</u> the existing and proposed facilities experiencing peak operating conditions, the Site would generate 8 truck trips per hour (4 entering and 4 exiting trips) and approximately 176 truck trips per day (approximately 88 entering and 88 exiting). This anticipates that six trucks per hour would be delivering fuel to both the existing station and the Proposed Project. This theoretical "worst case" operating scenario assumes that both the existing station and the Proposed Project will be operating simultaneously at 100% burn rate on all units exclusively using oil as fuel. However, these conditions have never previously been observed at the existing Summer Street site.
- Adequate Capacity. Traffic impacts from operation of the Proposed Project will be nominal, even under a hypothetical worst case operational scenario with both the existing and proposed facilities experiencing peak operating conditions. The resulting truck trips would be approximately 1 directional trip every 15 minutes under worst case operations for both the existing station and proposed Project simultaneously which would have a nominal impact to traffic operations and thus no additional roadway improvements are warranted.
- Adequate Sight Lines. The sight lines from the proposed driveway locations exceed industry standards to allow safe vehicle exits, and no additional countermeasures are warranted (other than maintenance of existing conditions.)

- *Established Truck Routes.* Truck trips associated with replenishment of fuel supplies (oil) at the site will originate from Providence, RI. As a result, trucks destined to/from the Project will solely use I-495 to/ from the south and Route 126 to/from the west. These roadways are well established commercial truck routes, and provide the most direct and efficient means of travel to the Site.
- *Adequate On-Site Circulation.* Several on-site improvements were identified and incorporated into the site plan set in order to improve both site access/egress and on-site traffic circulation.
- Construction Activity. The preferred parking area for construction workers is at an existing material lay-down-lot in the southern portion of the Site along West Street. This preferred parking area which is primarily grass will be re-enforced with gravel, stone, or similar material during the construction period to facilitate construction employee parking. Upon completion of the construction, the material lay-down-lot will be restored with loam and seed. No additional improvements are needed for any of the construction entrances. Construction traffic would be adequately accommodated at all study intersections ("LOS D" or better operations are expected) during peak traffic hours. In practice, actual construction traffic will occur during off-peak hours, and impacts will therefore be considerably lower than analyzed.

In summary, the study found that there will be adequate capacity along Summer Street and at the study intersections to accommodate the Project. Incremental traffic increases at the study intersections due to the Project generally result in inconsequential changes in intersection operations compared to No-Build conditions. Therefore, no additional off-site roadway improvements are warranted to accommodate the Project. Recommended access improvements, on-site circulation/traffic management improvements, and a construction traffic management plan will support the proposed operational needs of the Project while minimizing on-site and adjacent roadway impacts. American Association of State Highway and Transportation Officials' ("AASHTO") criteria for stopping sight distance and intersections with Summer Street and West Street.

10.1 Project Description

The existing Exelon station contains a 135-megawatt (MW) power station on +/- 65 acres land using six (6) combustion turbine units located at the 9 Summer Street in Medway, Massachusetts. Currently, Exelon has approximately twelve (12) workers at the Site between the hours of 7:00 am and 3:00 pm and two (2) employees between the hours of 3:00 pm and 11:00 pm. The Site in relation to the regional transportation system is shown in Figure 10-1.



The proposed expansion will include an adjacent 200-megawatt (MW) power station that consists of 2 dual-fuel generating units with oil backup. The Project will primarily use natural gas fuel to generate power which would be piped to the Site via a natural gas pipeline. As a backup fuel, the Project will also use ULSD which would be stored in an onsite 1,000,000 gallon storage tank. The fuel oil will be trucked to the Site to replenish the storage tank using 9,000 gallon fuel trucks via established commercial truck routes including I-495 and Route 126. In addition to these trips, occasional truck trips (several per week) may be generated to remove wastewater and replace demineralized water trailers. Water will be delivered to the Project via pipeline which will be used for emissions reduction purposes. Water demand is estimate to be used at a rate of 47,500 gallons per day with two on-site water storage tanks planned with a combined capacity of 950,000 gallons of water storage.

The existing station will continue to operate as a peaking station with an expanded capacity to generate 335 MW. The Project will accept fuel deliveries 22 hours per day with no fuel deliveries during the roadway peak hours, with the bulk of the deliveries on weekdays from 7:00 am to 3:00 pm. Projected on-site employment for the proposed Project is 6 additional employees, generally working the 7:00 am to 3:00 pm shift. The proposed shifts are designed to avoid peak traffic periods on area roadways with employees generally arriving prior to 7:00 am and exiting prior to 4:00 pm. A conceptual site plan prepared by HDR, Inc. is shown in Figure 10-2 for reference purposes.

10.2 Baseline Conditions

An overview of baseline roadway conditions, traffic volumes, safety characteristics, and public transportation facilities serving the area is provided below.

10.2.1 Study Area

In brief, the traffic study evaluated area roadways likely to sustain a measurable impact from the Project, which included the following primary study intersections:

- Route 109 at Route 126 (Signalized);
- Route 126 at Exelon Site Driveway (Unsignalized); and
- Route 126 at Main Street (Unsignalized).

Study locations which are likely to sustain a measurable impact from the Project during construction periods include the primary study intersections as well as the following supplemental study intersections:

- Route 126 at West Street (Unsignalized);
- Route 109 at West Street (Unsignalized); and



Medway, Massachusetts

Site Plan Source: HDR, Inc.



Figure 10-2 Preliminary Site Layout • West Street at Proposed Construction Driveway (Unsignalized).

Details are presented in the sections below with the study intersection shown in Figure 10-1.

10.2.2 Roadways

Summer Street (Route 126)

Summer Street is classified by the Massachusetts Department of Transportation (MassDOT) as an urban principal arterial under local (Town) jurisdiction within the study area. Summer Street is a north-south roadway connecting Washington Street (Routes 16/126) to the north with Main Street (Route 126) to the south. The roadway generally provides a single travel lane in each direction with additional turn lanes provided at its major intersections. Near the project Site, a bituminous sidewalk is provided along the western side of the roadway. Within the study area, the posted (regulatory) speed limit along Summer Street is 40 miles per hour (mph). Land uses along Summer Street include a mix of land uses including the existing Exelon Peaking station, residential uses, several restaurants, the Medway Fire Department, and the Medway High School.

Milford Street (Route 109)

Milford Street is classified by MassDOT as an urban principal arterial under local (Town) jurisdiction within the study area. Milford Street is an east-west roadway connecting Medway Road (Route 109) to the west with Highland Street (Route 109) to the east. The roadway generally provides a single travel lane in each direction with additional turn lanes provided at its major intersections. Within the immediate study area, there are limited sidewalks along Milford Street. Within the study area, the posted (regulatory) speed limit along Milford Street ranges from 35 to 40 mph. Within the immediate study area, land uses along Milford Street include residential homes with increased commercial activity near Summer Street.

Main Street

Main Street is classified by MassDOT as an urban principal arterial under local (Town) jurisdiction within the study area. Main Street is an east-west roadway connecting Hartford Avenue (Routes 126) to the west with County Street (Route 109) to the east. The roadway generally provides a single travel lane in each direction with additional turn lanes provided at its major intersections. There are no sidewalks along Main Street in the study area. Within the study area, the posted (regulatory) speed limit along Summer Street ranges from 35 to 40 mph. Within the immediate study area, land uses along Main Street primarily include residential homes.

West Street

West Street is classified by MassDOT as an urban minor arterial under local (Town) jurisdiction within the study area. West Street is a northwest-southeast roadway connecting Routes 109 to the northwest with Route 126) to the southeast. The roadway generally provides a single travel lane in each direction. Within the study area, the posted (regulatory) speed limit along West Street ranges from 25 to 30 mph. Within the immediate study area, land uses along West Street include residential homes and the existing Exelon station.

10.2.3 Traffic Volumes

Baseline Traffic Volumes – Peak of Adjacent Streets

Traffic volume data were collected at the study area intersections during the weekday morning peak period (6:00 AM–9:00 AM) and the weekday evening peak period (3:00 PM-6:00 PM) to coincide with peak traffic activity of the site and adjacent streets. Traffic data used in the evaluation was collected in September 2014 and September 2015, which represents above-average traffic conditions, based on review of Massachusetts Department of Transportation ("MassDOT") permanent count station data for the area. To provide a conservative analysis, no seasonal adjustment (i.e., reduction) of the data was made to the September traffic volume counts. The Baseline weekday morning and evening peak hour traffic volumes for the peak hours of the adjacent streets for the primary study intersections are shown in Figure 10-3 and Figure 10-4, respectively.

Baseline Traffic Volumes – Construction Periods

Traffic volume data were collected at the supplemental study intersections during the weekday morning peak period (6:00 AM – 7:00 AM) and the weekday evening peak period (3:00 PM - 4:00 PM) periods to coincide with peak traffic activity of the site's construction activity. Supplemental traffic data used in this evaluation was collected in January 2015, which represents below-average traffic conditions based on review of MassDOT permanent count station data for the area. In order to provide average-traffic conditions, a seasonal adjustment increase of 11% was made to the January traffic-volume counts. The Baseline traffic volumes for the construction arrival and departure periods (6:00 – 7:00 am and 3:00 – 4:00 pm) are shown in Figure 10-5 and Figure 10-6, respectively.

Subsequent to the data collection, the anticipated construction workday has been shifted to be from 6:00 am to 6:00 pm. As demonstrated in Section 10.3.5.3, actual traffic volumes during the revised construction arrival and departure periods will therefore be considerably lower than shown in the following sections.



Medway, Massachusetts

TRANSPORTATION CONSULTANTS, INC. MDM Planners & Engineers

Figure 10-3 2014 Baseline Conditions Weekday Morning Peak Hour Traffic Volumes



Medway, Massachusetts

Figure 10-4 2014 Baseline Conditions Weekday Evening Peak Hour Traffic Volumes



Medway, Massachusetts



Medway, Massachusetts

Figure 10-6 2014 Baseline Conditions Weekday Evening Peak Hour Traffic Volumes (Construction Period 3pm-4pm)

10.2.3.1 Baseline Site Trip Generation

Estimated trip generation for the existing Exelon use at the Property was determined based on turning movement counts conducted at the Site Driveway intersections with Summer Street in September 2014. As summarized in Table 10-1, the existing West Medway Station currently generates a nominal four vehicle trips (three entering and one exiting) during the weekday morning peak hour and four vehicle trips (one entering and three exiting) during the weekday evening peak hour.

On weekdays, the existing West Medway Station is currently staffed by approximately twelve employees between 7:00 am and 3:00 pm and by two employees between 3:00 pm and 11:00 pm. Typical arrival times for the employees working between 7:00 a.m. and 3:00 p.m. would be between 6:00 a.m. and 7:00 a.m.; and typical departure times would be between 3:00 p.m. and 4:00 p.m. Typical arrival times for the employees working between working between 3:00 p.m. and 11:00 p.m. and 11:00 p.m. All typical arrival arrival and departure times would be between 11:00 p.m. and 12:00 a.m. All typical arrival and departure periods are therefore outside the adjacent roadways' peak hours.

	Baseline Trip Rate ²				
Existing Site Trips ¹	Per Employee	Per Generator			
- 8:30 am):					
3	0.21	1.00			
<u>1</u>	0.07	0.33			
4	0.28	1.33			
5:30 pm):					
1	0.07	0.33			
<u>3</u>	0.21	<u>1.00</u>			
4	0.28	1.33			
	<i>Existing Site Trips</i> ¹ 3:30 am): 3 1 4 5:30 pm): 1 3 4	Existing Site Trips1 Baseline Per Employee 8:30 am): 3 3 0.21 1 0.07 4 0.28 5:30 pm): 1 1 0.07 3 0.21 4 0.28			

Table 10-1 Baseline Trip Generation – Exelon West Medway Station

¹Turning movement counts at the 9 Summer Street Site Driveway (inclusive of passenger cars and truck traffic) in September 2014; the existing Site includes 6-oil powered generating units and 14± total employees. ² Observed Trips per employee and per generator unit.

10.2.3.2 Daily Traffic Volumes

Daily traffic volumes were collected on Summer Street and West Street in the site vicinity using automatic traffic recorders ("ATR's") in September 2014 and September 2015 and are summarized in Table 10-2.

Table 10-2	Baseline Traffic Volume	Summary
------------	-------------------------	---------

Time Period	Daily Volume (vpd)1	Percent Daily Traffic ²	Peak Hour Volume (vph)³	Peak Flow Direction⁴	Peak Hour Directional Volume (vph)			
Summer Street north of Main Street								
Weekday Morning Peak Hour	7,885	8%	630	72% SB	451			
Weekday Evening Peak Hour	7,885	9%	710	57% NB	405			
West Street between Route 126 and Beech Street								
Weekday Morning Peak Hour	880	9%	77	62% EB	48			
Weekday Evening Peak Hour	880	11%	98	61% EB	60			

¹Two-way daily traffic expressed in vehicles per day without seasonal adjustment.

²The percent of daily traffic that occurs during the peak hour.

³Two-way peak-hour volume expressed in vehicles per hour.

 ${}^{4}EB$ = Eastbound, WB = Westbound, NB = Northbound, and SB = Southbound

As summarized in Table 10-2 above:

- Summer Street in the immediate study area carries approximately 7,885 vehicles per day ("vpd") with approximately 630 vehicles and 710 vehicles during the morning and evening peak hours respectively. The peak hour traffic volumes represent approximately 8-9% of the daily traffic volumes.
- West Street in the immediate study area carries approximately 880 vehicles per day ("vpd") with approximately 77 vehicles and 98 vehicles during the morning and evening peak hours respectively. The peak hour traffic volumes represent approximately 9-11% of the daily traffic volumes.

10.2.4 Measured Travel Speeds

Vehicle speeds were obtained for Summer Street and West Street adjacent to the site using radar recorder devices. These measured travel speeds provide a basis for determining sight line requirements at the proposed site driveway along Summer Street and proposed Construction driveway along West Street.

	Speed	Travel Speed			
Travel Direction Limit ¹		Mean ²	85 th Percentile ³		
Summer Street north of Main Stree	t				
Northbound	40	40	44		
Southbound	40	41	44		
West Street between Route 126 an	d Beech Street				
Eastbound	25	33	38		
Westbound	25	32	35		

Table 10-3 Speed Study Results

¹ Regulatory (Posted) Speed limit in miles per hour (mph)

² Arithmetic mean

 3 The speed at or below which 85 % of the vehicles are traveling

As summarized in Table 10-3 above:

- *Summer Street:* The mean (average) travel speed on Summer Street was observed to be 40 mph for the northbound direction and 41 mph in the southbound direction; the 85th percentile travel speed was observed to be 44 mph for both the northbound and southbound directions. Measured travels speeds are generally highly consistent with the regulatory speed limits along Summer Street in the site vicinity.
- West Street: The mean (average) travel speed on West Street was observed to be 33 mph for the eastbound direction and 32 mph in the westbound direction; the 85th percentile travel speed was observed to be 38 mph in the eastbound direction and 35 mph in the southbound direction. Measured travels speeds are considerable higher than the regulatory speed limits along West Street in the site vicinity.

10.2.5 Intersection Crash History

To identify crash trends and safety characteristics for primary study area intersections, crash data were obtained from MassDOT for the Town of Medway for the four-year period covering 2010 through 2013 (the most recent data currently available). A crash rate was calculated for the study intersections as shown in Table 10-4. This rate quantifies the number of crashes per million entering vehicles. MassDOT has determined the average District 3 crash rate to be 0.66 for unsignalized intersections and 0.89 for signalized intersections. This rate represents MassDOT's "average" crash experience and serves as a basis for comparing reported crash rates for the study intersections.

	INTERSEC	TION
Data Category	<i>Milford Street at Summer Street</i>	<i>Main Street at Summer Street</i>
Traffic Control	Signalized	Unsignalized
Crash Rate ²	0.30	0.27
MassDOT Dist. Avg ²	0.89	0.66
Year:		
2010	3	3
2011	1	1
2012	1	2
<u>2013</u>	<u>5</u>	<u>1</u>
Total	10	7
Type:		
Angle	2	0
Rear-End	7	6
Head-On	1	0
Single-Vehicle	0	0
Sideswipe	0	1

Table 10-4Intersection Crash Summary – 2010 Through 20131

	INTERSEC	TION
Data Category	Milford Street at Summer Street	<i>Main Street at Summer Street</i>
Severity:		
P. Damage Only	6	6
Personal Injury	4	1
Fatality	0	0
Conditions:		
Dry	8	6
Wet	2	0
Snow	0	1
Time:		
7:00 to 9:00 AM	3	1
4:00 to 6:00 PM	1	1
Rest of Day	6	5

Table 10-4 Intersection Crash Summary – 2010 Through 2013¹ (Continued)

¹ Source: MassDOT Crash Database.

²MassDOT District 3 crash rates: = 0.66 unsignalized; 0.89 signalized

As summarized in Table 10-4 above,

- Milford Street/Summer Street. Ten (10) crashes were reported for the Milford Street/ Summer Street signalized intersection – approximately 2.5 per year – resulting in a crash rate of 0.30. The majority (70%) of reported crashes at the intersection included rear-end type collisions under dry roadway conditions. Four (4) crashes occurred during the peak periods.
- Main Street/Summer Street. Seven (7) crashes were reported for the Main Street/Summer Street unsignalized intersection approximately 2 per year resulting in a crash rate of 0.27 All of the reported crashes (100%) at the intersection included rear-end/ sideswipe type collisions with the majority (86%) occurring under dry roadway conditions resulting in property damage collisions. One (1) crash occurred during the morning peak period and one (1) crash occurred during the evening peak period.
- Summer Street at Site Driveway (#9). There were no crashes reported for the site driveway (9 Summer Street) intersection with Summer Street during the study period.

In summary, based on extensive review of MassDOT crash data, the primary study intersections all experienced crash rates that are below the MassDOT District 3 averages. No additional safety countermeasures are warranted based on the review of the crash records and associated crash rates.

10.2.6 Sight Line Evaluations

An evaluation of sight lines was conducted at the proposed site driveway location along Summer Street and proposed construction site driveway along West Street to ensure that minimum recommended sight lines are available to safely exit onto Summer Street and West Street. The evaluation documented existing sight lines for vehicles as they relate to Summer Street and West Street with comparison to recommended guidelines for the regulatory speed limit and observed travel speeds.

The AASHTO standards¹ reference two types of sight distance which are relevant at the proposed site driveway intersection on Summer Street and the proposed construction driveway along West Street: stopping sight distance ("SSD") and intersection sight distance ("ISD"). Sight lines for critical vehicle movements at the proposed site driveway intersection with Summer Street and at the proposed construction site driveway along West Street were compared to minimum SSD and ISD for the regulatory and observed travel speeds in the Site vicinity.

10.2.6.1 Stopping Sight Distance

Sight distance is the length of roadway visible to the motorist to a fixed object. The minimum sight distance available on a roadway should be sufficiently long enough to enable a below-average operator, traveling at or near a regulatory speed limit, to stop safely before reaching a stationary object in its path, in this case, a vehicle exiting the site driveways onto Summer Street. The SSD criteria are defined by AASHTO based on design and operating speeds, anticipated driver behavior and vehicle performance, as well as physical roadway conditions. SSD includes the length of roadway traveled during the perception and reaction time of a driver to an object, and the distance traveled during brake application on wet level pavement. Adjustment factors are applied to account for roadway grades where applicable.

SSD was estimated in the field using AASHTO standards for driver's eye (3.5 feet) and object height equivalent to the taillight height of a passenger car (2.0 feet) for the approaches to the intersections. Table 10-5 presents a summary of the available SSD for the roadway segment approaches to the proposed driveways and AASHTO's recommended SSD for the regulatory and observed travel speeds.

¹ *A policy on Geometric Design of Highways and Streets,* American Association of State Highway and Transportation Officials (AASHTO), 2011.

Approach/	Available	/	AASHTO Recommended				
Travel Direction	Stopping Sight Distance	Regulatory Speed ^e	Average Travel Speed ⁸	85 th Percentile Travel Speed [#]			
Summer Street Ap	proaches to Proposed	Site Driveway					
Northbound	$435\pm$ Feet	80 Feet ²	n/a	n/a			
Southbound	>800 Feet	305 Feet	315 Feet	350 Feet			
West Street Appro	paches to Proposed Cor	nstruction Driveway					
Eastbound	$430\pm$ Feet	155 Feet ²	230 Feet	280 Feet			
Westbound	$530\pm$ Feet	155 Feet	220 Feet	250 Feet			

Table 10-5Stopping Sight Distance Summary

¹ Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on driver height of eye of 3.5 feet to object height of 2.0 feet and adjustments for roadway grade were applicable.

² Posted speed is 40 mph along Summer Street with NB speed based on 15 mile per hour travel speed for vehicles turning from Main Street. Posted speed along West Street is 25 mph.

³ Average Speed is 41 mph SB on Summer Street; 33 mph EB and 32 mph WB on West Street

⁴85th Percentile travel speed is 44 mph SB on Summer Street; 38 mph EB and 35 mph WB on West Street.

As summarized in the above Table 10-5, analysis results indicate that the existing available sight lines exceed AASHTO's recommended SSD criteria for both travel directions along Summer Street and West Street based on the regulatory speed limit and observed travel speeds.

10.2.6.2 Intersection Sight Distance

Clear sight lines provide sufficient sight distance for a stopped driver on a minor-road approach to depart from the intersection and enter or cross the major road. As stated under AASHTO's Intersection Sight Distance (ISD) considerations, "...*If the available sight distance for an entering ...vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to avoid collisions...To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road." AASHTO's ISD criteria are defined into several "cases". In this case the intersections are proposed to be under STOP signal control and the ISD in question relates to the ability turn left or turn right from the proposed driveways.*

Available ISD was estimated in the field using AASHTO standards for driver's eye (3.5 feet), object height (3.5 feet) and decision point (between 8 and 14.5 feet from the edge of travel way) for the northbound and southbound directions along Summer Street and eastbound and westbound directions along West Street. Table 10-6 presents a summary of the available ISD for the departure from the site driveways and AASHTO's recommended ISD for the regulatory speed limit and observed travel speeds.

Table 10-6Intersection Sight Distance Summary

		AASHT	O Minimum ¹	AASHTO Ideal ¹
Approach/ Travel Direction	Approach/ Travel		85 th Percentile Observed Speed ⁸	Regulatory Speed ^e
Summer Street Approache	s to Proposed Site D	riveway		
Looking North	>800 Feet 435 + Feet	305 Feet	350 Feet	385 Feet
West Street Approaches to	Proposed Construct	tion Driveway	in a reet	100 100
Looking East Looking West	$430 \pm$ Feet $530 \pm$ Feet	155 Feet 155 Feet	250 Feet 280 Feet	240 Feet 280 Feet

Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on driver height of eye of 3.5 feet and an object height of 3.5 feet and adjustments for roadway grade if required. Minimum value as noted represents SSD per AASHTO guidance.

² Posted speed is 40 mph along Summer Street with NB speed based on 15 mile per hour travel speed for vehicles turning from Main Street. Posted speed along West Street is 25 mph.

³ Average Speed is 41 mph SB on Summer Street; 33 mph EB and 32 mph WB on West Street

⁴ 85th Percentile travel speed is 44 mph SB on Summer Street; 38 mph EB and 35 mph WB on West Street.

The results of the ISD analysis presented in Table 10-6 indicate that the available sight lines looking north and south from the site driveway onto Summer Street and looking east and west onto West Street exceed the recommended minimum and ideal sight line requirements from AASHTO for the regulatory speed limit and observed travel speeds. MDM recommends that the sight line continue to be maintained and that any new plantings (shrubs, bushes) or physical landscape features to be located within the driveway sight lines should also be maintained at a height of 2 feet or less above the adjacent existing roadway grade to ensure unobstructed lines of sight.

10.3 Construction Conditions

The construction period will generate construction traffic, which will include both construction truck and construction employee traffic. The following is a summary of the expected impacts of construction traffic and measures to be used to reduce and potential negative impacts during the construction period.

During construction, the parking area for workers will be in an existing material lay-downlot in the southern portion of the Site along West Street as shown in Figure 10-7. This preferred parking area which is primarily grass will be re-enforced with gravel, stone, or similar material during the construction period to facilitate construction employee parking. Upon completion of the construction, the material lay-down-lot will be restored with loam and seed. No additional improvements are needed for any of the construction entrances. This is the preferred parking access area compared to the Summer Street entrance, for the following reasons:



Medway, Massachusetts

MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers Figure 10-7 Preferred Construction Parking Area

- The traffic volumes along this section of West Street are less than 75 vehicles per hour (vph) during the arrival and departure periods. In contrast the traffic volumes along Summer Street range from 550 to 649 vph during the construction worker arrival and departure periods.
- The construction driveway is proposed to be along a straight section of West Street approximately half way between Route 126 and Beech Street. The sight lines are adequate and the traffic volumes on this section of West Street during the construction arrival and departure times are nominal (less than 75 vehicles per hour).
- Trips to/from I-495 would travel fewer miles to the West Street entrance than to the Summer Street entrance (although noting that the travel miles should have a nominal impact to safety.)
- It is anticipated that the entrances into the property would be required to be manned during construction independent of construction parking location.
- ◆ As outlined in the traffic study, incremental traffic increases at the study intersections during the construction period will be adequately accommodated below-capacity with LOS D or better operations expected (the traffic study conservatively assumed 200 vehicles for 200 workers working in a single shift with an arrival period between 6:00 7:00 am, and a departure period between 3:00 4:00 pm). Subsequent to the data collection, the anticipated construction workday has been shifted to be from 6:00 am to 6:00 pm. As demonstrated in Section 10.3.5.3, actual traffic volumes during the revised construction arrival and departure periods will therefore be considerably lower than analyzed by the traffic study.

The peak construction activity is approximately 200 union workers, therefore, onsite parking along West Street will satisfy the peak construction worker demand. The preferred parking area is also proximate to an on-Site pedestrian walkway connection to the proposed construction areas. The West Street parking area currently includes primarily grass areas with access/egress directly onto West Street via the existing gated entranceway which is located approximately 300 feet east of Beech Street.

Exelon has met with the Town of Medway for preliminary discussions on a detailed Construction Traffic Management Plan which will address parking during construction. It is expected that the construction workers would utilize the West Street parking areas while construction deliveries would use the Summer Street entrance. No improvements are needed for the Summer Street entrance or West Street construction entrances. Beyond measures in a Construction Management Plan, no project related traffic mitigation is warranted for the day care center driveways along Summer Street due to the Project. Exelon will also actively manage construction deliveries and oil deliveries in accordance with the Construction Traffic Management Plan. Construction will primarily be limited to on-site activity with limited activity on adjacent roadways. The existing West Medway driveway onto Summer Street is proposed to be utilized by the Project and thus construction activity on Summer Street is anticipated to be limited. Activity on Summer Street may include the construction near the site driveway and necessary utility work. It is anticipated that traffic patterns on Summer Street will be maintained during construction and that no roadway closures or detours will be required during the construction period. Exelon will establish waiting and staging areas on-site for all material deliveries and the management of truck traffic. An analysis of construction period impacts on area roadways is provided below.

10.3.1 2021 No-Build Traffic Volume Networks – Construction Periods

To account for future traffic growth in the study area future, No-Build traffic volumes are developed by increasing the Baseline construction traffic volumes by approximately 3.6% (0.5% compounded annually over seven years). The resulting 2021 No-Build construction traffic volumes are provided in the Figure 10-8 and Figure 10-9 for morning and evening peak traffic volume, respectively.

10.3.2 Trip Generation – Peak Construction

Anticipated construction activity at the site will generate a peak of approximately 200 workers with significantly lower activity during the beginning and end of the construction period. The amount of crews and workers will vary based on the specific construction work activities, but will range up to approximately 20 to 25 crews working on site with approximately 8 to 10 workers per crew. To present a conservative (worst case) scenario, trip generation for the Project's construction impact is estimated based on a peak construction scenario and a vehicle occupancy rate of 1.0.

Table 10-7 summarizes the empirically derived trip estimates for the power generation station under a peak construction scenario of 200 workers. Results indicate that under a peak construction activity scenario, the Project is conservatively estimated to generate approximately 200 entering vehicle-trips during the weekday morning period (6:00 AM to 7:00 AM) and 200 exiting vehicle-trips during the weekday evening period (3:00 PM to 4:00 PM). These trips levels do not account for carpooling which may reduce actual vehicle demands at peak construction. Furthermore, subsequent to the data collection, the anticipated construction workday has been shifted to be from 6:00 am to 6:00 pm. As demonstrated in Section 10.3.5.3, actual traffic volumes during the weekday morning and evening periods will therefore be considerably lower than shown in Table 10-7.



Medway, Massachusetts

Figure 10-8 2021 No-Build Conditions Weekday Morning Peak Hour Traffic Volumes (Construction Period 6am-7am)



Medway, Massachusetts

Study Period/Direction	Peak Construction Vehicle-trips ¹
Morning Study Period (6:00 to 7:00 am):	
Entering	200
Exiting	<u>Negl.</u>
Total	200
Evening Study Period (5:00 to 6:00 pm):	
Entering	Negl.
Exiting	<u>200</u>
Total	200

Based on 200 construction workers with vehicle occupancy of 1.0 workers per vehicle. Analysis conservatively assumes that all workers arrive between 6:00 and 7:00 and depart between 3:00 and 4:00 pm. Since the anticipated construction workday has been shifted to be from 6:00 am to 6:00 pm, actual traffic volumes during the study periods will be considerably lower than shown.

10.3.3 Trip Distribution – Construction Periods

Primary routes to/from the site associated with construction employee related trips are will use I-495, Route 109, and Route 126. The distribution for projected traffic for the construction employees is based on Journey to Work Census data. The resulting trip distribution pattern is shown in Figure 10-10 with calculations presented in the Attachment G. It is estimated that approximately 65% of the construction worker trips will use Route I-495. An aerial view of the Site and vicinity depicting construction employee and oil delivery routes from Route I-495 are summarized in Figure 10-11.

Development-related trips for the proposed Site are assigned to the roadway network using the ITE trip-generation estimates previously shown in Table 10-7 and the distribution pattern for the construction employees. Development-related trips at each intersection approach for the weekday morning, and weekday evening construction periods are quantified in the Figure 10-12 and Figure 10-13.

10.3.4 2021 Build Traffic Volume Networks – Construction Periods

2021 Build construction period traffic volumes are derived by adding the incremental traffic increases for the Site's construction activity to the 2021 No-Build construction period traffic volumes. The 2021 Build construction period traffic-volume networks for the weekday morning and weekday evening construction periods are shown in Figure 10-14 and Figure 10-15.

10.3.5 Capacity Analysis – Construction Periods

This section provides an overview of operational analysis methodology, an assessment of intersection operations under Baseline and projected future No-Build and Build conditions for the construction periods.



Medway, Massachusetts



Medway, Massachusetts

MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers Figure 10-11 I-495 Construction Employee & Oil Delivery Routes



Medway, Massachusetts

MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers **Figure 10-12** Site Generated Trips Weekday Morning Peak Hour Traffic Volumes (Construction Period 6am-7am)



Medway, Massachusetts

Figure 10-13 Site Generated Trips Weekday Evening Peak Hour Traffic Volumes (Construction Period 3pm-4pm)



Medway, Massachusetts

Figure 10-14 2021 Build Conditions Weekday Morning Peak Hour Traffic Volumes (Construction Period 6am-7am)



Medway, Massachusetts

Figure 10-15 2021 Build Conditions Weekday Evening Peak Hour Traffic Volumes (Construction Period 3pm-4pm)

10.3.5.1 Analysis Methodology

Intersection capacity analyses are presented in this section for the Baseline, No-Build, and Build traffic-volume conditions for the construction arrival and departure periods. Capacity analyses, conducted in accordance with EEA/MassDOT guidelines, provide an index of how well the roadway facilities serve the traffic demands placed upon them. The operational results provide the basis for recommended access and roadway improvements in the following section.

Capacity analysis of intersections is developed using the Synchro[®] computer software, which implements the methods of the 2010 Highway Capacity Manual (HCM). The resulting analysis presents a LOS designation for individual intersection movements. The LOS is a letter designation that provides a qualitative measure of operating conditions based on several factors including roadway geometry, speeds, ambient traffic volumes, traffic controls, and driver characteristics. Since the LOS of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of LOS, depending on the time of day, day of week, or period of year. A range of six levels of service are defined on the basis of average delay, ranging from LOS A (the least delay) to LOS F (delays greater than 50 seconds for unsignalized movements and delays greater than 80 seconds for signalized movements).

10.3.5.2 Analysis Results – Construction Periods

LOS analyses were conducted for the Baseline, No-Build, and Build (Construction Period) conditions for the study intersections. The capacity analysis provided for the construction period has been calibrated based on observed vehicle delay characteristics for the unsignalized study intersections. The results of the intersection capacity for the construction period are summarized below for weekday morning and evening peak hours in Tables 10-8 and Table 10-9, respectively.

		2014 Baseline		2021 No-Build			2021 Build			
Period	Approach	<i>v/c</i> ¹	Delay ²	LOS ³	v/c	Delay	LOS	v/c	Delay	LOS
Summer Street at	Eastbound	0.33	9	А	0.35	9	А	0.36	9	А
Milford Street	Westbound	0.72	25	С	0.73	26	С	0.73	27	С
	Northbound	0.68	29	С	0.69	30	С	0.68	30	С
	Southbound	0.68	27	С	0.70	28	С	0.73	30	С
	Overall	0.72	22	C	0.73	23	C	0.73	24	C
Summer Street at	Northbound	0.01	< 5	А	0.01	<5	А	0.01	< 5	А
Exelon Dwy	EB L/R Exit	0.00	< 5	А	0.00	<5	А	0.00	< 5	А
Main Street at	Eastbound	0.25	< 5	А	0.25	<5	А	0.27	< 5	А
Summer Street	SB L Exit	0.03	11	В	0.03	11	В	0.03	11	В
	SB R Exit	0.10	8	А	0.11	8	А	0.13	8	А

Weekday Morning Peak Hour

Intersection Capacity Analysis Results – Construction Period

Table 10-8

Table 10-8 Intersection Capacity Analysis Results – Construction Period (Continued)

		2	014 Baselin	e	2	021 No-Bu	ild		2021 Build	
Period	Approach	<i>v/c</i> ¹	Delay ²	LOS ³	v/c	Delay	LOS	v/c	Delay	LOS
Route 126 at	Eastbound	0.00	< 5	А	0.00	< 5	А	0.00	< 5	А
West Street	SB L/R Exit	0.05	15	С	0.06	16	С	0.06	16	С
Route 109 at	Westbound	0.00	< 5	А	0.00	< 5	А	0.00	< 5	А
West Street	NB L Exit	0.20	14	В	0.21	14	В	0.22	15	В
	NB R Exit	0.03	10	А	0.03	10	А	0.03	10	А
West Street at	Eastbound	n/a4	n/a	n/a	n/a	n/a	n/a	0.00	7	А
Proposed Construction Driveway	SB I/R Exit	n/a	n/a	n/a	n/a	n/a	n/a	0.09	<5	А

Weekday Morning Peak Hour

¹Volume-to-capacity ratio

²Average control delay per vehicle (in seconds)

³Level of service

⁴Not applicable

Table 10-9 Intersection Capacity Analysis Results – Construction Period

Weekday Evening Peak Hour

		2014 Baseline		20	021 No-Bu	ild	2021 Build			
Period	Approach	V/C^1	Delay ²	LOS ³	v/c	Delay	LOS	v/c	Delay	LOS
Summer Street at	Eastbound	0.51	13	В	0.53	14	В	0.53	14	В
Milford Street	Westbound	0.69	27	С	0.70	28	С	0.70	28	С
	Northbound	0.31	20	В	0.32	20	В	0.36	20	С
	Southbound	0.74	28	<u>C</u>	0.75	<u>29</u>	<u>C</u>	0.75	29	<u>C</u>
	Overall	0.74	22	С	0.75	22	С	0.75	22	С
Current of Chront of		0.00	~ 5	٨	0.00	~ 5		0.00	~ 5	٨
Summer Street at	Northbound	0.00	< 5	A	0.00	< 5	A	0.00	< 5	A
Exelon Dwy	EB L/R Exit	0.01	13	В	0.01	13	В	0.01	13	В
Main Street at	Fastbound	0.21	< 5	А	0.22	< 5	А	0.25	< 5	А
Summer Street	SB Fxit	0.14	19	С	0.15	20	С	0.16	22	С
	SB R Exit	0.46	13	В	0.48	13	В	0.48	13	В
Route 126 at	Eastbound	0.01	< 5	А	0.01	< 5	А	0.01	< 5	А
West Street	SB L/R Exit	0.14	20	С	0.15	21	С	0.43	29	D
Route 109 at	Westbound	0.01	< 5	А	0.01	<5	А	0.01	< 5	А
West Street	NB L Exit	0.16	14	В	0.17	15	В	0.32	17	С
	NB R Exit	0.01	10	А	0.01	10	A	0.01	10	А
W/oct Streat at	E a cha ann a'	$p/2^4$	nla	nla	n/a	nla	n/a	0.00	~ 5	٨
Proposed Construction	Eastbound	n/a	n/a	n/a	n/a	n/a	n/a	0.00	10	^
Driveway	SB I/R Exit	11/d	II/d	II/d	n/a	II/d	II/d	0.09	10	Λ

¹Volume-to-capacity ratio

²Average control delay per vehicle (in seconds)

³Level of service

⁴Not applicable

As summarized in Table 10-8 and Table 10-9:

- *Summer Street at Milford Street.* The signalized Summer Street at Milford Street intersection will continue to operate below capacity at overall LOS C or better operations the peak construction period.
- Summer Street at Exelon Driveway. Under peak construction conditions, the Exelon Driveway approach to Summer Street will operate at LOS B or better operations. Mainline operations Summer Street are expected to continue to operate well below capacity at LOS A operations with minimal delay.
- Unsignalized approaches to Routes 126 and 109. Under peak construction conditions, left turns from unsignalized side streets onto Route 126 and Route 109 will continue to operate at LOS D or better operations.
- *West Street at Proposed Construction Driveway.* The proposed Construction driveway along West Street will operate well below capacity with nominal delay during the peak construction periods.

In summary, incremental traffic increases at the study intersections during the construction period will be adequately accommodated below-capacity with LOS D or better operations expected.

10.3.5.3 Construction Period – Shift Further Off-Peak

Subsequent to the data collection, the anticipated construction workday has been shifted to be from 6:00 am to 6:00 pm with construction access being via West Street. To reflect the conservative nature of the capacity results provided in the study, Table 10-10 and Table 10-11 summarize the traffic volume differences along Summer Street and West Street for the construction worker arrival period between 5:00 – 6:00 AM and departure period between 6:00 – 7:00 PM compared the time periods assumed in this traffic report.

Table 10-10 Traffic Volume Comparison – Summer Street north of Site Driveway

Time Period	Wednesday	Thursday ²	Average ³		
Morning Construction Arrival Period					
5:00-6:00 AM	225	223	224		
6:00-7:00 AM	487	442	465		
Difference⁴	-262 (-54%)	-219 (-50%)	-241 (-52%)		

Table 10-10 Traffic Volume Comparison – Summer Street north of Site Driveway (Continued)

Time Devied	Madesadard	Thursday ²	Aurom go ³
	weanesday	Thursday	Average
Evening Construction Departure 3:00-4:00 PM	Period 566	598	582
6:00-7:00 PM	<u>528</u>	<u>528</u>	<u>528</u>
Difference ⁵	-32 (-6%)	-78 (-13%)	-54 (-9%)

Collected on September 17, 2014

²Collected on September 18, 2014 ³Average volume during time period

⁴Volume Difference from 5:00-6:00 AM to 6:00-7:00 AM (as shown in the traffic report)

⁵Volume Difference from 6:00-7:00 PM to 3:00-4:00 PM (as shown in the traffic report)

Table 10-11 Traffic Volume Comparison – West Street west of Site Driveway

Time Period	Thursday	Tuesday ²	Average ³
Morning Construction Arrival Pa	riad		
5:00-6:00 AM	9	13	11
6:00-7:00 AM	<u>32</u>	<u>28</u>	<u>30</u>
Difference⁴	-23 (-72%)	-15 (-54%)	-19 (-63%)
Evening Construction Departure	Period		
3:00-4:00 PM	64	66	65
6:00-7:00 PM	<u>63</u>	<u>49</u>	<u>56</u>
Difference⁵	-1 (-2%)	-17 (-35%)	-9 (-16%)

¹Collected on September 17, 2015

²Collected on September 22, 2015

³Average volume during time period

⁴Volume Difference from 5:00-6:00 AM to 6:00-7:00 AM

⁵Volume Difference from 6:00-7:00 PM to 3:00-4:00 PM

As summarized in Table 10-10 and Table 10-11 above,

Summer Street

- The traffic volumes in the area are approximately <u>52% lower</u> during the 5:00 6:00 AM period compared to the 6:00 – 7:00 AM period shown in the traffic report.
- The traffic volumes in the area are approximately <u>9% lower</u> during the 6:00 7:00
 PM period compared to the 3:00 4:00 PM period shown in the traffic report.

West Street

- The traffic volumes in the area are approximately <u>63% lower</u> during the 5:00 6:00 AM period compared to the 6:00 – 7:00 AM period shown in the traffic report.
- The traffic volumes in the area are approximately <u>16% lower</u> during the 6:00 7:00
 PM period compared to the 3:00 4:00 PM period shown in the traffic report.

In summary, traffic volumes during the revised construction arrival and departure periods are <u>considerably lower</u> than analyzed as part of this report. Therefore, the capacity analysis result for the construction period which indicated that incremental traffic increases at the study intersections during the construction period will be adequately accommodated below-capacity with LOS D or better operations expected is conservative and no supplemental analysis is required.

10.4 Future Conditions

The traffic study included the establishment of a future baseline analysis condition to estimate future roadway and traffic conditions with and without the Project. For this evaluation, a seven-year planning horizon (year 2021) was selected consistent with industry standard guidelines. (In practice, a 2016/2017 planning period is anticipated and would result in improved conditions compared to the analysis shown.)

To determine the impact of site-generated traffic volumes on the roadway network under future conditions, baseline traffic volumes in the study area were projected to a future year condition. Traffic volumes on the roadway network at that time, in the absence of the development (that is, the No-Build condition), includes existing (baseline) traffic, new traffic due to general background traffic growth, and traffic related to specific developments by others that are currently under review at the local and/or state level. Consideration of these ``factors resulted in the development of No-Build traffic volumes. Anticipated sitegenerated traffic volumes were then superimposed upon these No-Build traffic-flow networks to develop future Build conditions.

The traffic study's findings for future No-Build traffic volumes and projected Build traffic volumes are provided below.

10.4.1 Background Growth

Background traffic includes demand generated by other planned developments in the area as well as demand increases caused by external factors. External factors are general increases in traffic not attributable to a specific development and are determined using historical data.
Nearby permanent count station data published by MassDOT indicates a negative average growth rate. For purposes of this planning evaluation, a 0.5 percent growth rate was used (3.6 percent increase over a 7-year horizon). This growth rate is slightly higher than historic rates, and as such is also expected to account for any small fluctuation in hourly traffic as may occur from time to time in the study area. MassDOT permanent count station data and background growth calculations are provided in the Attachment G.

Additionally, the peak use of the Exelon Project under a worst-case peak operating scenario, which has never occurred at the existing station, over a 24 hour period may increase traffic at the study intersection compared to baseline conditions.

For planning purposes the traffic study assumed the following:

- Maximum fuel firing rate for 135 MW generated over a 24-hour weekday period;
- Maximum oil consumption for existing units is 17,000 gallons per hour;
- Replenishment of on-site fuel oil storage up to 408,000 gallons per day;
- 2 inbound and 2 outbound fuel oil delivery truck trips per hour;
- Oil delivery loads of 9,000 gallon loads per truck;
- Maximum fuel dispensing rate of approximately 45 minutes/truck;
- 2 existing fuel dispensing stations; and
- 12 existing full-time employees (no change).

10.4.2 2021 No-Build Traffic Volume Networks

In summary, to account for future traffic growth in the study area future No-Build traffic volumes are developed by increasing the baseline (2014) volumes by approximately 3.6 percent (0.5 percent compounded annually over 7 years) as well as the addition of 2 inbound and 2 outbound fuel oil delivery trucks from the existing station as described above. The resulting 2021 No-Build traffic volumes are displayed in Figure 10-16 and Figure 10-17.

10.4.3 Trip Generation

Traffic generated by the proposed Project will be comprised of employee-related trips, truck trips associated with replenishment of oil, and service-vehicle related trips. Daily and hourly trip generation will vary from day to day based on the supplemental power generation needs of the area. To present a conservative (worst case) scenario, trip generation for the Project is estimated based on a peak operating scenario and full employment at the site.

With regard to employee parking, the area designated as existing owner parking (currently used by employees and visitors of the existing station) will continue to be parking for the existing station workers and visitors. Employees and visitors of the proposed Project will use the new spaces designated on-site with access/egress via the Summer Street driveway.



Medway, Massachusetts



Medway, Massachusetts

TRANSPORTATION CONSULTANTS, INC. MDM Planners & Engineers

Figure 10-17 2021 No-Build Conditions Weekday Evening Peak Hour Traffic Volumes

10.4.3.1 Empirical Trip Generation

Exelon currently anticipates that 4 of the new employees would work from 7:00 a.m. to 3:00 p.m. and 2 would work the 3:00 p.m. to 11:00 p.m. shift. It is possible that after construction of the proposed Project, the Project Site could be manned 24 hours per day in which case there would be two employees on an 11:00 p.m. to 7:00 a.m. shift.

Due to the rather limited number of on-site employees, "off-peak" shift times and weekdayonly operating periods for the Project indicate that daily and peak-hour trip generation for the Project will be nominal under typical operating conditions. However, potential trip activity is estimated under a worst-case operational scenario, which assumes the following conditions:

- Maximum fuel firing rate for 200 MW generated over a 24-hour weekday period;
- Maximum oil consumption for two units is 15,200 gallons per hour;
- Replenishment of on-site fuel oil storage up to 364,800 gallons per day;
- 2 inbound and 2 outbound fuel oil delivery truck trips per hour;
- Oil delivery loads of 9,000 gallon loads per truck;
- On-site oil storage capacity of 1,000,000 gallons;
- One wastewater truck per day (Actual estimate is 1± truck per week);
- Several service vehicle (vans) trips per week;
- One (1) ammonia truck per week with 8,000 gallons delivered per truck (Actual estimate is 1-2 per month);
- Maximum fuel dispensing rate of approximately 45 minutes/truck;
- 1 new fuel dispensing stations + 2 existing fuel dispensing stations; and
- 6 new full-time employees.

Table 10-12 summarizes the empirically-derived trip estimates for the proposed Project under a peak operating scenario. As summarized therein, under the peak operating scenario, the proposed Project is estimated to generate approximately 98 total daily vehicletrips, with the majority (86 trips) associated with delivery trucks (fuel oil and service trucks). Peak hour trip generation is estimated at seven vehicle-trips during a weekday morning peak hour and seven vehicle-trips during a weekday evening peak hour. For planning purposes, the expected duration of the peak operating scenario is 24 hours per day and up to 30 days per year. Peak hour trip generation by the proposed Project is estimated at 5 vehicle-trips during a weekday morning peak hour and 5 vehicle-trips during a weekday evening peak hour.

		Peak Operation Vehicle-trips	s ¹
Peak Hour/Direction	Trucks ²	Employees ³	Total
Morning Peak Hour.			
Entering	2	1	3
Exiting	<u>2</u>	<u>0</u>	<u>2</u>
Total	4	1	5
Evening Peak Hour.			
Entering	2	0	2
Exiting	<u>2</u>	<u>1</u>	<u>3</u>
Total	4	1	5
Weekday Dailv ¹	86	12	98

Table 10-12 Trip Generation Summary, Peak Site Operations

¹Assumes peak facility power generation scenario for the Proposed Project; trips associated with full employment and associated fuel replenishment to achieve peak facility power output over a 24-hour weekday period.

²Assumes a maximum fuel consumption per hour and replacement evenly distributed over a 22 hour period and service trucks.

³Based on empirical trip rates for the Site per employee for 6 additional employees.

The "peak" operating scenario differs from the average expected operational scenario in which the proposed Project would utilize natural gas which is proposed to be piped into the Project, thus resulting in no demand for oil deliveries via trucks. The trips generated by the Project (existing and proposed) under an average operational scenario would primarily be from employees consisting of approximately 40 trips per day which is nominal.

Note: Under a worst case operational scenario with <u>both</u> the existing and proposed facilities experiencing peak operating conditions, the Site would generate 7.3 truck trips per hour (3.6 entering and 3.6 exiting trips) and approximately 175.2 truck trips per day (approximately 87.6 entering and 87.6 exiting). This anticipates that six trucks per hour would be delivering fuel to both the existing station and the Proposed Project. This theoretical "worst case" operating scenario assumes that both the existing station and the proposed Project will be operating simultaneously at 100% burn rate on all units exclusively using oil as fuel. However, these conditions have never previously been observed at the existing Summer Street site.

Furthermore, even under this worst case operating scenario (existing station and Proposed Project), the impact of the proposed Project will be nominal with respect to traffic operations. The worst case scenario of 176 trucks per day would result in 8 truck trips per

hour generated by the site (4 entering and 4 exiting trips) assuming a 22-hour delivery period (excludes deliveries during the weekday morning and weekday evening peak hour as recommended by the Town). The resulting truck trips would be approximately 1 directional trip every 15 minutes under worst case operations for both the existing station and Proposed Project simultaneously which would have a nominal impact to traffic operations. Although the traffic study has determined that there would be nominal impact due to the proposed project during the roadway peak hours, Exelon is further prepared to limit deliveries to periods outside of the peak hours if recommended by the Town.

10.4.4 Trip Distribution

Primary routes to/from the site associated with employee and truck-related trips are presented below.

Site Access Routes

Employee-related trips to/from the site will use I-495, Route 109, and Route 126 consistent with existing employment at the Site by Exelon. According to the Proponent truck trips associated with replenishment of fuel supplies (oil) at the site will originate from Providence, RI. As a result, trucks destined to/from the Project will solely use Route I-495 to/ from the south and Route 126 to/from the west. These roadways are well established commercial truck routes, and provide the most direct and efficient means of travel to the Site.

The distribution for projected traffic for the employees of the proposed Project is based on existing travel patterns and volumes of the adjacent roadway system. The distribution of project truck traffic for the proposed Project was based on the nearby highway system and discussions with the project proponent. The resulting trip distribution is presented in Figure 10-18, with employee percentages shown in blue and truck percentages shown in green.

Development-related trips for the proposed Site are assigned to the roadway network using the ITE trip-generation estimates shown in Table 10-12 and the distribution patterns presented in Figure 10-18. Development-related trips at each intersection approach for the weekday morning and weekday evening peak hours are quantified in Figure 10-19 and Figure 10-20, respectively.

10.4.5 2021 Build Traffic Volume Networks

2021 Build condition traffic volumes are derived by adding the incremental traffic increases for the Site to the 2021 No-Build conditions. Figure 10-21 and Figure 10-22 present the 2021 Build condition traffic-volume networks for the weekday morning and weekday evening peak hours.





Medway, Massachusetts

TRANSPORTATION CONSULTANTS, INC. MDM Planners & Engineers

Figure 10-19 Site Generated Trips Weekday Morning Peak Hour Traffic Volumes



Medway, Massachusetts

TRANSPORTATION CONSULTANTS, INC. MDM Planners & Engineers

Figure 10-20 Site Generated Trips Weekday Evening Peak Hour Traffic Volumes



Medway, Massachusetts

MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers **Figure 10-21** 2021 Build Conditions Weekday Morning Peak Hour Traffic Volumes



Medway, Massachusetts

Figure 10-22 2021 Build Conditions Weekday Evening Peak Hour Traffic Volumes

10.4.6 Capacity Analysis Results

LOS analyses were conducted for the Baseline, No-Build, and Build conditions for the study intersections. The results of the intersection capacity are summarized below in Table 10-13 and Table 10-14.

		2	2014 Baselin	е	2	021 No Bu	ild		2021 Build	
Period	Approach	V/C^1	Delay ²	LOS ³	v/c	Delay	LOS	v/c	Delay	LOS
Summer Street at	Eastbound	0.51	12	В	0.54	12	В	0.54	12	В
Milford Street	Westbound	0.82	32	С	0.84	34	С	0.84	34	С
	Northbound	0.83	41	D	0.85	43	D	0.85	43	D
	Southbound	0.83	40	D	0.85	42	D	0.85	42	D
	Overall	0.83	31	С	0.85	32	С	0.85	32	С
Summer Street at	Northbound	0.00	< 5	А	0.00	< 5	А	0.01	< 5	А
Exelon Dwy	EB L/R Exit	0.00	11	В	0.00	11	В	0.01	11	В
Main Street at	Fastbound I	0.32	9	А	0.34	9	А	0.34	9	А
Summer Street	SB L Exit	0.28	> 50	F	0.33	> 5	F	0.33	>50	F
	SB R Exit	0.28	12	В	0.29	0 12	В	0.30	12	В

Table 10-13	Intersection Capaci	ty Analysis Results,	, Weekday Morning I	Peak Hour
-------------	---------------------	----------------------	---------------------	-----------

¹Volume-to-capacity ratio

²Average control delay per vehicle (in seconds)

³Level of service

		2	2014 Baselin	e	2	021 No Bu	ild		2021 Build	
Period	Approach	<i>v/c</i> ¹	Delay ²	LOS ³	v/c	Delay	LOS	v/c	Delay	LOS
Summer Street at	Fastbound	0.55	15	В	0.57	15	В	0.57	15	В
Milford Street	Westbound	0.80	33	С	0.82	35	С	0.82	35	С
	Northbound	0.39	23	С	0.40	24	С	0.40	24	С
	Southbound	0.86	39	D	0.88	41	D	0.88	41	D
	Overall	0.86	27	C	0.88	29	C	0.88	29	C
Summer Street at	Northbound	0.00	< 5	А	0.00	< 5	А	0.00	< 5	А
Exelon Dwy	EB L/R Exit	0.00	11	В	0.00	11	В	0.01	13	В
Main Street at	Fastbound I	0.20	9	А	0.21	10	А	0.22	10	А
Summer Street	SB Fxit	0.37	49	E	0.42	>5	F	0.42	> 50	F
	SB R Exit	0.83	38	E	0.89	0 46	E	0.89	47	E

Table 10-14 Intersection Capacity Analysis Results, Weekend Evening Peak Hour

¹Volume-to-capacity ratio

²Average control delay per vehicle (in seconds)

³Level of service

As summarized in the above Table 10-13 and Table 10-14:

• *Summer Street at Milford Street:* The signalized Summer Street at Milford Street intersection will operate below capacity at overall LOS C or better operations under future No-Build conditions during the weekday morning and weekday evening peak

hours. Under future Build conditions, the intersection will continue to operate at overall LOS C or better operations during the peak hours with only negligible increases in delay compared to No-Build conditions.

- Summer Street at Exelon Driveway: Under Build conditions, the Medway Station Driveway approach to Summer Street will operate at LOS B or better operations during the peak hours. Mainline operations Summer Street are expected to continue to operate well below capacity at LOS A operations with minimal delay.
- Main Street at Summer Street: Under existing and No-Build conditions, left turns from Summer Street onto Main Street operate with long delays during the peak hours. However, these calculated delays overestimate actual measured delays which are documented below to be 20 seconds or less (see Section 10.4.6 for further details). Right turn movements from Summer Street onto Main Street operate with only minor delays during the weekday morning peak hour and with long delays during the weekday evening peak hour. Under Build conditions, the Summer Street approach to Main Street will operate with only minor increases in delay compared to No-Build conditions.

In summary, incremental traffic increases at the study intersections due to the proposed development result in inconsequential changes in intersection operations compared to No-Build conditions. Therefore, no additional roadway improvements are warranted to accommodate the project.

10.4.7 Delay Study

A Stop Sign Delay study was conducted for the Summer Street approach to Main Street to determine the actual average delay for vehicles turning left and right from Summer Street onto Main Street. The delay study specifically measured average stopped delay for Summer Street vehicles approaching for turns onto the Main Street traffic stream. A comparison of the actual average vehicle delay observed in the field to the calculated delay results provided by HCM methodology is shown in Table 10-15 below.

	Calc	culated Results ¹		Obse	rved Results ²	
Time Period/Approach	Average Vehicle Delay (seconds)	Maximum Vehicle Queue (vehicles)	LOS	Average Vehicle Delay (seconds)	Maximum Vehicle Queue (vehicles)	LOS
Weekday Morning Peak Hour (7:00) – 8:00 am)					
Summer Street L Exit	67	1	F	12	2	В
Summer Street R Exit	12	1	В	5	8	А
Weekday Evening Peak Hour (4:45	– 5:45 pm)					
Summer Street L Exit	49	2	E	20	3	С
Summer Street R Exit	38	8	E	15	10	А

 Table 10-15
 Average
 Vehicle
 Delay
 Comparison
 Main
 Street
 at
 Summer
 Street
 –
 Baseline

 Conditions
 Conditi

¹Based on Highway Capacity Manual methodology.

²Based on field data collected on January 6, 2015.

As summarized in Table 10-15, a comparison of the actual average vehicle delay observed in the field to the calculated delay results provided by HCM methodology reveals that the HCM methodology produces an overly conservative delay analysis for the conditions on Summer Street. Specifically, calculated average delays suggest that the Summer Street approach to Main Street currently operate with average delays ranging from 49 to 67 seconds for left turn movements and 12 to 38 seconds for right turn movements during the weekday morning and evening peak hours. Observed average delays are significantly lower with average delays ranging from 12 to 20 seconds for left turn movements and 5 to 15 second for right turn movements during the weekday morning and weekday evening peak hours. Since the actual vehicle delays associated with the baseline condition are significantly less than reported and the project will add less than 5 vehicles per hour approaching Main Street, the project is not expected to have any substantial impact on the intersection operations.

10.5 Mitigation

Trip generation for the Project is projected to be nominal with approximately 5 new vehicles per hour or less during commuter peak hours. The traffic study has found that incremental traffic associated with the Project is not expected to materially impact operating conditions at the study intersections. Study intersections exhibit below-average crash rates based on historic crash data; safety countermeasures are therefore not warranted. Likewise, the available sight lines at the proposed site driveway intersection with Summer Street and proposed construction site driveway intersection with West Street exceed the recommended minimum sight line requirements from AASHTO for the posted speed limit and observed travel speeds.

The traffic study recommends the following access improvements, on-site circulation/traffic management improvements, and a construction traffic management plan that support the proposed operational needs of the Project while minimizing impact to adjacent roadways.

10.5.1 Site Access Improvements

The Proponent has identified the following site access improvements:

- A STOP sign (R1-1) and STOP line pavement marking is recommended on driveway approach to Summer Street. The sign and pavement marking shall be compliant with the Manual on Uniform Traffic Control Devices ("MUTCD").
- Plantings (shrubs, bushes) and structures (walls, fences, etc.) should be maintained at a height of two feet or less above the adjacent roadway grade within the sight lines in vicinity of the site driveway in order to continue to provide unobstructed sight lines.

10.5.2 On-Site Circulation/ Traffic Management Improvements

The Proponent has identified the following on-site circulation/traffic management improvements:

- AutoTURN[®] analysis was completed for the preliminary site plan using both a WB-50 design vehicle (55 feet long) and fuel delivery design vehicle (62 feet long). Based on recommendations a number of areas for on-site roadways have been widening to ensure adequate on-site truck circulation.
- The provision of a truck by-pass should be considered in the fuel-unloading zone to increase the efficiency of fuel delivery operations.
- On-site truck staging areas have been identified as shown in Figure 10-23 to accommodate fuel-truck storage while waiting for an unloading zone to clear. The primary fuel truck staging area has been identified adjacent to the existing on-site roadway. The potential truck staging areas can accommodate 6 fuel oil delivery trucks in the primary staging area and up to an additional 13 trucks in the overflow staging area. To the extent trucks are staged on-site they will be actively managed by on-site staff. Based on previous experience, it was estimated by Exelon that the process of entering the site, unloading and exiting the site would take approximately 45 minutes or less to perform. Under the worst case scenario the Site (existing and proposed Project combined) will generate approximately 4 inbound and 4 outbound truck trips per hour resulting in the need to stage approximately 2 vehicles. The designated staging areas for fuel unloading will be distinct from those for truck deliveries of other materials.



West Medway II Medway, Massachusetts

Site Plan Source: HDR, Inc.

 $\underset{\text{Planners & Engineers}}{\text{MDM}} \frac{\text{TRANSPORTATION CONSULTANTS, INC.}}{\text{Planners & Engineers}}$

Figure 10-23 Potential Stagng Area

10.5.3 Construction Traffic Management Plan

A traffic-construction management plan should be implemented in cooperation with the Town of Medway and the Project's EPC Contractor to accommodate the specific needs of the site and to provide coordination with the Town officials throughout the construction period. Exelon will also coordinate with the Town of Medway with regard to the length of the construction period and any construction permits which may be required. The construction traffic management plan should include but not be limited to the following:

- Designated parking areas should be provided for construction employees. This area is preferred to be in an existing material laydown lot in the southern portion of the site along West Street which will be reinforced during the construction phase of the site and returned to grass upon completion of the project.
- Construction periods (i.e., worker arrival/departure times) and material deliveries should be designated to coincide with off-peak travel periods of the area roadway. The current arrival/ departure periods are 5:00 – 6:00 am and 6:00 – 7:00 pm which have been shown to be off peak travel periods.
- Exelon should establish waiting and staging areas on-site for all material deliveries and the management of truck traffic.
- Dust suppression methods should be implemented at unpaved construction areas as needed (e.g., use of water trucks to wet the ground surface, stabilization of soils, creation of wind breaks, and/or use of stabilized construction and exit points).

10.5.4 Truck Deliveries

Truck trips associated with replenishment of fuel supplies (oil) at the site will originate from Providence, RI. As a result, trucks destined to/from the Project will solely use Route I-495 to/ from the south and Route 126 to/from the west. These roadways are well established commercial truck routes, and provide the most direct and efficient means of travel to the site.

10.6 Parking Supply

Parking requirements are set forth in Section V(H)4 of the Town of Medway Zoning Bylaw ("Zoning Bylaw"). For General Light Industrial and Manufacturing, *"1 space per each 2 persons employed or anticipated to be employed on the largest shift and 1 additional space for each 1,000 square feet of net floor area"* are required. The Project will comply, with approximately 16 proposed parking spaces for the proposed Project.

As described in Section 10.3, construction worker parking will be in an existing material laydown lot in the southern portion of the site along West Street.

10.7 Public Outreach

Exelon has developed a comprehensive communications plan to keep local residents, abutters, businesses and Town of Medway officials updated on significant construction milestones and schedules related to the expansion of the Project, including but not limited to: construction schedules; vehicular access and other traffic management information; construction crew movement and parking; laydown areas, staging, and equipment delivery; nighttime or weekend construction; and road repaving. These approaches include:

- *Electronic mail* As part of public outreach during the permitting process, Exelon developed e-mail lists to reach specific targeted audiences, including direct abutters, nearby neighbors within 2 miles, local businesses and key external stakeholders. These lists will be used to deliver targeted traffic and construction messages to affected audiences during the construction phase of the Project.
- Mailings As part of initial communications announcing and describing the proposed Project, Exelon developed and utilized mailing lists to communicate information on public hearings related to the Project. Those lists will be utilized to provide traffic, parking, delivery and construction-related updates and notifications during the next phase of Project development.
- *Website* The Proponent is in the process of developing and has launched a Project website which includes a news section where updated information can be posted. The website will also include a sign-up section for interested parties to receive updates. Future plans also call for the development of a blog section on the site to provide additional details and as-needed updates. The website address will be included in all Project-related external communications.
- Social media In relation to the planned website, Exelon plans to establish a Twitter account to provide the community and Town with realtime updated information during construction and prep work. The Twitter account will be linked to the Project website.
- Earned/paid media When specific construction-related events are scheduled (traffic changes, major deliveries, etc.) to take place, Exelon will utilize the media to communicate with the community. This will be done through press releases sent through established local media contacts (Milford Daily News, Boston Globe West, Wicked Local, or via paid media (advertisements) when necessary.

Routine updates with Town of Medway officials – Exelon has established routine communication networks with key Town officials and has conducted at least monthly meetings with Town of Medway department heads and leadership regarding the Project. These meetings will continue to be used to keep Town of Medway officials apprised of traffic management, construction, delivery and other potential issues of concern to the Town and residents during the construction phase.

Appendix

- □ Traffic Volume Data
- Seasonal and Background Growth
- □ Speed Data
- Intersection Crash Data
- □ Sight Line Analysis
- Construction Analysis
- □ Trip Generation Data
- □ Trip Distribution Calculations
- □ Capacity Analyses
- □ Intersection Delay Study

□ Traffic Volume Data

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Mariborough, MA 01752 508-303-0370 www.mdmtrans.com

Site Code: 79000001 Station ID: Latitude: 0' 0.0000 Undefined

790 Summer Street (Route 126) Volume

Stort	17 Sen 14	South	bound	Hour Totals		North	bound	Hour	Totals	Combined Totals		
Start	17-Sep-14	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	
12:00	vveu	14	45	Worning	7.11.01110011	3	52					
12.00	son an seath	 	40				41		NERS BERG			
12.13		2	53		1904 - N. 1996 - D. 1977 - M	1	41					
12.30		É.	38	27	176	3	40	8	174	35	350	
01.00		1	44		delle de centre de Mari	2	41		5			
01.00	nates a sub	ં	55		0000000000	Ī	50					
01.13	kaliste na stationets	5	44			1	37					
01.30			50	16	193	2	66	6	194	22	387	
01.40	in de la sete de la se	2011 (Sector Sector) 2	56	99999999999999999999999	999 - FELERAL I M M	3	50					
02.00	weren der der	6	46		(THACK STARK)	ō	54					
02.10		- 1	62	an a shekara sa	a an tata ina protación de	1 1	55					
02.30		l E	86	g	250	Á.	69	8	228	16	478	
02.45		3	00 03	d de l'ende le V u		3	56	ata bina inchinena 744	bala da talit animar a i			
03.00		J 7	7/		ana sha kalasi	4	55		ana geografie	ang testati		
03:15	haalaalaalaa	2	106	192011-02010-02011		4	50	dahala di katin katina da	and the of second dealer data in a	alan and to car broke it is		
03:30		2 1907 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 - 1909 -	112	12	361	i i i i i i i i i i i i i i i i i i i	44	15	205	27	566	
03:45			110	ter (* 1999) 1997 (* 1946) 1997 - J. S.	····· ·······························	11	60	onder som				
04:00		د م	110	0		11	52					
04.15			112	90234071157935600		19	47					
04:30		о С	10	17	457	17	51	58	210	75	667	
04:45		0	117		437	17	72				(1991) (1991) (1991) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997)	
05:00		' 7	117	- ALANA ANA ANA ANA ANA ANA ANA ANA ANA A	enteren ander de la	27	61					
05:15		14	110		in the the second	65	55	an a				
05:30		14 7 - 14			151	75	72	184	260	225	711	
05:45			90	AP Parata A Pa		68	54	•••				
06:00		აა იი	9/ 7/			96	70	on contractor				
06:15	d heteregede	29	/4 05	4940-00.0000000-00		88	49					
06:30	neo esta si terreta della del	0C A 2	90		305	96	30	346	203	487	528	
06:45		43	09 61	1.41 (J. 1.41)		85	46	· · · ·			digiliha aya da	
07:00	n an aise an - s a sa 170	ວວ	10	a tana kaominina amin'ny faritr'i Andre	undu di di Galikia	110	26		y po as secu			
07:15			44 EC	le de la celeta de l	lete 2002 to a december of	108	20 20					
07:30		00 74	00 F K	222	202	102	31	405	142	627	344	
07:45	1745 U.M.U.S.	/ l	4 l 24		202	106	30		an man tana 1990 - 1990 - 1997 -		annathar ann a' chuir a	
00:00		02	34 20			121	37					
08:15		30 E0	ວ0 ⊑7	r produktel kölök		107	07 27	under dem struktur. Die 1960 -	qual concentrational fille			
08:30		80 7 k	7C 1	202	168	82		426	117	629	285	
08:45		47	41 20	203	100		20			landida balda Mar ak		
09:00		42 44	JC DC			51	27	1000000000000000				
09:15		41	20 1 4	pitan téhléhéné kélék	and state statistic	50	42					
09:30	a an an an tainn an 1940.	30 20	14 10 - 10 - 10 - 10	145	an	46	13	211	104	356	194	
09:45		20	10	143		38	12		· · · · · · · · · · · · · · · · · · ·	p 242 p m ch 2 b 27 7.73	9 - 19 - 10 - 10 - 10 - 10 - 10 - 10 - 1	
10:00		42	20		uppograduka akil	44	17					
10:15			20	n fabila kan kan ka wasa	queste a transferantes. NG	1	15		na constant areas des			
10:30	100000000000000000000000000000000000000	40	20	466	70	40	10	171	54	326	124	
10:45		39	10. 4 A	100	70	4-3 7 1	ווע אווע אווע אווע. ר	1.0000.0000.000				
11:00	l 	3/	[] ev	-		40 52	J 19			a Panteera George		
11:15	gental veluin.	30	13			100	21. 2	1.0.00000000000000000000000000000000000		n conservation control		
11:30		50	0 ~ {	1 100		42 ∠0	ے ۸ 1404 1414 1419	106	21	356	69	
11:45		43	18	100	40	2024	1012	1.30	<u></u>	3181	4703	
_ Tota		114/	2/91			2004 51 50/	A8 50/			40.3%	59.7%	
Percent	1	29.1%	70.9%			01.5%	40.070			-0.070	00.770	

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752 508-303-0370 www.mdmtrans.com

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

Site Code: 79000001 Station ID: Latitude: 0' 0.0000 Undefined

790 Summer Street (Route 126) Volume

Start	18-Sep-14	South	bound	Hour	Totals	Nort	hbound	Hour	Totals	Combin	ed Totals
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		14	40			7	36				
12:15		17	42			3	47		101000530		
12:30		3	34			3	33	ana ana amin'ny fisiana			
12:45		7	33	41	149	3	58	16	174	57	323
01:00		2	43			4	45			1 (1991 N. 1993) (1997) (1997)	
01:15		5	42			2	42	ang pang pang pang pang pang pang pang p	en des also esperes Strates a constantação		
01:30		2	33			1	42		enande andere ganger		
01:45		2	56	11	174	3	45	10	174	eene 21	348
02:00	ere erroret roret e batoli fan	5	43	ng ang awayang panalakan sa	nana matana amin'ny fisiana	0	61		a succe ar service re		
02:15		ensense t e	49	0.551610510510	이 영영에 가는 것	nd na sidu	49	YEARCARS	liti se stêra ozn		
02:30		0	60			1	43				400
02:45		4	67	10	219		64	3	217	13	430
03:00	e i u marchi decre com fuit tri un tri i	3	79		ales dama sa sa	0	50	terte kali Nasi Asi ast		asaala ta ta ta	
03:15	Kaabibbaabi	8	89		a waa a dad		50		1990-1280-1990-199	A MACHARANA	
03:30		3	101			C Contractor of C	/U 60	eses constants à la t	246		
03:45		0	83	14	352	3	5U	(11.04.05. 14 .)	240	an 1999, 20 9	080
04:00		1	99	an an an an an an an an	Maria da Adaptinationa de	0	31 F1	15.0454.02491.02491	n socialitada nos públicas	SARA SANGANA SANG	
04:15		3	90 407			4 E	51 67			a de la constante de la	
04:30		3	107		10F	10 10	07 67	F3	226	62	6/1
04:45	*****	4	103	I.I.	405	19	67 57	1000	230	02	041
05:00	an estado de sole estera	/ 	122	a ana ang ang ang ang ang ang ang ang an		10	55				
05.15		0.1	60 20	0.00000.0000000000000000000000000000000		Z I A A	67		. Alforitus eta cr. scr	- 60 - 60 - 70 - 71 - 71 - 71 - 71 - 71 - 71 - 7	
05.30	Second Contractors	24	92 109	.	105	99	64	170	248	223	653
05.45		21	100	44	405		04 47				000
06.00		24 27	110			80	53	460000000000000000000000000000000000000		NRCONCESS. CAL	
00.15		2 4 27	110 76			98	58			ter e contra jero na pos	
00.30		21 15	07 63	120	334	90	36	322	194	442	528
07:00	agialis in atalisa	43	00. 02	120	007	81	00 49	000.7780203 944 0		ininiis) Sectit e ri	959
07.00		40 30	52 68		n les en seu e	126	47			1020240000	
07.13		75	56	na anna anna anna anna anna anna anna		120	46	diningkrigeng disaster		HARDOLAN IZI ALI DAL	
07:30		62	34	219	250	115	24	444	166	663	416
08.00		51	40	ar av a ca 60.40s		110	26	na di Mariana si Si			
08:15		63	43			100	27				
08:30		41	36	a la vel de la la come de la come		100	37				
08:45		43	34	198	153	97	32	407	122	605	275
09:00		42	32	r del 1010 de la cara cara car		70	24				
09:15		39	32			62	17				
09:30		43	33			53	21				
09:45		33	35	157	132	65	23	250	85	407	217
10:00		23	26			42	19				
10:15		50	15			43	16				
10:30		44	17			46	15				
10:45		42	26	159	84	43	16	174	66	333	150
11:00		38	11			31	13				
11:15		42	12			45	9				
11:30		50	22			44	5				
11:45		50	16	180	61	43	5 3	163	30	343	91
Total		1164	2718			2033	1958			3197	4676
Percent		30.0%	70.0%			50.9%	49.1%			40.6%	59.4%
Grand		2311	5509			406	7 3870)		6378	9379
Total		2011								10 501	
Percent		29.6%	70.4%			51.29	% 48.8%	נ		40.5%	59.5%
		A DT - 070									
ADT		ADT 7,878		4ADI 7,878							

Page 2

MDM TRANSPORTATION CONSULTANTS, INC. 28 Lord Road, Suite 280 Mariborough, MA

West Street West of Driveway Medway, MA

www.mdmtrans.com

Site Code: 790

Start	17-Sep-15	West	hound	Hour	Totals	Eas	tbound	Hour	Totals	Combin	ed Totals
Time	Thu	Mornina	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	1114	0	7			2	12				
12:15		0	7			1	4				
12:30		0	3			1	3		5 4	· · · · · · · · · · · · · · · · · · ·	15
12:45		0	4	0	21	Õ	5	4	24	4	43
01:00		1	4		·	0	4				
01:15		Ō	5			0	0			1986 fyllit a belenn	
01:30		0	5		16	0	0 7	l n	25	2	40
01:45			10	Ζ.	19	О	10	personale como Ma			.6.1 ()
02:00		U 19 estatutation de la com	L2 ا	NARAH DER ANDARAM		, Normalization of the second	.0				
02:15			0	9 <u>9 8 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 </u>	ter se	0	9	And the state of the second se			
02:30			ě	aa	32	Ō	5	0	32	1	64
02.45	an a	a programanica. O a O	10	a tan wa watero da	94 h 30 t - 1 t - 1 t - 1	0	9				
03.00	900.000.000000	ň	10			0	9				
03:30	e., 9, 7, 7, 0, 1, 6, 6, 10, 10	0	7			0	5				
03:45		Ō	7	0	34	0	7	0	30	0	64
04:00		0	5			1	7	-		arakasi da Kutata Jalama	
04:15		0	12			0	7	na source		1993 North Or	
04:30		0	7			1	9				50
04:45	: 2016 - 2016	0	6	0	30	0	6		29	[-	
05:00		0	10			3 	10	and the second			
05:15		1	10						en ante das tes		
05:30		2	10	-	0 0		J 17	6	44	9	83
05:45		0	9	3	39) I <i>1</i> 9 Q	i de la compansi M	nan dilininan sa	1 define de la actuar dan Ta	. N. C. M. H. Y. L. H. M. Maratha
06:00		1	11	a na shekara ta	are sectored and	2	. 7	uppessed to be			
06:15		Z	10	parte de la composition de la compositi		F	5 7			i at ta minapurta datar	
06:30		ບ ວ່	ي ١٠	10	32		8	22	31	32	63
00.43	000500000000000000000000000000000000000	ے ۸	14	laation aan oo sa ah		5	5 6				
07:00		10	5			8	3 2				
07:30	<u>1958 (</u> 1999) - Alexandre (1998) - Alexandre (19	9	5			14	ļ 3				
07:45		14	4	37	28	1	5	38	16	75	44
08:00		18	3			4	1 5				an nangananan sin 1993 in
08:15		5	7			1() 4				
08:30		6	2				5 1		esserva esetut 🧣 🚽	e i	24
08:45		7	7	36	19		5	20	10	04	
09:00)	5	5	· · · · · · · · · · · · · · · · · · ·	san meneratikan sekara sek				1999-00-00-00-00-00-00-00-00-00-00-00-00-		3400-1700-0700
09:15)	5	5				+ 4			11.171.071.010.0707110	<u>ihi si sejarik senera sana</u>
09:30)	6		40	10		, 1 (19	6	37	· 18
09:45		2)	- 1995 - La 1997 - La	3		1990-9000.000000000000000000000000000000		
10:00) - 1990 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19	ے ۸		spulseruites		y Peneroose	7				
10:10) \	4	۱ 4	5 - 14 - 16 - 16 - 16 - 16 - 16 - 16 - 16			2 ()			
10.30) Pho taran da Siliki		· 7	1 12	1	•	Ō	12	. 2	26	ş 11
11.40	2	2000-00-00-00-00 2	0 0	a genta a Marina Se			4 .	1			
11-17	, 5	2	Ĭ				3	[]			
11.3(- 		5 1				4 2	2	eren i er hanne ette defektion		
11.4	-	ē	5 1	11	В і	3	2 (D 13	3	I <u>3</u>	<u> </u>
Tota	ıl	139	272			14	4 260	2		283	5 532
Percen	t	33.8%	66.2%			35.69	64.4%	6		34.7%	0 00.3%
Combine	d		411				404				815

1

Total

Page 1

MDM TRANSPORTATION CONSULTANTS, INC. 28 Lord Road, Suite 280 Marlborough, MA

West Street West of Driveway Medway, MA

www.mdmtrans.com

Site Code: 790

	22 Sop 15	Moet	hound	Hour	Totals	Eas	tbound	Hour	Totals	Combin	ed Totals
Start	22-Sep-15	Morning		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	<u> </u>	2	6	monnig		0	3				
12.00		- 1	4	yan sa ka		0	6				
12.10		1	2	A91.2414.11480.000		0	8				
12.30		0	5	4	17	0	3	0	20	4	37
12.40	a an	0	4		North and a state of the second s	0	4				
01.00	orvanaetees aaales	ň	5	n Martin († 1916)		0	6				
01.13	0-10-00-00-00-00-00-00-00-00-00-00-00-00	0	q			0	8				
01.30	regeneration de		ă I	1	22	0	9	0	27	1	49
01.45	gguundeleide	0	10	1992, ol 1.4000, 161, 163		0	4				
02.00		័			ky contraction	0	7				
02.13		0	13			0	9				and the second second second second
02.30	ar chine and		7	0	38	0	3	0	23	0	61
02.40	1.610-049-040-041-05	0	10			0	8				
03.00		Ő	7			0	4				
03.13		0	8		1997)) (transformation of the second s	0	12				
03:30		ŏ	8	0	33	0	10	0	34	0	67
03.45		0	10			0	9			and a subsection to a te	
04.00		เมษะสาวส์	10		t i de ser ser	1	10				
04.10		0	5	· · · · · · · · · · · · · · · · · · ·	100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C) 7			a proposition to the fact .	
04:45		ō	9	1	34	2	6	3	32	<u>1998 - 199</u> 4	00
05.00		1	14) () 16				
05:15	255 B. 1975 B. 1975	3	6			2	2 14				
05:30		2	11			() 16				00
05:45		2	7	8	38	3	3 14	. 5	60	13	98
06.00		1	10] 3	3 12				se pers de value das de la
06:15		i se si si i	8				5 11				
06:30		4	8				3 8	3		-	
06.45	588 C HESS 653	6	10	12	36	1	5 7	' 16	38	28	/4
07.00	n Afrikala tanın musur muzara	2	9			8	36	5	e este en		
07:15		5	11			18	3 7				
07:30		12	3			1:	2 2	2	- 4	-	40
07:45		10	5	29	28	1	5	5 48	21	11	45
08:00		15	4			1	1 4		n way an ar dooranged	- Lanecolar Contaile	
08:15		8	9				8			3.23506668867	
08:30)	9	6				8	3	ana ang ang ang ang ang ang ang ang ang	er	<u>م</u> ار ا
08:45	; 	6	4	38	3 23	n staarsee	4	(00	πv
09:00)	3	5				6 (J			
09:15	5	7	2				4	2	392 (M. 2006).	li din din li di	
09:30)	6	2				3	J 4	,	2	15
09:45	5	1	5	13	7 14		4				T
10:00)	3	9	1			3	3 4 8 16585-16535-16555			
10:15	5	4	1				3	1			1999) (400 000 minor 40
10:30)	2	2 5	i			2 2	i la estate de la l	n de service de la c	2	22
10:45	5	8	3 1	1	7	⊃.[Laterations	3	1. •	<u>Pels and during</u>	· · · ·	·
11:00)	5	5 C)	re waarnoon oo waa 1997.2		2	0			
11:1:	5	2	2	94 - 00 - 00 - 00	u na sana sa		7	2	satos de la del a del a del la del la	10) (C. 1997) (C	egene getterheitetetet
11:30	0	4	1				1 7	<u> </u>	,	2	9 4
11:4	5	E	<u>) - 1</u> 1		<u>/</u>	4	7 70	<u>u </u>	<u>6 </u>	29	7 582
Tota	al	144	4 301			10 0 = 0	00 ZO 0/ CA70	1 16		33 89	66.2%
Percen	1t	32.4%	67.6%	D		30.3	70 04.77	/0		00.07	
Combine	d		445				434				879
Tota	al										

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) Medway, MA

File Name : 790 Route 109 at Route 126 AM Site Code : 790 Medway Start Date : 9/17/2014 Page No : 2

······	Sum	morS	troot (Pouto	126)	Milf	ord St	reet (F	Route	109)	Sum	mer S	treet (Route	126)	Milford Street (Route 109)					
	Sum			th	120)	14410	Fr	om E	ast	,		Fre	om So	uth			Fr	om W	est		
				<u></u>			The	Loft	Dede		Pight	Thru	Left	Peds	Ann Total	Right	Thru	Left	Peds	App. Total	Int. Total
Start Time	Right	Thru	Len	Peds	App. Total	Right	Deals	Leit	Feus	App, Total	Right	Tind	20.1		Chhi Inter						
Peak Hour A	nalysi	s From	1 07:00) AM to	08:45	AIVI - I	Peak														
Peak Hour fe	or Entii	re Inte	rsectio	on Begi	ins at 0	7:15 A	M			100		440	E	0	125	0	82	37	0	119	497
07:15 AM	41	70	12	0	123	22	107	1	0	130	2	118	5	0	105	5	96	63	õ	154	529
07:30 AM	45	52	4	0	101	19	145	5	0	169	4	92	9	0	100	5	76	56	0	136	510
07:45 AM	57	58	11	0	126	11	139	5	0	155	5	85	12	0	102	4	70	20	0	100	107
08:00 AM	39	54	10	0	103	15	153	5	0	173	4	96	13	0	113	.4	00	30		E17	2042
Total Volume	182	234	37	0	453	67	544	16	0	627	15	391	39	0	445	13	310	194	0	517	2042
Pé App Total	40.2	51.7	8.2	0		10.7	86.8	2.6	0		3.4	87.9	8.8	0		2.5	60	37.5	0		005
PHE	798	836	771	.000	.899	.761	.889	.800	.000	.906	.750	.828	.750	.000	.890	.650	.901	.770	.000	.839	.905
Lights	178	217	36	0	431	65	536	16	0	617	14	374	37	0	425	13	300	191	0	504	1977
% Lights	97.8	92.7	97.3	ō	95.1	97.0	98.5	100	0	98.4	93.3	95.7	94.9	0	95.5	100	96.8	98.5	0	97.5	96.8
Modiums	4	14	07.0	õ	19	2	7	0	0	9	1	13	2	0	16	0	10	3	0	13	57
% Modiums	1		•	•														_		-	
76 Mediums	0	3	0	0	3	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	8
Articulated Trucks		12	ň	õ	07	l õ	02	Õ	Ő	0.2	0	1.0	0	0	0.9	0	0	0	0	0	0.4
% Articulated Trucks	U U	1.5	0	0	0.7	1 0	0.2	Ų	Ū	÷	-										
																			7		
		_							Cument	and Strong	(Poute	126)									



N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) Medway, MA

File Name: 790 Route 109 at Route 126 AM Site Code : 790 Medway Start Date : 9/17/2014 Page No : 1

						Gro	oups F	rintec	I- Light	hts - Mediums - Articulated Trucks											
	Surr	imer S	treet	(Route	126)	Milf	ord St	reet (l	Route	109)	Sum	imer S	Street	(Route	126)	Milf	ford St	reet (Route	109)	
		Fr	om No	orth			F	rom È	ast			Fr	om So	buth			Fr	om W	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App, Total	Int, Total
07:00 AM	34	36	8	0	78	12	109	0	0	121	1	85	8	0	94	1	98	33	0	132	425
07:15 AM	41	70	12	0	123	22	107	1	0	130	2	118	5	0	125	0	82	37	0	119	497
07:30 AM	45	52	4	0	101	19	145	5	0	169	4	92	9	0	105	5	86	63	0	154	529
07:45 AM	57	58	11	0	126	11	139	5	0	155	5	85	12	0	102	4	76	56	0	136	519
Total	177	216	35	0	428	64	500	11	0	575	12	380	34	0	426	10	342	189	0	541	1970
						•															
08:00 AM	39	54	10	0	103	15	153	5	0	173	4	96	13	0	113	4	66	38	0	108	497
08:15 AM	34	41	11	0	86	13	109	3	0	125	1	124	7	0	132	2	68	35	0	105	448
08:30 AM	35	44	3	0	82	10	116	8	0	134	4	85	14	0	103	6	94	31	0	131	450
08:45 AM	31	40	9	0	80	9	110	8	0	127	1	74	2	0	77	4	87	20	0	111	395
Total	139	179	33	0	351	47	488	24	0	559	10	379	36	0	425	16	315	124	0	455	1790
						•															
Grand Total	316	395	68	0	779	111	988	35	0	1134	22	759	70	0	851	26	657	313	0	996	3760
Apprch %	40.6	50.7	8.7	0		9.8	87.1	3.1	0		2.6	89.2	8.2	0		2.6	66	31.4	0		
Total %	8.4	10.5	1.8	0	20.7	3	26.3	0.9	0	30.2	0.6	20.2	1.9	0	22.6	0.7	17.5	8.3	0	26.5	
Lights	308	365	65	0	738	108	961	34	0	1103	20	715	68	0	803	25	621	304	0	950	3594
% Lights	97.5	92.4	95.6	0	94.7	97.3	97.3	97.1	0	97.3	90.9	94.2	97.1	0	94.4	96.2	94.5	97.1	0	95.4	95.6
Mediums	7	21	3	0	31	3	23	0	0	26	2	33	2	0	37	1	33	8	0	42	136
% Mediums																					
Articulated Trucks	1	9	0	0	10	0	4	1	0	5	0	11	0	0	11	0	3	1	0	4	30
% Articulated Trucks	0.3	2.3	0	0	1.3	0	0.4	2.9	0	0.4	0	1.4	0	0	1.3	0	0.5	0.3	0	0.4	0.8

N/S: Summer Street (Route 126) E/W: Exelon Power Driveway Medway

File Name : 790 Route 126 at Site Driveway AM Site Code : 790 Medway Start Date : 9/17/2014 Page No : 2

	Sumr	ner Stree	t (Route 12	26)	Sumr	ner Street	(Route 12	26)	Exe	ion Pow	er Drive	way	
	-	From I	North			From S	outh			From	West		
Start Time	Right	Thru	Peds Ap	p. Total	Thru	Left	Peds Ap	p. Total	Right	Left	Peds	App. Total	Int. I otai
Peak Hour Analysis	s From 06:0	00 AM to (08:45 AM -	Peak 1 o	f1								
Peak Hour for Entir	e Intersect	ion Begins	s at 07:30 /	AM ER L	400		^	110	4	0	0	1	169
07:30 AM	0	58	0	58	109	1	0	100	0	0	0		178
07:45 AM	0	69	0	69	109	1	0	105	0	ő	Ő	õ	159
08:00 AM	0	54	0	04 46	104	1	0	128	Ő	õ	õ	ō	174
U8:15 AlVi	0	227	0	227	449	3	0	452	1	0	0	1	680
% App Total	0	100	õ	EE!	99.3	0.7	Ō		100	0	0		
PHF	.000	.822	.000	.822	.884	.750	.000	.883	.250	.000	.000	.250	.955
Lights	0	208	0	208	421	2	0	423	0	0	0	0	631
% Lights	0	91.6	0	91.6	93.8	66.7	0	93.6	0	0	0	0	92.8
Buses	0	3	0	.3	5	0	0	5	0	0	0	0	12
% Buses	0	1.3	0	1.3	1.1	1	0	24	1	0	0	1	41
Trucks	0	16	0	70	20 5 1	22 2 I	0	53	100	õ	õ	100	6.0
% Trucks	0	7.0	U	1.0	J. I	55.5	0	0.0	100	•	•		
					Out 42 2 44	In 208 1 208 5 3 3 16 9 227 0 208 0 3 0 208 0 3 0 16 0 227	Total 629 8 39 676 0 0 0						
		10 14			⊷ Pea	k Hou	r Data				o	_	
	Exelon Power Drivewa Out In To	NO - 0			Peak H Lights Buses Trucks	 North Hour Begins	at 07:30 AM			0		Fake Approach	
						eft Thru 2 421 0 5 1 23 3 449 	Peds 0 0 0 631 8 41 680 70tal Route 126)						

N/S: Summer Street (Route 126) E/W: Exelon Power Driveway Medway

File Name: 790 Route 126 at Site Driveway AM Site Code : 790 Medway Start Date : 9/17/2014 Page No : 1

					Gro	ups Printe	d- Lights	 Buses 	- Trucks					
		Sumn	ner Stree	et (Route	e 126)	Sum	mer Stree	et (Route	126)	Exe	elon Pow	er Drivew	ay	
			From	North	,		From	South			From	West		
Start Tin	ne	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
06.00 A	M	0	30	0	30	94	1	0	95	0	0	0	0	125
06:15 A	M	1	35	0	36	94	0	0	94	0	0	0	0	130
06:30 A	M	ò	35	Ō	35	79	1	0	80	0	0	0	0	115
06:45 A	M	5	45	0	50	90	4	0	94	0	0	0	0	144
To	tal	6	145	0	151	357	6	0	363	0	0	0	0	514
10		•												
07·00 A	MI	0	36	0	36	107	1	0	108	0	0	0	0	144
07:15 A	M	ŏ	64	Ō	64	105	1	0	106	0	0	0	0	170
07:30 A	M	Ō	58	Ō	58	109	1	0	110	1	0	0	1	169
07:45 A	AM	õ	69	Ō	69	109	0	0	109	0	0	0	0	178
To	tal	0	227	0	227	430	3	0	433	1	0	0	1	661
10		-												
08·00 A	AM	0	54	0	54	104	¹ 1	0	105	0	0	0	0	159
08:15 A	AM	ō	46	Ō	46	127	1	0	128	0	0	0	0	174
08:30 A	AM	õ	51	0	51	91	- 0	0	91	0	0	0	0	142
08:45 A	AM	ō	50	0	50	66	0	0	66	0	1	0	1	117
To	otal	0	201	0	201	388	2	0	390	0	1	0	1	592
		-				I								
Grand To	otal	6	573	0	579	1175	11	0	1186	1	1	0	2	1767
Apprch	%	1	99	Ó		99.1	0.9	0		50	50	0		
Total	1%	0.3	32.4	Ō	32.8	66.5	0.6	0	67.1	0.1	0.1	0	0.1	
	hts	6	530	0	536	1106	10	0	1116	0	1	0	1	1653
% L ig	hts	100	92.5	0	92.6	94.1	90.9	0	94.1	0	100	0	50	93.5
Bus	Ses	0	4	0	4	8	0	0	8	0	0	0	0	12
% Bus	ses	ō	0.7	ō	0.7	0.7	0	0	0.7	0	0	0	0	0.7
	cks	0	39	0	39	61	1	0	62	1	0	0	1	102
% Tru	cks	ō	6.8	ō	6.7	5.2	9.1	0	5.2	100	0	0	50	5.8

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Main Street (Route 126) Medway, MA

File Name: 790 Main St at Summer St AM Site Code : 77700002 Start Date : 9/17/2014 Page No : 2

г <u>. </u>	Cum	mor	troot (Pouto	126)		Ma	ain Str	eet			D	rivewa	av		Ma	ain Str	eet (R	oute 12	26)	
	Sum	Fri Fri	neer (hm No	orth	120)		Fi	om Ea	ast			Fre	om So	uth			Fi	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysis	s From	7:00:	00 AM	to 8:45	5:00 Al	VI - Pe	ak 1 o	F 1												
Peak Hour fo	or Entir	e Inter	rsectio	on Begi	ins at 7	:00:00	AM					-	~	~	0	~	400	00	0	247	356
7:00:00 AM	37	0	5	0	42	6	61	0	0	67		0	0	0	0	0	136	92 108	0	241	364
7:15:00 AM	49	0	4	0	53	8	59	0	0	6/	0	0	0	0	0	0	90	93	õ	192	319
7:30:00 AM	49	0	4	0	53	15	59	0	0	74		ů N	ň	ő	õ	Ő	102	82	ŏ	184	329
7:45:00 AM	63			0	210	12	241	0	0	282	0	0	Ő	0	0	0	492	375	0	867	1368
Total Volume	190	0	96	0	215	14 5	85.5	Ő	Ő	202	ō	Õ	Ō	0		0	56.7	43.3	0		
% App. Total PHF	786	000	.656	.000	.771	.683	.972	.000	.000	.953	.000	.000	.000	.000	.000	.000	.794	.868	.000	.878	.940
Passenger Vehicles												_	_				~ ~ ~	05.0	0	05.6	05.2
% Passonger Vehiclos	94.9	0	100	0	95.4	90.2	95.0	0	0	94.3	0	0	0	0	0		95.9	95.2	0	95.6	90.3
Heavy Vehicles			_					•	•	F 7		^	0	0	0	0	41	48	0	44	4.7
% Heavy Vehicles	5.1	0	0	0	4.6	9.8	5.0	0	0	5.7	1 0	U	Ų	U	0	ļ	4.1	7.0	Ũ	-1.1	
																			-		
		Г							Sumn	er Street	(Route	126) atal	1						1		
									 	1 2		603									
	22 10 32 416 219 635																	1			
									416	<u>s</u> <u></u> 2	19	635									
		188 0 21 0 10 0 0 0																			
		Right Thru Left Peds														1					
		Ì								÷											
		F							Pea	k Ho	our D)ata									
			10		N mlu										★ π		ГТ	1			
		i i	548 c)		357	ŧ.Ţ				1	•				₽	. u	7 տ.	Q 4			
		Č,	ğθ[-			1				l No	rth				-=		1 3	ິ ສິ			
			n le		20	1 Z							1	•	(N			Ma		
		ģ	와 드 8	86.3		Ë.			Peak	lour Beg	ins at 07	UU AIVI				2 20 20	- N	. 29 5 0	2 20		
					000	걸			Passer	nger Veh	icles				_6		32	56	free		
				নাক		Rig ↓			Heavy	Vehicles					+ [#] ∈	000		— , [']	<u> </u>		
		ŀ	4 K a	49	000	20									لع الع		7				
		ŀ	έ°_		-	Ped									ä,	00	5	6 6 9			
					L										L						
		1																	4		
										*											
									∢ _												
									Left	Thru	Right	Peds									
											0	0									
											0	0									
											r										
										0		0									
										ŏ	_ŏ	Ō									
									Ĺ	0		0 Totol									
									OL	n. Driv	ni rewav	i Uidl									

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Main Street (Route 126) Medway, MA

File Name: 790 Main St at Summer St AM Site Code : 77700002 Start Date : 9/17/2014 Page No : 1

						Gro	oups P	rintec	I- Pass	senger \	Vehicle	es - He	∋avy \	/ehicle	s						
	Sum	mer S	treet	(Route	126)		Ma	ain St	reet			Ľ	Drivew	ay		Ma	ain Str	eet (R	loute 1	26)	
		Fr	om N	orth	,		F	rom E	ast			Fr	om So	buth			Fr	rom W	lest		
Start Time	Diabt	Thru	Left	Deds	Aug. Total	Right	Thru	Left	Peds	Ann Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	37	0	5	0	400 App. Total	6	61	0	0	67	0	0	0	0	0	0	155	92	0	247	356
07.00 AM	10	õ	4	ň	53	Ř	59	õ	Ō	67	0	0	0	0	0	0	136	108	0	244	364
07.13 AM	49	Ň	4	õ	53	15	50	õ	ō	74	ō	Ő	Ō	Ó	0	0	99	93	0	192	319
07:30 AN	49	0	4	0	71	12	62	Ň	ň	74	Ň	õ	õ	ō	Ó	Ó	102	82	0	184	329
A	63			0		12	241	<u> </u>		292	0	<u> </u>		0	0	Ő	492	375	0	867	1368
iotal	198	0	21	0	219	41	241	U	0	202	0	0	0	0	0	0		0.0	-		,
			_	-			~~	~	~	70	1 0	0	~	0	0	1 1	108	81	0	190	313
08:00 AM	37	0	8	0	45	15	63	0	0	78		0	1	0	· ·		70	07	0	175	288
08:15 AM	36	0	3	0	39	21	51	0	0	12	0	1		0	2		10	37	0	150	200
08:30 AM	44	0	12	0	56	23	54	0	0	- 77	0	0	1	U	1		67	12	0	109	255
08:45 AM	43	0	8	0	51	9	59	0	0	68	0	0	0	0	0	0	83	55	<u> </u>	130	25/
Total	160	0	31	0	191	68	227	0	0	295	0	1	2	0	3	1	356	305	0	662	1151
	,																		_		1
Grand Total	358	0	52	0	410	109	468	0	0	577	0	1	2	0	3	1	848	680	0	1529	2519
Annrch %	87.3	Ō	12.7	0		18.9	81.1	0	0		0	33.3	66.7	0		0.1	55.5	44.5	0		
Total %	14.2	Ō	21	Ō	16.3	4.3	18.6	0	0	22.9	0	0	0.1	0	0.1	0	33.7	27	0	60.7	
10101 70	17.6																				
Passenger Vehicles	05	0	012	٥	94.9	96.3	96.2	0	0	96.2	0	100	100	0	100	100	95.5	94.9	0	95.2	95.4
% Passenger Vehiclos	35	0	0.4.2		01.0																
Heavy Vehicles		0	5.9	Λ	51	37	3.8	0	٥	3.8	0	0	0	0	0	0	4.5	5.1	0	4.8	4.6
% Heavy Vehicles	5	U	5.0	U	5.1	1 0.1	0.0	Ų	0	0.0	1 0	•	-	-		i.					

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) Medway, MA

File Name: 790 Route 109 at Route 126 PM Site Code : 790 Medway Start Date : 9/16/2014 Page No : 2

	Sum	mor S	troot (Route	126)	Milf	ord St	reet (F	Route 1	09)	Sum	mer S	street (Route	126)	Milf	ord St	reet (I	Route	109)	
	Juli	Fri		th	1207		F	rom Fa	ast	· /		Fr	om So	outh			Fr	om W	est		
Olart Time	B 1.1.1	Theu		Bode		Pight	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App, Total	Int. Total
Start Time	Right	<u></u>		Peus	App. Total			of 1	Todd I	App. Total	10.5.0										
Peak Hour A	nalysi	s From	1 04:00		0 05:45	PIVI - I	Peak	011													
Peak Hour fe	or Enti	re Intei	rsectio	on Begi	ins at 0	5:00 P	'M				-		~	~		10	442	24	0	184	518
05:00 PM	37	96	7	0	140	4	118	4	0	126	2	60	6	0	68	10	143	51	0	407	510
05.15 PM	32	114	11	0	157	13	114	10	0	137	3	46	7	0	56	19	137	31	0	187	537
05:30 DM	36	98	à	ń	143	19	107	9	0	135	3	43	10	0	56	13	109	38	0	160	494
05.301 M	21	07	10	ñ	138	15	113	2	0	130	2	56	5	0	63	8	123	34	0	165	496
05:45 PW	31	97	- 10	<u> </u>	E70	51	452	25		528	10	205	28	0	243	50	512	134	0	696	2045
Total Volume	136	405	37	U	2/0	51	402	23	Š	520	10	044	11 5	õ		72	73.6	19.3	0		
% App. Total	23.5	70.1	6.4	0		9.7	85.6	4.1	0		4.1	04.4	700	000	002	659	905	882	000	930	952
PHF	.919	.888.	.841	.000	.920	.671	.958	.625	.000	.964	.833	.854	.700	.000	.093	.050	.090	120	.000	000	2025
Lights	133	400	37	0	570	51	448	25	0	524	10	203	28	0	241	50	510	130	0	000	2020
% Lights	97.8	98.8	100	0	98.6	100	99.1	100	0	99.2	100	99.0	100	0	99.2	100	99.6	97.0	0	99.1	99.0
Mediums	0	4	0	0	4	0	4	0	0	4	0	2	0	0	2	0	1	4	0	5	15
Wediums	Ŭ	•		-																	
76 Meulums	2	4	0	Δ	1	0	Ο	0	0	0	0	0	0	0	0	0	1	0	0	1	5
Articulated Trucks	3		0	Š	07		ň	ň	õ	ň	Ō	Ō	Ó	0	0	0	0.2	0	0	0.1	0.2
% Articulated Trucks	2.2	0.2	0	0	0.7	0	U	U	0	U	0	0	Ũ	Ŭ	Ţ		•				
																			_		
		Г							Summ	er Stree	(Route	126)									
									Out	In	` 1	[otal									



Marlborough, MA

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) Medway, MA

File Name: 790 Route 109 at Route 126 PM Site Code : 790 Medway Start Date : 9/16/2014 Page No : 1

						Gr	oups F	Printec	1- Ligh	ts - Mec	liums ·	 Artic 	ulated	Truck	s						
	Sum	mer S	treet	(Route	126)	Milf	ford St	reet (I	Route	109)	Sum	mer S	treet	Route	126)	Milf	ord St	treet (Route	109)	
		Fr	om No	orth			F	rom Ė	ast			Fr	om So	outh			<u> </u>	om W	lest		
Start Time	Right	Thru	Left	Peds	Ann. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int, Total
04:00 PM	43	82	11	0	136	11	108	4	0	123	2	55	4	0	61	8	120	39	0	167	487
04:15 PM	32	89	12	0	133	14	87	2	0	103	1	48	5	0	54	8	100	33	0	141	431
04:30 PM	38	105	8	0	151	4	94	5	0	103	4	45	· 6	0	55	7	142	29	0	178	487
04:45 PM	24	106	11	0	141	9	108	9	0	126	2	46	6	0	54	3	116	32	0	151	472
Total	137	382	42	0	561	38	397	20	0	455	9	194	21	0	224	26	478	133	0	637	1877
						,													_		1
05:00 PM	37	96	7	0	140	4	118	4	0	126	2	60	6	0	68	10	143	31	0	184	518
05:15 PM	32	114	11	0	157	13	114	10	0	137	3	46	7	0	56	19	137	31	0	187	537
05:30 PM	36	98	9	0	143	19	107	9	0	135	3	43	10	0	56	13	109	38	0	160	494
05:45 PM	31	97	10	0	138	15	113	2	0	130	2	56	5	0	63	8	123	34	0	165	496
Total	136	405	37	0	578	51	452	25	0	528	10	205	28	0	243	50	512	134	0	696	2045
						•													_		
Grand Total	273	787	79	0	1139	89	849	45	0	983	19	399	49	0	467	76	990	267	0	1333	3922
Apprch %	24	69.1	6.9	0		9.1	86.4	4.6	0		4.1	85.4	10.5	0		5.7	74.3	20	0		
Total %	7	20.1	2	0	29	2.3	21.6	1.1	0	25.1	0.5	10.2	1.2	0	11.9	1.9	25.2	6.8	0	34	
Lights	261	771	79	0	1111	87	838	45	0	970	18	393	49	0	460	76	983	259	0	1318	3859
% Lights	95.6	98	100	0	97.5	97.8	98.7	100	0	98.7	94.7	98.5	100	0	98.5	100	99.3	97	0	98.9	98.4
Mediums	9	13	0	0	22	1	9	0	0	10	1	5	0	0	6	0	3	8	0	11	49
% Mediums																		0	0		14
Articulated Trucks	3	3	0	0	6	1	2	0	0	3		1	0	0	1		4	0	0	4	
% Anticulated Trucks	1.1	0.4	0	0	0.5	1.1	0.2	0	0	0.3	[0	0.3	0	0	0.2	0	0.4	0	U	0.3	0.4

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Exelon Power Driveway Medway

File Name : 790 Route 126 at Site Driveway PM Site Code : 790 Medway Start Date : 9/16/2014 Page No : 2

	Sumr	ner Stree	t (Route 12	:6)	Sumr	ner Street	(Route 1)	26)	Exe	lon Pow	er Drive West	way	
Start Time	Right		Peds An	n Total	Thru	Left	Peds Ar	op. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis	From 03:0	DO PM to	05:45 PM -	Peak 1 o	of 1								
Peak Hour for Entir	e Intersect	ion Begin	s at 04:30 F	PM _								. 1	
04:30 PM	0	111	0	111	58	1	0	59	1	0	0	1	171
04:45 PM	0	117	0	117	56	0	0	56	0	0	0	0	173
05:00 PM	0	108	0	108	58	U	0	58	1	0	0	1	167
05:15 PM	0	124	0	124	216	1	0	217	1	0	0	3	680
% App Total	0	400	0	400	99.5	0.5	0	211	100	ŏ	Õ	Ū	000
PHF	.000	.927	.000	.927	.931	.250	.000	.919	.750	.000	.000	.750	.983
Lights	0	446	0	446	214	1	0	215	3	0	0	3	664
% Lights	0	97.0	0	97.0	99.1	100	0	99.1	100	0	0	100	97.6
Buses	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	16
	0	14	0	14	2	0	0	2	0	0	0	0	24
% Irucks	0	3.0	U	3.0	0.9	U	U	0.9	U	Ū	0	U	2.1
							(100)					-	
						In In 446 0 460 14 460 0 446 0 14 460 14 460 14 460 14	Total 660 0 16 676 0 0 0 0 0 0 0 0 0 0 0 0 0						
	Exelon Power Driveway Out In Total 1 3 4				Peak H Lights Buses Trucks	k Hou North	r Data at 04:30 PM			0		Fake Approach	
					44 1 44	eft Thru 1 214 0 0 2 1 216 9 215 0 4 2 3 217 In mer Street (6	Peds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Exelon Power Driveway Medway

File Name : 790 Route 126 at Site Driveway PM Site Code : 790 Medway Start Date : 9/16/2014 Page No : 1

				Gro	ups Print	ed- Lights	 Buses 	- Trucks					
	Sum	mer Stree	et (Route	e 126)	Sun	nmer Stre	et (Route	e 126)	Exe	elon Pow	er Drivewa	ay	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds A	App. Total	Int. Total
03:00 PM	0	80	0	80	46	0	0	46	0	0	0	0	126
03.15 PM	õ	92	Ō	92	54	0	0	54	4	1	0	5	151
03:30 PM	õ	106	Ō	106	60	0	0	60	0	0	0	0	166
03:45 DM	Õ	107	ō	107	53	0	0	53	0	1	0	1	161
	<u>0</u>	385	<u> </u>	385	213	0	0	213	4	2	0	6	604
rotari	Ū	000	•						•				
04.00 PM	0	99	0	99	60	0	0	60	1	. 1	0	2	161
04:00 PM	0	91	ő	91	52	1	0	53	0	0	0	0	144
04.131 M	0	111	ñ	111	58	1	0	59	1	0	0	1	171
04.30 F M	0	117	Ő	117	56	Ó	0	56	0	0	0	0	173
	0	418	0	418	226	2	0	228	2	1	0	3	649
Total	0	410	Ũ			_							
05-00 DM	<u>م</u>	108	0	108	58	0	0	58	1	0	0	1	167
05:00 F M	ň	124	õ	124	44	0	0	44	1	0	0	1	169
05.13 FM	Ö	104	õ	104	58	Ō	0	58	0	0	0	0	162
05.30 FM		03	ň	93	63	Ō	0	63	0	0	0	0	156
	0	429		429	223	0	0	223	2	0	0	2	654
TOLA	0	423	0	420		-							
Crand Total	1 0	1232	0	1232	662	2	0	664	8	3	0	11	1907
		100	ň	ILUL	99.7	0.3	Ō		72.7	27.3	0		
Appicit %	0	64.6	ň	64.6	34.7	0.1	ō	34.8	0.4	0.2	0	0.6	
		1190		1189	649	2	0	651	8	3	0	11	1851
Lights	0	06.5	0	96.5	98	100	Ō	98	100	100	0	100	97.1
% Lights	0	90.0	0	30.0	2	0	0	2	0	0	0	0	5
Buses		0.2	0	. 02	03	õ	ō	0.3	0	0	0	0	0.3
% Buses		40		<u> </u>	11	0	<u>0</u>	11	0	0	0	0	51
		40	0	40	17	0 0	0	1.7	Ō	ō	Ō	0	2.7
% I rucks	0	3.Z	U	J.Z	1 1.7	0	0	1.7	· ·	-	-		1

N/S: Summer Street (Route 126) E/W: Main Street (Route 126) Medway, MA

File Name: 790 Main St at Summer St PM Site Code : 77700001 Start Date : 9/16/2014 Page No : 2

	Sum	mer St	reet (Route	126)		Ма	in Str	eet			D	rivewa	ıy		Ма	in Str	eet (R	oute 12	26)	
	Quin	Fro	om No	rth	,		Fr	om Ea	st			Fro	om So	uth			-Fr		Bada		La Talal
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App, Total	Right	Thru	Leit	Peus	App. Total	Int. Total
Peak Hour A	nalysis	From	4:00:	00 PM	to 5:45	5:00 PM	I - Pe	ak 1 of	1												
Peak Hour fo	or Entir	e Inter	sectio	n Begi	ins at 4	:45:00	PM		•	4 - 0	0	^	0	٥	0	0	74	42	0	116	383
4:45:00 PM	108	0	6	0	114	3	150	0	0	153	0	0	0	n n	ñ	ů n	93	57	Ō	150	406
5:00:00 PM	96	0	9	0	105	6	145	0	0	101	0	0	0	ñ	õ	õ	124	45	ō	169	418
5:15:00 PM	104	0	10	0	114	3	132	0	0	113	0	ñ	ő	ñ	õ	Ō	90	45	0	135	364
5:30:00 PM	97		19		116	4	536		0	552	0	0	0	0	0	0	381	189	0	570	1571
Total Volume	405	0	44	0	449	20	071	ů ů	ő	002	ŏ	ō	Ō	0		0	66.8	33.2	0		
<u>% App. Total</u>	90.2	000	9.0	000	968	667	.893	.000	.000	.902	.000	.000	.000	.000	.000	.000	.768	.829	.000	.843	.940
Phr	.930	.000	.010	.000									_	-	_		400	400	0	100	00 A
Passenger Venicles	99.0	0	100	0	99.1	100	98.9	0	0	98.9	0	0	0	0	0	0	100	100	U	100	55.4
Heavy Vehicles								_				~	~	0	0		٥	٥	0	0	0.6
% Heavy Vehicles	1.0	0	0	0	0.9	0	1.1	0	0	1.1	0	U	U	U	U	I U	U	U	U	. 0	0.0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•																		7		
									Out 203 201 401 401 405 Right	In 5 4 5 4 0 0 0 0 Thru 4 1 1 1 1 1 1 1 1 1 1 1 1 1	44 49 49 44 44 44 Left	otal 650 4 654 0 0 0 Peds									
			Main Street (Koute 126) Out In Total 931 570 1501	941 0 10 941 570 1511	0 0 381 189	Peds Right Thru Left	*		Peak I Peasse Heavy	K HC 1 No Hour Beg Onger Vehicles	our E orth ins at 04 sicles)ata :45 PM			Right Thru Left Peds	16 530 0 0 0 6 0 0	425 552 977	Out In Total 425 546 971 0 6 6	Main Street		
												Peds 0 0 0 0 Total									
MDM Transportation Consultants, INC. 28 Lord Road, Suite 280

Marlborough, MA

N/S: Summer Street (Route 126) E/W: Main Street (Route 126) Medway, MA

File Name : 790 Main St at Summer St PM Site Code : 77700001 Start Date : 9/16/2014 Page No : 1

						Gro	oups F	rintec	i- Pass	senger \	/ehicle	es - He	eavy \	/ehicle	s						
	Sur	mer S	treet	Route	126)		Ma	ain St	reet	-		Ľ	Drivew	ay		Ma	ain Str	eet (R	oute 1	26)	
	oun	Fr	om No	orth	,		F	rom E	ast			Fr	om So	buth			Fi	om W	est		
Ctart Time	Dista	Theu		Dede		Diabt	Thru	Left	Peds	San Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
	Right	0	10	n Peus	App. Total	2	137	0	0	139	0	0	0	0	0	0	79	55	0	134	375
04:00 PM	92	0	10	0	00	5	130	ň	ň	135	õ	Ō	Ō	Ó	0	0	84	48	0	132	357
04:15 PM	85	0	5	0	104		110	ŏ	ő	127	ñ	ň	ñ	ō	Ō	Ó	82	48	0	130	361
04:30 PM	97	0		0	104	0	119	ő	2	152	ő	ň	ň	ň	ñ	Ō	74	42	Ó	116	383
04:45 PM	108	0	6		114	3	150	0	0	100	- 0				<u> </u>	<u> </u>	310	193	0	512	1476
Total	382	0	28	0	410	18	536	0	0	554	0	U	0	0	Ų	1 0	010	100	Ū	0.2	
								-				•	~	~	0		02	67	0	150	406
05:00 PM	96	0	9	0	105	6	145	0	0	151	0	U	0	0	0		404	37	ő	160	410
05:15 PM	104	0	10	0	114	3	132	0	0	135	0	0	0	0	0		124	45	0	105	264
05:30 PM	97	0	19	0	116	4	109	0	0	113	0	0	0	0	0		90	45	0	130	304
05:45 PM	88	0	5	0	93	6	115	0	0	121	0	0	0	0	0	0	111	49		160	3/4
Total	385	0	43	0	428	19	501	0	0	520	0	0	0	0	0	0	418	196	0	614	1562
Grand Total	767	0	71	0	838	37	1037	0	0	1074	0	0	0	0	0	0	737	389	0	1126	3038
Approb %	01 5	0	85	ñ	000	34	96.6	Ó	0		0	0	0	0		0	65.5	34.5	0		1
Appicit 78	25.0	0	2.2	ň	27.6	12	34.1	ō	Ō	35.4	0	0	0	0	0	0	24.3	12.8	0	37.1	
10(a) %	25.2	0	2.J	0	21.0	1.4	1023														
Passenger Vehicles	0.00	•	00.6	0	00.0	100	08.6	0	0	98.7	0	0	0	0	0	0	99.5	99.2	0	99.4	99
% Passenger Vehicles	98.8	<u> </u>	98.6	U	90.0	100	30.0	0	0	00.7											
Heavy Vehicles	1 4 9	•		•	10		1 4	0	0	1 3	1 0	0	0	0	0	0	0.5	0.8	0	0.6	1
% Heavy Vehicles	1.2	0	1.4	0	1.2	0	1.4	Ų	0	1.5	0	0	Ų	Ŭ	0	1 0	9.0	2.0	-		

□ Seasonal and Background Growth

									Average														Average	
	September Adjustment to Year	1.01	66 U		1.00	0.99	1.00		1.00		0.97		0.95	0.96		0.98	000	30.0	0.95		0.94	0 96	0.95	0.98
	A.	~ 0	-0.16		(D \S		~ ~ ~		 	~	-	%	0	% O	· ~	2	~ ~	0 %		%	56	%		ent Factors
		YEAF 49,732	νς αν	6F-	47,62(1º	48,23	19 48 79		-0.65	YEAI	80,30	0	29'63 29'63	-0 80 07	4	77,00	02	19,01	79.01	ŏ	78,95	20.02	-0.04	Adjusm
ç		DEC 47,007	-1%	40,030 2%	47,564	49,888	47 600	2%	48,441	DEC	75.126	2%	76,386	-5%	-2%	70,747	30, <u>5</u> 2, %E	/3,109	75 273	2%	76,729	-2%	14,903	Average
ILY TRAFF		NOV 49,662	-4% -4%	4/,490 0%	47,379	49,151	2%	-1%	49,651	NON	78.746	1%	79,468	-2%	-5%	73,861	2%	75,486	0/c 77 516	2%	78,698	1%	/9,543	
VERAGE DA		OCT 50.571	-3%	49,009 1%	48,663	49,198	2%	%0 %0	50,021	00T	79 478	1%	80,518	2%	%5°,28	79,645	%0	79,419	0/4/0 7/1/	-2%	80,223	3%	82,647	
MONTHLY A		SEP 49 031	-1%	48,531 - <i>2%</i>	47,762	1% 48,825	%0	48,882 2%	49,935	CFD	32 180	1%	83,740	-1%	83,309 -5%	78.778	6%	83,273	%0 %0	03,403 1%	84,288	-1%	83,100	
NG STATION		AUG 52323	-7%	48,759	47,056	1% 48.234	4%	49,941 -1%	49,223		DOK 20	70C-	89.595	2%	91,080 50	-3% 86.189	1%	86,829	4%	367'06	87.108	4%	90,589	
ous counti		JUL JUL	-8% -8%	48,629 20/	-2.70 47,638	-1% 46 812	3%	48,380 3%	49,797		JUL 20.105	70V 70V	84.957	4%	88,401	-4% 84 701	-1%	84,000	4%	87,728 102	- 1 /0 BG 859	-1%	85,909	
I I - CONTINU	- - -	JUN I.Y.	000,2c	49,936	0%0 49,934	1% הח הסה	-1%	49,961 -9%	45,623			90'06Z	85 77B	3%	88,000	-8% 81166	-1%	80,700	%2	86,167	971 87 344	%0	87,015	
SECTION			50,000 1%	50,518	-2% 49,474	%0 102.07	19, 64	50,126 1%	50,657	Υ T.L.	MAY	84,600	0/C-	%9 9%	85,024	-70 of	/9,332 -1%	78,876	-1%	77,940	3% 90.458	2%	81,707	
		9 - EAST OF APR	49,136 1%	49,816	-2% 49.049	%0	40,943 -1%	48,662 1%	49,359	- AT MEDWA	APR	79,123	-1%	-2%	76,751	-1%	/5,934 1%	76,913	1%	77,906	-1%	1%	78,117	
		JUGH - RTE. MAR	49,268 _3%	47,829	3% 46.455	2%	48,U15 1%	48,608	47,421	- RTE.I-495 -	MAR	74,150	3%	/b'34/ -4%	73,596	3%	76,000	69.739	2%	73,544	1%	13,992	74,372	
		WESTBOR(FEB	47,283	46,112	1% 46.434	%0	46,150 2%	46,883	46,220) - MILFORD	FEB	71,945	-1%	71,145 	70,432	-3%	68,456	69 136	-1%	68,595	2%	69,804 7%	71.280	
		TATION 307 - JAN	47,505	45,614	-3%	-1%	43,244 70/	46,381	0% 46,393	STATION 3180	JAN	67,586	%2	72,492	70.749	-2%	69,200	0%G-	3%	67,428	-3%	65,217 80/	0.70 70 333	-
		, S K	07	08	ç	e D	1	12	13		ΥR	05		90	07	i	80	ç	20	6		£	10	į

ITALICS = ESTIMATED DATA MADT

-0.35% **0.5%**

Average Yearly Growth Calculated Yearly Growth Factor Used □ Speed Data

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

Site Code: 7900001 Station ID: Latitude: 0' 0.0000 Undefined 790 Summer Street (Route 126) Speed

Total	ထတ္ထ	28 28	184 346	405 426	211 171	196 174	194 228	205 210	260 203	142 117	104 54	21 3946
76 999	0 0 C) O C	00	000	00	00	00	00	00	oc	00	00
71 75	0 0 C	, o c	000	, o c	00	00	00	00	00	00	000	00
66 70	0 0 C	000	, o c	oc	000	0	000	00	00	. o c	, o c	000
61 65	000	000	000	00+	- 0 c) O C	, o o	00	- 2 C	000	000	30 (
56 60	0	000	1		- 0 ~	1	-	3	000) , _ _	0 C	0 16
51 55	000	00,	- . . c	7 7	t 01 a) - c	1 C) C)	5 0	3		» ب د	42
46 50	- 0 0	7	20 20	20 °9	3 23 %	3 0 4	28 28 28	10 23	46 23	15	ל מ	2 445
41 45	0.00	99		12/ 164 146	140 72 55	22 72 84	01 81 77	74	113	54	32 43 28	20 1471
36 40	3	ကဆင့်	6 <u>6</u>	146 119 154	- 08 80 ¢	2 89 1 2 8 1	59 76	92	رع 76 50	57 57	36 36 4	13 6 1384
31 35		000	α 11	25 45 7	52 13 22	0 7 7 7 7 8	10 14 24	77.5	- 8,	1 <u>3</u> 7	ۍ ه د ۲	369 269
30 30	00	0,0	- 3	4 4 18	19 16	4 7 v	, 2, α		- 0 6	y F,	, a a	145
21 25		0	3 7	; e 5	11	ر ع	γ γ γ α	° 2 °	ົວເ	. 0 0	, o 1	54 0 0
16 20	200	1	0 0	00	5 0	- 0	400	000	00	00	00	8 0 0
+ بر بر	200	0 0	00	00	0 Į	0 0	0 - 0	о - г	0 2	0	0 2	0 0
Northbound Start Time	09/17/14 01:00	02:00 03:00	04:00 05:00	06:00	00:60	10:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

I Transportation Consultants, Inc.	28 Lord Road, Suite 280	Mariborough, MA 01752	508-303-0370	www.mdmtrans.com
MDM				

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

Site Code: 7900001 Station ID: Latitude: 0' 0.0000 Undefined 790 Summer Street (Route 126) Speed

Total 16 16 16 16 174 444 444 444 174 174 174 174 174 174	<u>3991</u> 7937
7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
00000000000000000000000000000000000000	ou pic
000000000000000000000000000000000000000	
,004000,000,000,000,000,000,000,000,000	121
\$ <u>6</u> 60−00∞5%8858222≈552886555∞	908
<u>4482828255588586586586566666666666666666</u>	1522 2993
2388.8528882333222727029 <mark>9</mark> 638 288823332227270299638 2888288828882	2818
E ∞ - 0 0 0 4 5 ∞ 6 4 6 2 4 4 5 2 2 2 2 5 6 5 ∞ 6 € ∞ 6 5 ∞ 6 5 ∞ 6 5 ∞ 6 5 ∞ 6 5 ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 5 ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 € ∞ 6 5 ∞ 6 € ∞ 6 ∞ 6	8 8 8 9 7 T T T T T T 7 8 8 9 7 7 7 7 9 9 9 9 7 7 7 7 7 7 7 7
0070007979497709720900007000	90 90 40 MPt 44 MPt 48 MPt 73.2% 73.2% 0.4%
0000000000000000000000000000000000000	0 50 104 104 centile : centile : cen
000770000000000000000000000000000000000	0 15th Pere 50th Pere 85th Pere 85th Pere 85th Pere 85th Pere 85th Pere MPH Pace Number ir Percent ir Percent ir Percent ir
<u>- 6000000000000000000000000000000000000</u>	20 20 Mean 10 h 3ercent of Ve
Northbound Start Time 09/18/14 02:00 03:00 00 00 00 00 00 00 00 00 00 00 00 00	Grand Grand Total Statistics

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752 508-303-0370 www.mdmtrans.com

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

Site Code: 7900001 Station ID: Latitude: 0' 0.0000 Undefined 790 Summer Street (Route 126) Speed

ŀ	1 otal	<u>;</u> 6 «	12 17	41 141	222 203	145 155	160 176	193 250	361 457	451 325	202 168	06 6	3938
76	666 U) O C	, o o	00	00	00	00	00	00	00	00	00	00
71	75	000	00c	000	00	00	, o c	00	00	00	• •	00	00
99	70) o c	, o c) O C	, o c	0	- 0 0	00	00	00	-
61	65	000	- - - -		-	000	> o c) o c) 1 0	0 0	00	00	2
56	09	о с	0	> c	0 00 0	, o c	000	> o c	- 2 4	- 0 0	02	000	08
51	55	• • •	0 1	4	- 9 4	ົດເ	- r c	- 2	u	2 4	. u .	1 – –	61 61
46	50	പറ		- 9	-11 22	2 9 2 7 8 2	15 25	19 19	32 20 20	25 25 25	9 0 5	<mark>6</mark> 8	359
41	45	12 5	2 7	6 17 6	/3 99 35	۵ 89 2	64 73 25	69 74 24	91 141 707	158 1158 116	93 63	35 24	23 1510
36	40	10 3	9	6 13	49 76	/3 45	-23 	65 86	140 83	219 219	<u>9</u> 69	3 3 3	1539 1539
31	35	- 5	2 0	50	5 10	20 7	11	4 10	49 36	8 4 2 4 2 7	- 6,0	30 7 a	397 397
26	30	0.	00	0,	6	90	00	0 .	9 7	, 16 1	- 0 '	000	2 2 2
21	25	0 0	00	0 0	00	00	00	0	00	2 0	00	000	004
16	20	00	00	00	00	00	00	00	1	00	00	0 0	00+
Ŧ	- 15		00	00	0 0	0 +	00	o ,	o ,	- 0	00	00	004
Southbound	Time	09/17/14	02:00	04:00 05:00	06:00 07:00	08:00 09:00	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752 508-303-0370 www.mdmtrans.com

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

Site Code: 79000001 Station ID: Latitude: 0' 0.0000 Undefined Summer Street (Route 126) Speed

										PH PH 773 78 2% 9%	41 M 36-45 M 77.	werage) : e Speed : in Pace : in Pace : 55 MPH : 55 MPH :	an Speed(/) MPH Pac Number Percent Vehicles > (Me 10 Number of Percent of	Statistics
										HAHA	35 M 39 M 44 M M M M M M M M M M M M M	ercentile : ercentile : ercentile : ercentile :	15th P 50th P 85th P 95th P		
7820	0	0	N	4	13	116	759	2964	3109	751	84	7	-	10	Grand Total
3882	0	0	~	2	S	55	400	1454	1570	354	32	e	0	9	Total
61	0	0	00	00	-	ح 4	6	28 26	34 18	13 3	0	0 0	0 0	0 0	22:00 23:00
132 84	00	00	00	0	0,	τ.	í,	54	41	13	90	òO	0	`	21:00
153	• 0	• •	0	0	0	10	ی ۲-	t 69	57	40 41	чС	o c		ອ ⊂	19:00
334 250	o c	0	00	0	1	en o	28	126 	153	18	4	0	0	-	18:00
405	0	00	0	0	`	n e	20 34	110	170	54 54	4 r.	o c	0	0 +	16:00
352	00	00	0	0	Õ	· • • •	22	134	146	42	9	,	0	0	15:00
219) 0	`	o c	o c			ح 2	107	99 77	ی ک	0 0	0 0	0 0	00	13:00
149	00	0	0	0	00	2	21	63	52		0	0	0	0	12 PM
180	0	00	00	-	7	ъ 1	25 22	76 69	45 76	9 1 0	00	۲ 0	00	00	10:00
157	00	0	0	Õ		2	19	64	67 67	5 4	° 0	- 0	0	- 0	00:60
198	0	0	0	. 0	, o	~ 7	22	63	82	2 C	۷ ۳	⊃ ≁	o c	D 4	00:00
120 219	00	00	00	0	00	e e	20 21	52 78	36 88	9.00	00	0	00	0	00:90
44	00	0	0	0	0	2 -	3	204	3 11	04	00	0	00	00	04:00
4.4	00	00	00	Ő	0	Ó			8	<u>0</u>	0	, 0	° 0	0	03:00
÷6	0) 0	-0	00	0	` 0	74	4 W	4 -	- -	o c	o c	o c	o c	01:00
41	0 C	00	0 •	00	0	3	ი ი	16	12	-	0	0	0		09/18/14
Total	666	75	70	65	60	55	50	45	9 4	35	3 6	25	0 0	- ג ג	Time
	76	71	66	61	56	51	46	41	36	31	26	21	46		Southboun
co) opeed	er (Koute 17	ummer stre													

> West Street West of Driveway Medway, Ma

Site Code: 790

WEST STREET WEST OF DRIVEWAY_SPEED

	Total	0	م 1	00	3 10	37 36	18 14	18 21	15 32	¥8	32 32	28 19 ·	12	411
76	66	00	0	00	00	00	00	00	00	00	00	0	00	00
	. 6													
71	75	00	00	00	00	00	00	00	00	00	00	00	00	oo
99	32	00	0	00	00	00	00	00	00	00	00	00	00	00
ų t	65	00	00	00	000	00	00	00	00	00	00	0	00	00
ц Ц	2 09 2 09	00	, 0	00	000	00	00	00	00	00	0 C	000	000	00
) 1940-1944	()	(
ŭ	55	0	-0	oc	, , , ,	,00	.00						,00	
ar	50 1	00	00	oc) o c) o c	000	o c	000	00	000) O C	000	00
+	- 13	00		00) 	·⊤c	070	- o c)))))	0,0+	c	000	000	09
	14													
ac	8 6 7	00	- 0	00	o+ ∘	102	• 4 4	÷ ۲ و) 00 4	- O r) N () 4 c	100	67
1	35 - 35	00	. 0	00	о — и	15 23	} ► 4	۰ ۲ ۵	ر ح ا	i 7 t	202	i rū -	<u>-</u> ი	<u>91</u>
	., .,													11
ŰC	9 R	0	~ ~	· o c) 0 (າວແ) 4 r.	ر م	~ ~ α	ာထာ	, 1 , ć	<u>1</u> 0 «	>	- 113
Ţ	25 25	0	0 0	, o c	000	o	- D C	- 2 -	- 0 +	- 4 c	ı — بر ا	о м с	> o c	30 0
	20 20	0	0 C			000	> o c) O C	00	- - - c	000	00	000	0 0 0
	15 1	0	o c	, o c				, o c			> - - c	> - - c		~ 0 ~
p														
stboun	Start l'ime	3/17/15	01:00	03:00	05:00	00:20	00:00	11:00		15:00	17:00	19:00	21:00	23:00 Total
Ne		30												

West Street West of Driveway Medway, Ma

Site Code: 790

WEST STREET WEST OF DRIVEWAY_SPEED

Total	30	2 2	00	2 12	34 37	26 14	22 18	24 39	48 35	2 <u>9</u> 29	28 19	13 13	450
76 999		00	00	0	00	0	00	00	00	000	000) O C	000
71 75	20	00	00	00	00	0	0	0.0) O C	, o c) O C	, o c	00
00		00	00	00	00	000	00				, o c	000	
Ϋ́Θ													
61 55	30	00	00) O C	oc	000	000) o c) O C	00) O C) O C	, 0 0
20 20	30	<u> </u>	o c) O C) O C) O C) o c) O C) O C	>oc) O C) O C	, o o
51 54		00	00	, o c) O C) o c) O C	0	000	000	, o c	000	000
46	0	00	00	, o c	000	, o c		000	, o c	000	000	000	000
		((0						1 -			
41	4						, , ,						
36	7	00	00	20 Y	- 10 7	- 0 c	12 6	4 01 6	o ~ c	~~ ~	າຕເ	າຕ	- 73
31	20 20	0	·oc	~ 7 G	151	<u>- 0</u>	, , ,		5 8 4	<u>, 5</u>	<u>+</u> – – e	041	2 212
26 26	0	Р С	000	- O C	<u>،</u> ه د	<u>0</u> °	י © מ	າດເ	<u>, 0 t</u>	~ 6 F	- 7 0	י בי מ	5 135
5	<u>0</u> 0	, с	000		- 5 C	- 6			ი ი ი	000	00		0
	.N												
16	070	0	- 0 0			000	010	000	° O	- 0 0		- 0 č	0
- !	12	0	000	000	00	000	000	000	00	- o a	00	000	0 0 C
bound art	ne 8/15	1:00	13:00 13:00	15:00	00:00 17:00	00:60	1:00	3:00 3:00	5:00 5:00	6:00 7:00	00:8	11:00 11:00	22:00 70tal
West St	D9/1		00	000	000							N 01	N 0.

West Street West of Driveway Medway, Ma

Site Code: 790

WEST STREET WEST OF DRIVEWAY_SPEED

	Total	. o c) 0 0	2 2	- 2 -	59 50	14 %	30 30 32 3	23 26	25 16	01 8	14 14	357
76	666		00) O C) O (, o c	, o c	, o c	000	, o c	, o c	, o c	00
71	75	- o c	, o c	, o c) o c	000) O C	, o c	, o c	, o c	, o c	, o c	00
99	20) o c	, o c	, o c	000	000	, o c	, o c	000	, o c	000	
61	65	0 0 0	000	, o c	, o c	, , , , , , , , , , , , , , , , , , ,	000	> o c	0	000	0	000	
56	60	000		000	> 0 c	000	, 0 0	000	000	00	0	000	
51	55	000	- o c	00	00	0	0	000	, o c	000	00	000	000
46	50	000	000	000	000	000	0 0		000		000	000	000
41	45	000	000	000	000	0 7 G	- 0 0	- 0 0	000	-07	- 0	000	3
36	84 84	0 2	000	000	000	, o c	4 7 •	4 0 -	040	ہ - م	0,0		48
24	35 35	0 2	000		C	11	14 17 5	10 10	12 	15 19	5 12	4 8 ł	11 4 182
ar	30	0 0	000		- 0	9 8 9	13 8 1	13 Z	8 7	4 0 (3 5	ъ 4 Э	00
	25	1	00	0 0	o , ·		3	, 2 0	e O	1 5	0	0 Ú	2100
		0	0 0	0.0	0 1	0	0	0 0 1	0	0	0	0 0	300
	- 0	0	00	0	00	0	0	0 0	0 0	0 0	0 0	00	000
pu	11))	1	()))	
Westbou	Start Time	09/19/15 01:00	02:00	04:00 05:00	06:00 07:00	08:00 09:00	10:00	12 PN 13:00	14:0C 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Tota

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	Total	2	0		^ N ¢	- - 4	, 1 3 23	17 6) , , , ,	14 20	28 24 24	15 12	9	0 0	107
97	0) 666	o c	0	00	00		, o c) o c) o c	000) O C) O C	000	000	2
11	75 75	0 0	00	00	000	- o c	, o c	, o c) O C	, o c	, o c) O C) O C	, o c	5
			0												_
č) •							,) -		,) , j				
2	65 65	00	00) 0 0	000	000		000) O C) O C	000) O C		> o (J
C	00 00	00	- c) O (00	000	, , , , , , , , , , , , , , , , , , ,	000	• o c	000	, o c	o o c	, o c	00	∍
1	51 55	0	- c	, o c	00	- 0 0	> o c	000		000	, o c	> o c	, o c	, o c	Б
)													1
	4 2 2	J))))				- - -			•
	41 45	0	o c	00		000		- 0 0				000	000		-
	40 36	0	o c	00	- г	-0,	•	າຕເ	י מ י	- 10 -	t 0 c	0 O 0	• O 0	- 0	34 24
	31 35	2	~ c) , ,	c	0 - 0	n œ ç	17 17	ç Q Q	2 1 5	- 67 5	1 00 1	- 4	7 O F	125
	0.0	0			0.0	207			~ 6	- 2 -	4 O n	0 /	v 0 0	0	თ
	8 8)												ũ
	21 25	0	o	0	00	0 0	о о с	N N N	- o c	-00	> 4 0	0 0	000	> 0	<u>1</u> 3
	16 20	0	00	0 0	00	0 0	0 0 i	0 o i	၁၀၀	, o c	- 0	- 0	000	, o	4
	1 15	0	00	00	0 0	0 0	00	0 0 i	- 0 (00	- o ·	o o	- o d	0 0	0
pu		5	Ć		0	0			Ć		0	'n		0	_
Westbou	Start Time	09/20/1{	01:00	03:00	04:0(05:0(06:01 07:01)0:60 0:60	10:01	12 PN 13:0(15:0(16:01 17:0(18:0	21:00	22:0 23:0	Tota

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

Total	0 0 0	o n c	490	43 24	25 25	20 14	18 34	25 40	35 24	24 15	12 6	407
76 999		0 O C) O C) O C) O C	oc) O C) O C	000) O C	000	
71 75		000) o c	000	000	, o c	, o c	, o c	, o c	, o c	
66 70		000		> o c) O C	> o c	, o c	, o c) O C	000	000	
61 65	800	000	000	00	,00	0	000	000	000	, , , , , , , , , , , , , , , , , , ,	, o c	00
56 60	000	00	000	, o c	000	000	> o c	000	00	0	000	
51 57	800	00	000	000	00		000	000	000	000	000	
46		00	000	000	000	000	000	· • •		000	000	500
41	000	00	000	⊃ र- र	- 0 4	- o c	- o -	-0	o r c	000	000	5 1 0
36	0 - 0	07	000	n C C	، O α	о У С 3	၁ကဖ	ი ი.	40,	4 7 -	0	72
31	35 1 0	00	0.00	3 23		12 10	10 10	19 16	70 13 13	12 ,12	10 °	3 4 207
26	0 0 0	00	0	6 - 1	3 	<u>-</u> 2	, L	6 0	12 12	9 9 '	ۍ ۲	0 0 46
21	25 0	0.	00	0 0 ·		1	1	0	3	2 7	0 0	1 23 23
16	0 0 0	000	00	00	0 0	1	0 0	00	0 0	00	1	004
-	15 0	, o o	00	00	0	0	00	0 0	00	0	0	000
<u>Westbound</u> Start	Time 09/21/15 01:00	02:00 03:00	04:00 05:00	06:00	00:00	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

West Street West of Driveway Medway, Ma WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

Total 0	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3833332244 3833382544	28 23 16 16 445 2307 2307	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0000000	
71 75 0 0 0			000000	
66 70 0 0 0 0			0000000	
61 65 0 0 0 0	000000			
20 0 0 0				
51 55 0 0				
46 50 0			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
41 0 0 0	00-0-0-	00000775C	3 <u>3</u> 3 - 7 - 0 0 0	
0 0 36	ი ი ო 4 დ თ ო	- 4 ო ო დ 4 ო ე ა	33 0 369 369 369	
007333	007700 5797700	çooççç248;	22 13 8 6 6 6 7 1 128 1128	1111 II 0888
0 30 1 26	α ω α ο → → Ο	4 r w α 6 6 6 6 6 6	621 621	26 MF 31 MF 35 MF 35 MF 38 MF 26-35 MF 75.8 66.4
21 25 0	000+++0	000747070	2 2 4 4 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2	arcentile : arcentile : arcentile : arcentile : arcentile : a Speed : in Pace : in Pace : b0 MPH : 80 MPH :
16 20 1	000000	00077000	24 0 0 0 24	15th Pc 50th Pc 85th Pc 95th Pc 95th Pc MPH Pacc Number Percent /ehicles > 3 /ehicles > 3
- 1 000	000000		7	Me: 10 Vumber of V
Westbound Start Time 09/22/15 01:00	03:00 04:00 05:00 06:00 06:00 08:00 08:00 09:00	10:00 11:00 12 PM 13:00 14:00 16:00 16:00	18:00 20:00 22:00 22:00 22:00 70tal Total Total	Statistics

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	10181	t O i	000	2 ⁰ 6	38	- 1 1 1 1 1 1	13 24 24	25 32	30	44 31	16 15	94	404
76	888	00	000	000) O C	000	000	, o c	000	, o c) O C	, o c	
71	<u>د</u> ر	00	000	- o c) O C	o o c	, , , , , , , , , , , , , , , , , , ,	, o c) O C) O C	, o c	, o c	
66 70	2	00	000	- o c	, o c	> o c	000	- -		000	000	0	
61	65	0	000		000	000	000	000	000	000	00	000	00
56	60	0	00		> o c	000	000	000	> o <	, o c	000	000	000
51	55	0	00	000	00	000	000		000	000	.	000	
46	20	00	00	000	000	000	000	000	>0	000	0	000	000
41	45	00	00	000	v 0 v		о г (<u>، -</u> د	- 2 -	- 4 0	c	- 0	0 18
36	40	1	0 0	0 - 0	ით	а Э б	. 4 a	م ک	م 2	<u>_</u> @ (000	2 - 2	94 84
31	35	10	00	2 4 2	<u>-</u> + (a 11 1	99	13 19	12	12 21 12	13	-10	1 3 179
26	30	0 2	00	0 F ·	4 16	о ю ;	2 2	0 0	000	9 O O	ہ 4 م	2 2	- 1 95
21	25	0 0	00	0 0	3	0	1 0	5 -	ō Z	0 2	1 0	0	15 0
16	20	00	00	00	0	1	0	001	0 5	0	0 0	0	000
-	15	0		00	0 0	0 0	0 0	0 0	0 0	0 0	0	0	00
Eastbound Start	Time	09/17/15	02:00 03:00	04:00 05:00	06:00 07:00	08:00	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

West Street West of Driveway Medway, Ma

Site Code: 790

WEST STREET WEST OF DRIVEWAY_SPEED

	Total	- - c	00	1 O ¢	41 23	-17 2.17	- 29 14	22 26 2	8 6 8	38 23 23	14) 4 (415
76	666	- o c	, o c		, o c) O C	000) O C) O C) O C	000) O C	000
71	75	- o c) O C) o c	000	000	ooc	o c	, o c	, o c	, o c		
gg	32		>o	> o c	000	000	000) o c	000) O C	000		
5	65	000		000	000	000	000	000	000	> o c	000	0	
EB	00 °	000	000		000	000	000	> o c		.	00	000	
L.	55 55	000	00	000	000	000	000	000	000	000	00	0	
4	50 50	000	000	- 0 0		- o i	000	- 0 -	- 0 0	200	7 O 7	-04	004
	41	000	00	c	4				- o (4 م	- 7 (oc	24
0	99 90 90	000	00	00	1 % N	, ,	4 7	ז מי 4	စ က ပ	101	4 W r	0 4 0	90 S
	31 35	~	o o	4 7	15 15	9.	10 13	0 10 c	<u>, 0 i</u>	- 4 - 4	- 4 - 4	ž v	6 188 188
	26 30	00	00	0	4 0 <u>,</u>	3	4 6	0 9 1	۹ 11 4	-10 9	4	2 ,4	833 O C
	21 25	0 0	00	0 +	· 2 0	-	5	0 0 ·	1		0 +	0	2002
	16 20	00	00	0 0	0	00	00	00	0 ო	0 0	0	0	200
	15 15	0 0	00	00	0 0	00	0	• •	0,	00	00	0	00+
Eastbound	Start Time	09/18/15 01:00	02:00 03:00	04:00 05:00	06:00	00:60 00:60	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

West Street West of Driveway Medway, Ma WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	TotoT		- c	<i>×</i>	00	2 6	13 18	20 29	2 4 24	37 28	26 27	22 17	9 9	დი	359
C T	9/ 000	222		o	00	00	00	00	00	00	00	00	00	00	00
Ĩ	1/	C/	0	00	00	0	00	0	00	00	00	0	00	00	00
Ċ	00 0	2	5 0	00	00	00	00	0 0	00	00	0	00	00	00	00
	61	ço	ъ	00	00	0	000	00	00	00	0	00	0	00	00
-	9 <u>2</u>	ng	0	00	00	000	, o o	0	0	0	0	0	0	0	0
	5 - 1	22 2	0	00	o	000	000	00	00	• o c	, o c	0 1	00	00	0+
	46	De PU	0	00	0 0	000	0 0	0	0	2	0	· 0 0	0	0	0 7
	41	45	0	00	00) O +	- 7 -	7 7	4	- 2	- - - c	0 0		۰ ک	0 26
1	90 90	40	0	~ ~	oc	0.0	- ო ი	10	5	- 12 9	2 1 2) œ +-	4 2	7 7	1 76
	31	35	-	00	0 0) - c	1 O Q	14 6	10	15	1 — ç	10	10 4	5 3	2 153
	26	30	0	۲ 0	00	o.≂.¢	5-7	- 2 8	6 4	- 5 4	۲ <u>۲</u> «	7 7	2	3 3	79
	21	25	0	00	00	> o c) , c)	0,-	- r	, o c) O +	0	0-	
	16	20	0	00	00	00	00-	· 0 0	- ~ c	, o c	, o c	, - 0	- O C	0	04
	,	15	0	0	, O	0	>oc	- 0 -	O	, o c	o c	, o c	0 0	0	0 2
Eastbound	Start	Time	09/19/15	01:00	03:00	04.00 05:00 06:00	00:00	09:00	11:00 Mg C1	13:00	15:00	7:00	19:00	21:00 22:00	23:00 Total

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	Total	, 0 2) ► ▼	t o c	20 24 27	38	16 16	0 0 0 0 0 0 0 0	12 2 8 2 8	10	- O 9	3 266
76	0 666	000	- o.c	, o c) O C	000) O C) O C) O C) O () O C) O C	00
74	75 75	000		, o c	> o c	, o c	> o c	, o c	, o c	, o c	000) O C	00
Ĺ	00 02	000		, o c	> o c	> o c	000	<u>ہ</u> م	, o c	> o c	> o c		000
2	65 65	00	000	000	> o c	000	000	000) 0 0	000	000	000	0
C	00 00	0 0	000	000	000	> o c	000	> o c	000	000	000	000	000
L	51 55	0 0	000	0		0	0	000	000	000		000	000
	46 50	0	000	000	-	- 0 -	- 0		000	- O -	- 0		0 m
	45 45	0	0,-0	000	000	00			- 2 -		0.00	000	, 0 1
	90	10	000	- O -	- 0 1	- 6	იიი	, ο α	4 m c	വര	ο / 2 α	200	იუნ
	- 10 w 4	1	- 0			Ŷ	~~~~	'nϒ	0.00		0.00	20	
	ર્ખ ભેં												10
	30 30	0	000		7 F ú	~ • •	4 8 0	NOL	יסי	ייסם	20	-00	- - - - - - - - - - - - - - - -
	21 25	00	00	0 0	- 0 0	0 0	0 0	εοú	с, ,	ò	1	0 J	
	16 20	- 0	00	0 0	00	00	00	0 0 í	- o c	- 0	00	0 0	
	15 1	0	0 0	00	0 0	00	00	00	0 0	00	10	00	- 0
Eastbound	Start Time	09/20/15 01:00	02:00 03:00	04:00 05:00	06:00	08:00	10:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	75 999 Total	0 0 0				0 0 49 0 28	0 0 16	0 0 21 0 11			0 0 49 0 28			
	5 61 66 0 65 70	0												
	46 51 56 50 55 60	0	0											, ,
	36 41 40 45	0	<u> </u>	Ő			0 0 0	, , , ,	2 - 2	2 Q C	24 2	0 3 4 4		v
	21 26 31 26 31		Ŭ Ū				2 / 13 0 2	0 2 12 3 9 9 6 6	1 2 8 8	0 30 37 12 0 10 30 0 12	8 9 0	6 0 17 2		-
	1 16 20		$\overline{0}$	0000	0 0	0000	0 0	0 0 0	0 0	0 0		0		о О
Eastbound	Start	09/21/15	01:00	02:00 03:00	04:00 05:00	06:00 07:00	08:00 00:60	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00	20:00 21:00	22:00

West Street West of Driveway Medway, Ma

Site Code: 790

WEST STREET WEST OF DRIVEWAY_SPEED

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			FC.				90	11	ЧE	л 1	56	61	99	71	76	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		÷ 5	21	Ň	0 0	51 од	0,0	- t - t	0 0 0 0	- ע ה ע		- 4 9	85	75	666	Total
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0		N)	97	20		20	040	1			30	30			0	0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0			0		n C	00	0	0	0	ò	0	0	0	0) O	0
0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	0	-	6	0	0	0	0	٥	0	0	0	0	0	0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			0 0		0	00	0.	00	00	00	00	o c	o c	o c	эc	- ო
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			ŭ į		5	0 1 0	- 0.	ہ ر			000	, o c) O C	, o c	000	5 16
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ccccccc} 1 & 0 & 5 & 15 & 3 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0$			3 0	•		20	12 -	с <mark>О</mark>	0	ò	00	òo	00	00	, o (48 5 7
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 3 4 3 4 3 4 3 4 3 4 3 4 3 4 1 5 4 0			1		ם נו	15 6	თო	۲	0	00	0	0	0 0	o c	o c	31 17
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		J			9	04	იო	<u>ک</u>	0	0	00	0	0	0	0	11
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$, , ,			5	4	0	, c	0	0	0	00	00	00	22
0 1 7 5 7 2 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			0 1 2	• •	4 4	12 11	4 0	0 0	00	00	00	00	00	>0	0	27
	0 2 9 16 5 1 0) 1		7	5	7	7	0	0	0	0	0	0	0	53
0 1 9 15 1 3 0	0 1 9 25 15 7 3 0			20	<u> </u>	0 "	16 15	ۍ ځ	***	00	oc	00	0 c	oc	o c	oc	32 ¥
0 0 8 23 7 0	0 0 6 23 7 0			о С		0.0	1.5 25	15	- 1	° N	0	0	0	0	0	0	000
0 0	1 0 5 7 3 0		-	0	~	ω.	23	7	0	00	0	00	0	0	0	0 0	38 21
0 0	0 0			0		о ч	اں ح	٥٣) c) C	ر	- c	00	0	0	0	17
0 2 1 0 3 0	0 2 1 0 3 0			0		0	0	, -	0	Ő	ō	0	0	õ	0	0	,
6 14 99 182 105 20 4 1 0 0 0 434 22 83 492 979 547 123 21 2 0 0 0 0 0 2779 15th Percentile 32 MPH 547 123 21 2 0 0 0 0 0 2779 15th Percentile 32 MPH 32 MPH 33 MPH 123 21 2 0 0 0 0 0 0 0 2779 155th Percentile 33 MPH 33 MPH 140 MPH 1526 140 MPH 1526 1527 1526 <	6 14 99 182 105 20 4 1 0 0 0 0 43 22 83 492 979 547 123 21 2 0 0 0 0 0 43 15th Percentile 32 MPH 50th Percentile 32 MPH 50th Percentile 38 MPH 93 MPH <td></td> <td></td> <td>0 0</td> <td></td> <td></td> <td>0 +</td> <td>3 0</td> <td>0 1</td> <td>0 0</td> <td>0</td> <td>0 0</td> <td>0 0</td> <td>00</td> <td>00</td> <td>00</td> <td>2 0</td>			0 0			0 +	3 0	0 1	0 0	0	0 0	0 0	00	00	00	2 0
22 83 492 547 123 21 2 0 0 0 0 0 0 2709 15th Percentile: 32 MPH 50th Percentile: 32 MPH 32 MPH 33 MPH 33 MPH 33 MPH 50th Percentile: 50 MPH 50 MPH	22 83 492 979 547 123 21 2 0 0 0 0 0 0 0 0 0 0 0 0 0 271 15th Percentile 27 MPH 50th Percentile 27 MPH 50th Percentile 27 MPH 50 mPH <td></td> <td></td> <td>3 14</td> <td>ő</td> <td>1</td> <td>82</td> <td>105</td> <td>20</td> <td>4</td> <td>-</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>434</td>			3 14	ő	1	82	105	20	4	-	0	0	0	0	0	434
15th Percentile27 MPH50th Percentile32 MPH55th Percentile32 MPH95th Percentile41 MPH95th Percentile31 MPHn Speed(Average)33 MPHMPH Pace Speed31-40 MPHNumber in Pace1526Percent in Pace67.0%ehicles > 30 MPH73.4%	15th Percentile27 MPH50th Percentile32 MPH55th Percentile38 MPH95th Percentile31 MPH95th Percentile31 MPH05th Percentile31 MPH05th Percent in Pace152605th Percent in Pace67.0%6hicles > 30 MPH73.4%		6	2 83	49;	2	62	547	123	21	7	ο	0	0	0	0	2279
an Speed(Average): 33 MPH MPH Pace Speed: 31-40 MPH Number in Pace: 1526 Percent in Pace: 67.0% (ehicles > 30 MPH: 73.4%	an Speed(Average): 33 MPH MPH Pace Speed: 31-40 MPH Number in Pace: 1526 Percent in Pace: 67.0% ehicles > 30 MPH : 73.4%		15 50 95 95	th Percentile : th Percentile : th Percentile : th Percentile :	20004	27 MPH 32 MPH 38 MPH 11 MPH											
		Ales 10 1/	In Spe MPH Nur Per (ehicle (ehicle	ed(Average) : Pace Speed : nber in Pace : cent in Pace : s > 30 MPH : s > 30 MPH :		33 MPH 0 MPH 1526 67.0% 1672 73.4%											

□ Intersection Crash Data



INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Medway, M	A			COUNT DA	TE: <u>Se</u>	ept. 17, 2014
DISTRICT : 3	UNSIGN	ALIZED : [SIGNA	LIZED : [X
		~ INT	ERSECTION	DATA ~		
MAJOR STREET :	Milford Stree	t (Route 109)				
MINOR STREET(S):	Summer Stre	eet (Route 126	;)			
INTERSECTION DIAGRAM (Label Approaches)	North Milf	ord Street (3)	Summe (2	r Street 2)	Milford S (4)	itreet
			Summer (1	Street		
			PEAK HOUF	R VOLUMES		
APPROACH :	1	2	3	4	5	Total Peak Hourly
DIRECTION :	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :	445	453	517	627		2,042
"K" FACTOR :	0.09		ECTION ADT APPROACH	(V)= TOT/ VOLUME:	AL DAILY	22,689
TOTAL # OF CRASHES :	10	# OF YEARS :	4	AVERA CRASHES	GE # OF PER YEAR (() :	2.50
CRASH RATE CALCU	ILATION :	0.30	RATE =	<u>(A*1,</u> (V	000,000) * 365)	
Comments : MassDOT	District 3 Avg	s: Signalized	= 0.89, Unsig	nalized = 0.6	6	

Project Title & Date: 790 - Medway (Exelon Power)



INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Medway, M	IA				TE: <u>Se</u>	pt. 17, 2014
DISTRICT : 3	UNSIGN	ALIZED :	X	SIGNA		
		~ INT	ERSECTION	DATA ~		
MAJOR STREET :	Main Street					
MINOR STREET(S) :	Summer Stre	et (Route 126)	ass		
INTERSECTION DIAGRAM (Label Approaches)	↑ North Ma	in Street (3)	Summe (2	r Street 2)	Main St (4)	reet
			PEAK HOUF	R VOLUMES	I	Total Dook
APPROACH :	1	2	3	4	5	Hourly
DIRECTION :	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :		449	570	552		1,571
"K" FACTOR:	0.09		ECTION ADT APPROACH	(V)= TOTA I VOLUME:	AL DAILY	17,456
TOTAL # OF CRASHES :	7	# OF YEARS :	4	AVERA CRASHES	AGE # OF PER YEAR (A) :	1.75
CRASH RATE CALC	JLATION :	0.27	RATE =	<u>(A*1</u> , (V	000,000) * 365)	
Comments : MassDOT	District 3 Avg	s: Signalized	= 0.89, Unsig	nalized = 0.6	6	

Project Title & Date: 790 - Medway (Exelon Power)

	1888) 1988)		7742-61	TRACK I	THE PARTY	77281.0	1 50641	7 68505	Veve	AL175	٦
	No. of the other states of	Contrals	1118	67023	-12020	ATTR.	KZŪLO	877170	21.129	422.14	
	CONTRACTOR OF A	Coordinale	201723 1950	2012011020	204680 6543	USUS EZINCZ	201000 02420	201600 42162	1117 003HUZ	2012/12/02	
	0.000000000000000000000000000000000000	sultree XC									
	STORES STORES	oured Non Mar									
	Sector displaying the	Distance front N Lanconsk									
	A PAGE/CONTROLOGICS	Distance from Macrell Edd									_
	Orbitale from 2	Henricher Werneher									_
	Constant and the last of the lot of the	/ Interlection						м	×		
	P. How See Station Street	ca from General Rondare						FORD STREET Rim 109	FORD STREET Rie (03	VNER STREET / Rin 12	11.Rtm 103
	ACCESSION AND ADDRESS OF	Denne	LEET R10	1 STREET			STREET	45 MIL	45 MIL	46.50	Bie 12
	(carciers consistent)	istica	REET / SUMMER STI	UNER STREET INAU	REET (MAN STREE	1267 / Rts 126 / Rts	HEET RIP 120/ MAN				
	CALLE ALLENCING AND DECINE	n ARadom's	MILFORD ST 126 M	Rue 125/521	SURVERST	SUNUERS	SUMMER ST	-			_
	100 June 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Weeker Conditi	CreenClear	Churt	Centifier	à	Court	RenCourty	oet,	ClearClear	Cent
	AD A STOCHARTER REP.	Arbertyn	EMMED	Denter	Device	191	Dendst	Devict	Derk - Igtted randery	Det	Daviet
	States alteration	24	55 B	<u>8</u>	6 1	5 5 7		Wei	5 5 - 5	5	<u> </u>
	Apple and the second second second second	Vettes Configuration	VI: Light Fucktvan, met- penet, picture, sport untity orfy four tires / VZ Passe rar	VI: Ugd truckver, mit- penel, pickus, sportutting orty four tree / VZ, Pette cor	VI: Ugit tuckver, met- penel, jokup, sportudtif ony four tree / V2Ugit suckver, mit-ver, pane pickes, sportudtify with a tree.	VI: Upsi tuckyan, mirk- panel, pickup, sportushy onty four fires / V2.Upsi suckyan, miri-van, panel puckup, sportushy with p	VI: Uga tuckiver, mini- penel, pickup, sportuitif oriy four tree / V2 Pesse cer	VI: Passenger car / V2 Passenger car	VI: Passenger car / V2 Passenger car / V3 U ruckyan, mul van pera pictur, sport unity) with o tres	VI: Uga pucayan, min pena, pickup, sport uthy ony four time / V2 Passe car	V1: Not reported / V2 Not recorted
	**************************************	i Hered Perio	Collation with moder vehicle affic /VZ; Collation with or works in traffic	Collaton with motor vehicle afte J V2: Collaton with or vehicle in taillic	Colligion with motor verticle with / V2 Colligion with an verticle in traffic	Colision win motor vehicle affie //22 Colision win a motor in second	Colsion with motor vehicle sills /VZ: Colsion with or vehicle in traffic	Collsion with motor vehicle affic / V2: Colision with or vehicle in traffic	Contribution with moder vertice and / V2: Contribution with for verticite in traffic / V3 ⁻ ballon with moder verticie by fit.	Collular with motor vehicle affic / V2: Colletion with by vehicle in traffic	Not reported / V2: Not other
	And a second second	al Drectors No	VI: Tel	Vt: ht	:14 14 14			VI: A M International Total Section	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VI: http://www.compound.mod	VI:
		at vera te		traffic / VI Soundto		Ĩ	taffic /	talls / Vt.Westoo	Miller VI Wentho VI Exitor	ad/ VISaufte	taffic/
		Athe Atim Pre-PC	/I: Soving of shopped in	 Screep or stopped in 21 Treveling at stopped in 	VI: Soving or Linguid in	na ngan papanit su	vi. jugarumi VI. Soving or stoppedin	VI: Stowing on strayped in V2.Traveling at all did also	VI: Sowing or straped in V2 Sowing or stapped in V3 Diter	VI: Traveling straight abs VI: Traveling straight abs	V1. Bowing or stopped in V2 Streing or stopped in
		The state of the s							text-on	lauterd	
						2				0	
	for 2010										
	rash Report		Property demage	Property cleanings or ty (more tweed)	Property demage orty (none	Property damage prove	Property densige only (norme	Property damage bring (mone	Non-tal	Property damage orty (none Harted)	Property durage orty (none
	ISSDOT C.						10007		hdtsa olasit.	-2010 4 CB PM	10.00
	JT Ma			XX X01		W	141	10 N			
	Mass DC		WILDER IN CONTRACTOR				MEDA				
1	, i						2000	100			

ALCONDENATED I DAY

95 FC201		
10		
Dutern		
Contrast		
×		
3		
11-state		
<u> </u>		
E		
E.		
<u>F</u>		
E		
62 E		
i kerze fr teret fr Bernacker		
023		
ti soo		
a la constante de la constante		
nu i su		
Elfan 1/Maril 8		
A STREE		
SUMME SUMME		
Į.		
R R		
Artheri Ugh Dank - Jystel Dankar		
Larres Artenting Den - grane Den - grane teterer		
President and Area President and Ar		
1 Cantan Andrea 1 Cantan Andrea Cantan Andrea Cantan Andrea Cantan	· · · · ·	
articultur (and articultur) articultur (and articultur) articultur (and articultur) articultur (articultur) articu	· .	
Media Statistica Media Statistica Media Statistica Contras - Beneficial Contras - Beneficial Contras - Beneficial Contras - Beneficial Descriptiones Media Statistica Media Stat	· · · · ·	
And Colorado And Date		
atterna att	· · · · · ·	
Harden here in the conduction of the factor of the conduction of t	· · · · ·	
Image: state of the s	· .	
Other State Interact Net Net Scatsub Real area Other State Interact Net Net Scatsub Real area Interact Net Interact Net Net Net Net Net Net Net Net Net Ne	· .	
Interfaction Interfactor		
International Internat		
er ei im Man Parliteters Matturard Read er ei im Man Parliteters Matturard Read opreest in Parliteters Matturard Read opreest in Parliteters Matturard Read water Inne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsansanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Parliteter ei in Dan - period and Tinne, Virtsanzer in Dan - perio		
Attentione efforms (Network Interfaction) (Methodation) (M		
Mark Man Mie State Mark Man Mie		
Anno. Week Action for the initial Week Technology and the standard and the		
Inter of Cabina in Mark Antan The E-train (Wein Theorem 2) (Mark Mark Antan The E-train (Mark Mark Mark Mark Mark Mark Mark Mark		
Name Contract New Location		
Internet Inter		
2011 are listed from linear claims (and vector the etc.). (when invariants the manual them (whet claims) (whet cl		
ort for 2011 		
Report for 2011 Measure leave Measur		
Crash Report for 2011 Image: State of the state of th		
OT Crash Report for 2011 Interve & long Pair Methods From Pair Pair Methods From Pair Pair Methods From Pair Pair Methods From From From From From From From From		
(assDOT Crash Report for 2011 Addition Industrial providence Industrial		
MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 « Monthly for a primer fo		
D/F MassDOT Crash Report for 2011 memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memory memo		
at:3007 MassDOT Crash Report for 2011 e Ontoning Ontoning Ontoning MassDOT Crash Report for 2011 e Ontoning Ontoning Ontoning MassDOT Crash Report for 2011 e Ontoning Ontoning Ontoning MassDOT Crash Report for 2011 e Ontoning Ontoning Ontoning MassDOT Crash Report for 2011 e Ontoning Ontoning MassDOT Crash Report for 2011 e Ontoning MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e Ontoning MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e Ontoning MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e Ontoning MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e Ontoning MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 e MassDOT Crash Report for 2011 MassDOT Crash Report for 2011 MassDOT C		
Initial SUDT MassDort Crash Raport for 2011 Entrance Entrance MassDort Crash Raport for 2011 MassDort Crash Raport for 2011 Entrance MassDort Crash Raport for 2011 Restance MassDort Raport for 2011 MassDort Raport Raport for 2011 MassDort Raport Rapor		

Page f

NEDWAY2011_M

									-		-	100				100
Constanting in	V Coordinale			B/02			1010									100
100000000				10103 800102	•		TALS BUCKES					10211 12/1012				THE PROPERTY OF
	XContr															
Contraction of the local distance	Undertial Type															
the management	h															-
Hausen auf	Landhach 2015															
And the second second	retEd															
POP RULE -	Terrar Nei			-+								_				-
March 1940												-				
A DESCRIPTION OF A DESCRIPTION	denecton															
Carlon Carlon Carlo	latest Roldery															
C. CONTRACTOR	Claimine from P	_			_											
47 KGPA 20002000000				at street												
101010101010101010				ET R16 126 5 / MA			WEST STREET					The second se	UNITER ST REEL			401.07
50.04030204050	ny Elenedor			TSUNNER STRE			REET/Bha 126 E						DALHO TURE 10			10 PT 10 10 10 10 10
ansarta Sheefan	ctor Allerda	-		MANST MANST		_	ILAIN ST						HOOM			
AND LEVELOR OF A	Baa	-		Smuthing			ł						Ren			
COLD COMPANY STORY	lace Amberiliot	-		Dert - 10164	_		-	_					Device			-
Contractor and an other states of the second s	and and a			M	net t		ž	100		ŧ	E S		Viet	Line and Lin		enger -
and more surgering the				an enger car f	TATION COLUMN	van meri-van pan	1. sport utility with	ALMANON CHI /VZ	van, merk van, pan	a. sportually) with	ion House I and	ran, panel, pickap, r	with only four tres	Intervention mit	pictury, sport utility	our times / V2.Phils
The second s	1			srvettchein VI:P	V1 P	1	arvence in poku		moor they	2	or vehicle in four t		affe Latin		27.	or vehicle in orly !
1000 million and 1000 million			verticle in value /	Collision with mot	VI CABION WITH	verticle in tractic //	Consider with most		VI: Collifor with	vehicle in traffic /	Collision with mot	traffic / V3: Collisi	motor vehicle in F	VI; Collation With	vehicle in some	Collision with mot
		10711-0 ALC: 100		Ş.				Bunders with ZA / P.				d/V2.Enthound/				Ĩ
		NEU RULAN (OR		allic VI Southour	NO INT SQUEROU		-	NI Sourcou			ĕ	ViFaction	Ci Factory			affic VI.Southout
		10 a late man		Ang or strapped in t	which shelds also		strug stattic larre /	efter staldtit efter		retro tapes /	the or shreed in th	and a shreed in	and the second second			in a strend h
		PLOT TO LOD		VI: 59	1121		19:1X	VZ Trav		6.5	10.01	1000				5
		Harrier of Col			Restand			Ande						NG-MOL		
 2		Pacine Intelle			_	_		-	_							
ort for 201	lunter o	any Vetoles			~			2 100								
rash Rep.		Time CatchSer		and from	u buredi			M Non-falable							1	- Lineta Li
assDOT C		thickless Crish		No+	12 556F.		THE PARTY	12 Z51P.						101202-04		_
OT N	STATES OF	Town Kenne		27	WAY 20		đ	AMAY 20						PVAV B		_
massD	States and		-		72002 NED			10370 MEC						VTOLD WEL		-
L .	櫾	ŝ				1		8	1					췱		

•

(EDWAY2012-c)

		ţ			Ī		
	At Roadway Intersection	MAIN ST / SUMMER ST R. 126 / MAIN ST	SUMMER ST Rta 126 S / MILFORD ST Rta 109				
	Weather Condition	Clear	Cloudy	Clear	Sleet, hail (freezing rain or drizzle)	Clear	Clear
	Amblent Light	Daylight	Caylight	Caylight	Daylight	Dark - líghtad Dadway	Davlicht
	Road Surface Condition	yı	'ny	yı	Vat	λι	~
	F Vehicle Configuration	V1: Tractor/semi-trailer / V2:Passenger car	V1: Passenger car / V2: Passenger car / V2: Passenger car / C3: Passenger car	V1: Light truck(van, mini-van, panel, pickup, sport utility) with only four tites / V2:Passenger zar / V3:Passenger car	V1: Passenger car / V2:Single- unit truck (2-axle, 6-tire)	V1: Passenger cat / v2:Passenger car	V1: Passenger car / V2: Passencor car
	Most Harmful Events	V1: Callision with motor vehicle in traffic / V2: Collision / with motor vehicle in traffic	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic / V V3: Collision with motor V3: collision with motor vehicle in traffic	V1: Collision with motor vehicle in traffic / V2: Collision with motor vahicle in traffic / p V3: Collision with motor vehicle in traffic	V1: Collision with motor vehicle in traffic / V2: Collision V with motor vehicle in traffic 1.	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Collision with motor vehicle in traffic / V2: Collision V with motor vehicle in traffic /
	Vehicle Travel Directions	V1:Southbound / V2:Southbound /	/1:Southbound / V2:Southbound / V3:Southbound /	V1:Westbound / V2:Northbound V3:Westbound	V1:Westbaund / V2:Southbaund	V1:Northbound / V2:Northbound	han of the second s
	Anticle Action Prior to Crash	V1: Turning right / V2:Slowing or stopped in traffic	1: Travelling straight ahead / 1: Travelling straight ahead / 2:Slowing or stopped in traffic / 2:Sowing or stopped in fraffic /	11: Slowing or stopped in traffic V2:Entering traffic lane / V3:Tzevelling strafight ahead	/1: Travelling straight ahead / /2:Entering traffic lane	 V1: Slowing or stopped in traffic V2:Slowing or stopped in traffic 	11: Slowing or stopped in traffic
or the year 2013	otal atal Nurtes Manner of Collision	Sideswipo, same direction	Rear	Head-on	Angla	Rear-end	
way f	otal T Ionfatal F Nuries II		0				
r Med	mber of hicks						
h Report fo	Nu Xrash Seventy Ve	Property damage inly (none siured)	ion-fatal Intury 3	ion-fatal Iniury 3	Property damage niy (none Jured) 2	Property damage vnly (none biured)	Property damage nily (none
T Crasl	Tash Time	107 AM	Wd 95	AM P	A BE	A D L	
MassDC	Crash Date	D4-Dec-2013 9	D8-Aug-2013 5	04~Jan-2013	19-Mar-2013 3	E ELOC-VAM-ED	
DOT	ChV/Town Name	MEDWAY	MEDWAY	MEDWAY	MEDWAY	MEDWAY	
mass	Tash Number	682914	P31C55	191876	1800996	GOTOTA	

Sight Line Analysis

•

Stopping Sight Distance - Posted

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	NB	15	55.125	21.6	76.7
Direction 2	SB	40	147	153.3	300.3

<u>INPUTS</u>	Direction 1	Direction 2
Travel Direction	NB	SB
Speed	15	40
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO
SSD = Reaction Distance + Brake Distance
Reaction Distance = 1.47 x t x V
Brake Distance = V^2 / (30 x ((a/32.2)+G))
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)

Stopping Sight Distance - Average

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	NB	15	55.125	21.6	76.7
Direction 2	SB	41	150.675	161.1	311.8

INPUTS	Direction 1	Direction 2
Travel Direction	NB	SB
Speed	15	41
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO	-
SSD = Reaction Distance + Brake Distance	
Reaction Distance = $1.47 \text{ x t } \text{ x V}$	
Brake Distance = V^2 / (30 x ((a/32.2)+G))	
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)	

Stopping Sight Distance - 85th Percentile

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	NB	15	55.125	21.6	76.7
Direction 2	SB	44	161.7	185.5	347.2

Direction 1	Direction 2
NB	SB
15	44
0	0
2.5	2.5
11.2	11.2
	<u>Direction 1</u> NB 15 0 2.5 11.2

Stopping Sight Distance (SSD) - Source: AASHTO

SSD = Reaction Distance + Brake Distance

Reaction Distance = 1.47 x t x V

Brake Distance = $V^2 / (30 \times ((a/32.2)+G))$

Where:

- t = reaction time (sec)
- V = travel speed (mph)

G= roadway grade a - deceleration rate (ft/sec^2)

Intersection Sight Distance Calculations

Source: A Policy on Geometric Design of Highways and Street, 6th Edition; AASHTO; 2011.

ISD = 1.47 * V * t

V = speed t = time gap

t = 7.5 s for a passenger car for Left Turn from a Stop t = 6.5 s for a passenger car for Right Turn from a Stop

Posted (Regulatory) Speed Limit

Proposed Site Driveway ISD = 1.47 * 15 * 7.5 = 165 ft SAY 165 ft (left-turn from a stop)

Proposed Site Driveway ISD = 1.47 * 40 * 6.5 = 382 ft SAY 385 ft (right-turn from a stop)

Stopping Sight Distance - Posted

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	25	91.875	59.9	151.8
Direction 2	EB	25	91.875	59.9	151.8

INPUTS	Direction 1	Direction 2
Travel Direction	EB	EB
Speed	25	25
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO
SSD = Reaction Distance + Brake Distance
Reaction Distance = 1.47 x t x V
Brake Distance = V^2 / (30 x ((a/32.2)+G))
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)

Stopping Sight Distance - Average

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	33	121.275	104.4	225.6
Direction 2	WB	32	117.6	98.1	215.7

<u>INPUTS</u>	Direction 1	Direction 2
Travel Direction	EB	WB
Speed	33	32
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO
SSD = Reaction Distance + Brake Distance
Reaction Distance = 1.47 x t x V
Brake Distance = V^2 / (30 x ((a/32.2)+G))
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)

Stopping Sight Distance - 85th Percentile

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	38	139.65	138.4	278.0
Direction 2	EB	35	128.625	117.4	246.0

INPUTS	Direction 1	Direction 2
Travel Direction	EB	EB
Speed	38	35
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO	
SSD = Reaction Distance + Brake Distance	
Reaction Distance = $1.47 \times t \times V$	
Brake Distance = V^2 / (30 x ((a/32.2)+G))	
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)	

□ Construction Analysis
2014 Existing Conditions Weekday Morning Peak Hour

	۶	-+	\mathbf{i}	1	-	*	1	Ť	1	1	¥	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	۴			4			4			4	
Volume (vph)	149	239	10	12	419	52	30	301	12	28	180	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.985			0.995			0.946	
Flt Protected	0.950				0.999			0.996			0.996	
Satd. Flow (prot)	1770	2019	0	0	2094	0	0	2031	0	0	1938	0
Flt Permitted	0.262				0.990			0.937			0.946	
Satd. Flow (perm)	488	2019	0	0	2075	0	0	1911	0	0	1841	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			2			37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	154	246	10	12	432	54	31	310	12	29	186	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	256	0	0	498	0	0	353	0	0	359	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	-		12	-		0	Ū		0	Ū
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15	•	9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	CI+Ex		Cl+Ex	Cl+Ex		Cl+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			Cl+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

2014 Existing Conditions Weekday Morning Peak Hour

	٠	-	\rightarrow	-	←	×.	1	Ť	1	1	Ŧ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	35.9	35.9			21.2			17.3			17.3	
Actuated g/C Ratio	0.56	0.56			0.33			0.27			0.27	
v/c Ratio	0.33	0.22			0.72			0.68			0.68	
Control Delay	9.6	8.1			25.3			29.1			26.9	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	9.6	8.1			25.3			29.1			26.9	
LOS	А	А			С			С			C	
Approach Delay		8.7			25.3			29.1			26.9	
Approach LOS		А			С			С			С	
90th %ile Green (s)	10.0	49.7		34.7	34.7		28.3	28.3		28.3	28.3	
90th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Gap	Gap	
70th %ile Green (s)	10.0	40.5		25.5	25.5		20.5	20.5		20.5	20.5	
70th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
50th %ile Green (s)	10.0	35.8		20.8	20.8		16.7	16.7		16.7	16.7	
50th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
30th %ile Green (s)	8.9	30.1		16.2	16.2		13.4	13.4		13.4	13.4	
30th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
10th %ile Green (s)	6.8	23.9		12.1	12.1		10.1	10.1		10.1	10.1	
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	24	42		•	159			119			109	
Queue Length 95th (ft)	68	104			314			249			237	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	487	1728			1378			951			934	
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	0.32	0.15			0.36			0.37			0.38	
Intersection Summary												
Area Type:	Other											
Cycle Length: 95												
Actuated Cycle Length: 63	3.8											

Natural Cycle: 60 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.72 Intersection Signal Delay: 22.3 Intersection Capacity Utilization 76.7% Analysis Period (min) 15 90th %ile Actuated Cycle: 88 70th %ile Actuated Cycle: 71 50th %ile Actuated Cycle: 62.5 30th %ile Actuated Cycle: 53.5 10th %ile Actuated Cycle: 44

Intersection LOS: C ICU Level of Service D

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2	
35 s	60's
↓ [™] ø6	▶ø7 ₹ø8
25 s	15 c

Intersection							
Int Delay, s/veh (0.1						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	0	0	6	357	145	6	
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	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	0	0	6	372	151	6	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	538	154	157	0		0	
Stage 1	154	-	-	-	-	-	
Stage 2	384	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	508	688	1254	-	-	-	
Stage 1	879	-	-	-	-	-	
Stage 2	693	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	505	688	1254	-	-	-	
Mov Cap-2 Maneuver	505	-	-	-	-	-	
Stage 1	879	-	-	-	-	-	
Stage 2	689	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	0		0.1		0		
HCM LOS	А						
	- · -						
	NBL	NBI EBLN1	SBI SBR			-	
Capacity (veh/h)	1254						
HCM Lane V/C Ratio	0.005						
HCM Control Delay (s)	7.9	0 0					
HCM Lane LOS	А	A A					
HCM 95th %tile Q(veh)	0						

HCM 2010 TWSC	2014 Existing Conditions
3: Main Street (Route 126)/Main Street & Summer Street (Route 126)	Weekday Morning Peak Hour

Intersection										
Int Delay, s/veh 3	.6									
Movement	EBL	EBT				WBT	WBR	SBL	SBR	
Vol, veh/h	331	499				96	32	16	135	
Conflicting Peds, #/hr	0	0				0	0	0	0	
Sign Control	Free	Free				Free	Free	Stop	Stop	
RT Channelized	-	None				-	None	-	None	
Storage Length	250	-				-	-	100	0	
Veh in Median Storage, #	-	0				0	-	0	-	
Grade, %	-	0				0	-	0	-	
Peak Hour Factor	94	94				94	94	94	94	
Heavy Vehicles, %	5	29				15	10	0	5	
Mymt Flow	352	531				102	34	17	144	
Major/Minor	Maior1					Maior2		Minor2		
Conflicting Flow All	136	0					0	1354	119	
Stare 1	100	-				-	-	119	-	
Stage 2	_	_				-	-	1235	-	
Critical Hdwy	4 15	_				-	_	25	25	
Critical Hdwy Sta 1	10	_				_	_	5.4	-	
Critical Hdwy Stg 2	_	_				-	-	5.4	-	
Follow-up Hdwy	2 2/5	_				_	_	2.5	25	
Pot Cop 1 Mapouvor	1/30	_				•	_	868	1381	
Storo 1	1400					_	_	1255	1001	
Stage 7						_	_	336	_	
Diatoon blockod %	-					_	_	000		
May Cap 1 Manauvar	1/30	-				_		654	1381	
Mov Cap-1 Maneuver	1450	-				-	-	654	1001	
Mov Cap-z Maneuver	-	-				-	-	1255	-	
Stage 1	-	-				-	-	1200	-	
Stage z	-	-				-	-	200	-	
Annragh	-0					\\/D		90		
	<u></u>							<u> </u>		
HCM Control Delay, s	3.3					U		0.2		
HUMLUS								A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	SBLn1	SBLn2				
Capacity (veh/h)	1430	-	-	-	654	1381				
HCM Lane V/C Ratio	0.246	-	-	-	0.026	0.104				
HCM Control Delay (s)	8.3	-	-	-	10.7	7.9				
HCM Lane LOS	А	-	-	-	В	А				
HCM 95th %tile Q(veh)	1	-	-	-	0.1	0.3				

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 EXAM.syn MDM Transportation Consultants, Inc.

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBR	SBL	. SBR	l
Vol, veh/h	1	813				221	10	17	7 ()
Conflicting Peds, #/hr	0	0				0	0	() ()
Sign Control	Free	Free				Free	Free	Stop	o Stop)
RT Channelized	-	None				-	None		- None	9
Storage Length	-	-				-	-	().	-
Veh in Median Storage, #	-	0				0	-	() .	-
Grade, %	-	0				0	-	() .	-
Peak Hour Factor	93	93				93	93	93	3 93	3
Heavy Vehicles, %	0	4				8	0	() ()
Mvmt Flow	1	874				238	11	18	3 ()
Major/Minor	Major1				N	lajor2		Minor	2	
Conflicting Flow All	248	0				-	0	1119	243	3
Stage 1	-	-				-	-	243	3 .	-
Stage 2	-	-				-	-	876	5	-
Critical Hdwy	4.1	-				-	-	4.8	5 4.8	5
Critical Hdwy Stg 1	-	-				-	-	5.4	4	-
Critical Hdwy Stg 2	-	-				-	-	5.4	4	-
Follow-up Hdwy	2.2	-				-	-	4.	5 4.8	5
Pot Cap-1 Maneuver	1330	-				-	-	367	7 685	5
Stage 1	-	-				-	-	644	4	-
Stage 2	-	-				-	-	354	4	-
Platoon blocked, %		-				-	-			
Mov Cap-1 Maneuver	1330	-				-	-	36	7 685	5
Mov Cap-2 Maneuver	-	-				-	-	36	7	-
Stage 1	-	-				-	-	64	4	-
Stage 2	-	-				-	-	35	4	-
-										
Approach	EB					WB		SE	3	
HCM Control Delay, s	0					0		15.	3	
HCM LOS								(2	
Minor Lane/Maior Mymt	FBI	FBT	WBT	WBR S	SBI n1					
Capacity (veh/h)	1330				367					
HCM Lane V/C Ratio	0.001	-	-	-	0.05					
HCM Control Delay (s)	77	n	-	-	15.3					
HCM Lane LOS	Δ	Δ	-	-	о.о С					
HCM 95th %tile O(veh)	0	-	-	-	02					
HCM 95th %tile Q(veh)	0	-	-	-	0.2					

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 EXAM.syn MDM Transportation Consultants, Inc.

Intersection

Int Delay, s/veh

Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	359	16	1	482	78	17	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	78	78	78	78	78	78	
Heavy Vehicles, %	3	21	100	2	0	0	
Mvmt Flow	460	21	1	618	100	22	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	481	0	1092	471	
Stage 1	-	-	-	-	471	-	
Stage 2	-	-	-	-	621	-	
Critical Hdwy	-	-	5.1	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	-	-	3.1	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	718	-	504	731	
Stage 1	-	-	-	-	593	-	
Stage 2	-	-	-	-	509	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	718	-	503	731	
Mov Cap-2 Maneuver		-	-	-	503	-	
Stage 1	-	-	-	-	593	-	
Stage 2	-	-	-	-	508	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0		13.2		
HCM LOS					В		
Minor Lane/Major Mvmt	NBLn1 NBLn2	EBT	EBR WBL	WBT			
Capacity (veh/h)	503 731	-	- 718	-			
HCM Lane V/C Ratio	0.199 0.03	-	- 0.002	-			
HCM Control Delay (s)	13.9 10.1	-	- 10	0			
HCM Lane LOS	B B	-	- B	Ă			
HCM 95th %tile Q(veh)	0.7 0.1	-	- 0	-			
· · ·							

2021 No-Build Conditions Weekday Morning Peak Hour

	≯	-	\mathbf{r}	-		₹	1	Ť	1	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1			\$			4 4-			£	·
Volume (vph)	154	248	10	12	434	54	31	312	12	29	186	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	Ó		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.985			0.996			0.946	
Fit Protected	0.950				0.999			0.996			0.996	
Satd. Flow (prot)	1770	2019	0	0	2094	0	0	2033	0	0	1938	0
Flt Permitted	0.255				0.991			0.933			0.942	
Satd. Flow (perm)	475	2019	0	0	2077	0	0	1905	0	0	1833	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			2			37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	159	256	10	12	447	56	32	322	12	30	192	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	266	0	0	515	0	0	366	0	0	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	Ū		12	Ŭ		0	Ũ		0	U
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		Cl+Ex	Cl+Ex		Cl+Ex	CI+Ex		CI+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

2021 No-Build Conditions Weekday Morning Peak Hour

	۶	-+	$\mathbf{\hat{z}}$	4		×.	1	1	۲	1	Ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	37.0	37.0			22.2			18.1			18.1	
Actuated g/C Ratio	0.56	0.56			0.34			0.28			0.28	
v/c Ratio	0.35	0.23			0.73			0.69			0.70	
Control Delay	10.1	8.4			26.1			30.0			27.8	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	10.1	8.4			26.1			30.0			27.8	
LOS	В	А			С			С			С	
Approach Delay		9.1			26.1			30.0			27.8	
Approach LOS		А			С			С			С	
90th %ile Green (s)	10.0	51.0		36.0	36.0		29.8	29.8		29.8	29.8	
90th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Gap	Gap	
70th %ile Green (s)	10.0	41.8		26.8	26.8		21.5	21.5		21.5	21.5	
70th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
50th %ile Green (s)	10.0	36.8		21.8	21.8		17.4	17.4		17.4	17.4	
50th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
30th %ile Green (s)	9.1	31.0		16.9	16.9		14.0	14.0		14.0	14.0	
30th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
10th %ile Green (s)	6.9	24.5		12.6	12.6		10.5	10.5		10.5	10.5	
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	26	45			170		-	128			117	
Queue Length 95th (ft)	72	113			334			264			251	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	476	1701			1388			922			906	
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	0.33	0.16			0.37			0.40			0.41	
Intersection Summary												
Area Type: C	Other											
Cycle Length: 95 Actuated Cycle Length: 65.7												

Natural Cycle: 60 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.73 Intersection Signal Delay: 23.0 Intersection Capacity Utilization 79.0% Analysis Period (min) 15 90th %ile Actuated Cycle: 90.8 70th %ile Actuated Cycle: 73.3 50th %ile Actuated Cycle: 64.2 30th %ile Actuated Cycle: 55 10th %ile Actuated Cycle: 45

Intersection LOS: C ICU Level of Service D

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2	
35 s	60 s
↓ ₀₆	≠ø7 ₹ø8
25 c	ALC C

Intersection	
Int Delay, s/veh	0.1

Vol, veh/h 0 0 6 370 150 6 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Stop Stop Stop Free 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 96 96 96 96 96 96 Heavy Vehicles, % 0 100 33 2 7 0 Mymt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - - -	Movement	EBL	EBR		NBL	NBT	SBT	SBR	
Conflicting Peds, #/hr 0	Vol, veh/h	0	0		6	370	150	6	
Sign Control Stop Stop Free Free Free Free Free Free Free RT Channelized - None - None None <td>Conflicting Peds, #/hr</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Conflicting Peds, #/hr	0	0		0	0	0	0	
RT Channelized - None - None None Storage Length 0 - - - - - Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 96 96 96 96 96 Heavy Vehicles, % 0 100 33 2 7 0 Mwmt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - Stage 2 398 - - - - - Critical Hdwy 6.4 7.2 4.43 - - -	Sign Control	Stop	Stop		Free	Free	Free	Free	
Storage Length 0 -	RT Channelized	-	None		-	None	-	None	
Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 96 96 96 96 96 Heavy Vehicles, % 0 100 33 2 7 0 Mvmt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - - Stage 2 398 - - - - - - Critical Hdwy 6.4 7.2 4.43 - - - -	Storage Length	0	-		-	-	-	-	
Grade, % 0 - - 0 0 - Peak Hour Factor 96 96 96 96 96 96 Heavy Vehicles, % 0 100 33 2 7 0 Mvmt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - Stage 2 398 - - - - - Critical Hdwy 6.4 7.2 4.43 - - -	Veh in Median Storage, #	0	-		-	0	0	-	
Peak Hour Factor 96 96 96 96 96 96 Heavy Vehicles, % 0 100 33 2 7 0 Mvmt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - Stage 2 398 - - - - Critical Hdwy 6.4 7.2 4.43 - -	Grade, %	0	-		-	0	0	-	
Heavy Vehicles, % 0 100 33 2 7 0 Mvmt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - Stage 2 398 - - - - - Critical Hdwy 6.4 7.2 4.43 - - -	Peak Hour Factor	96	96		96	96	96	96	
Mvmt Flow 0 0 6 385 156 6 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 -	Heavy Vehicles, %	0	100		33	2	7	0	
Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - - Stage 2 398 - - - - - - Critical Hdwy 6.4 7.2 4.43 - - -	Mvmt Flow	0	0		6	385	156	6	
Major/Minor Minor2 Major1 Major2 Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 - - - - - - Stage 2 398 - - - - - - Critical Hdwy 6.4 7.2 4.43 - - - Critical Hdwy Sta 1 5.4 - - - - -									
Conflicting Flow All 557 159 163 0 - 0 Stage 1 159 -	Major/Minor	Minor2		N	fajor1		Major2		
Stage 1 159 -	Conflicting Flow All	557	159		163	0		0	
Stage 2 398 -	Stage 1	159	-		-	-	-	-	
Critical Hdwy 6.4 7.2 4.43 - - - Critical Hdwy 5.4 5.4 - - - - -	Stage 2	398	-		-	-	-	-	
Critical Howy Sto 1 54	Critical Hdwy	6.4	7.2		4.43	-	-	_	
	Critical Hdwy Stg 1	5.4	-		-	-	-	_	
Critical Hdwy Stg 2 5.4	Critical Hdwy Stg 2	5.4	-		-	-	-	_	
Follow-up Hdwy 3.5 4.2 2.497	Follow-up Hdwy	3.5	4.2		2.497	-	-	_	
Pot Cap-1 Maneuver 495 683 1248	Pot Cap-1 Maneuver	495	683		1248	-	-	_	
Stage 1 875	Stage 1	875	-		-	-	-	-	
Stage 2 683	Stage 2	683	-		-	-		-	
Platoon blocked, %	Platoon blocked, %					-	-	-	
Mov Cap-1 Maneuver 492 683 1248	Mov Cap-1 Maneuver	492	683		1248	-	-	-	
Mov Cap-2 Maneuver 492	Mov Cap-2 Maneuver	492	-		-	-	-	-	
Stage 1 875	Stage 1	875	-		-	-	-	-	
Stage 2 679	Stage 2	679	-		-	-	-	-	
	-								
Approach EB NB SB	Approach	EB			NB		SB		
HCM Control Delay, s 0 0.1 0	HCM Control Delay, s	0			0.1		0		
HCM LOS A	HCMLOS	А					-		
Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR	Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR				
Capacity (veh/h) 1248	Capacity (veh/h)	1248		-	-				
HCM Lane V/C Ratio 0.005	HCM Lane V/C Ratio	0.005		-	-				
HCM Control Delay (s) 7.9 0 0	HCM Control Delay (s)	7.9	0 0	-	-				
HCM Lane LOS A A A	HCM Lane LOS	А	A A	-	-				
HCM 95th %tile Q(veh) 0	HCM 95th %tile Q(veh)	0		-	-				

HCM 2010 TWSC			2021 No-Build Conditions
3: Main Street (Route	e 126)/Main Street & Summe	r Street (Route 126) Weekday Morning Peak Hour

Intersection													
Int Delay, s/veh	3.6												
Movement	EBL	EBT				WBT	WBF	2	SBL		SBR		
Vol, veh/h	343	517				99	33	3	17		140		
Conflicting Peds, #/hr	0	0				0	()	0		0		
Sign Control	Free	Free				Free	Free	3	Stop		Stop		
RT Channelized	-	None				-	None	e	-	1	None		
Storage Length	250	-				-		-	100		0		
Veh in Median Storage, #	-	0				0		-	0		_		
Grade, %	-	0				0		-	0		_		
Peak Hour Factor	94	94				94	94	1	94		94		
Heavy Vehicles, %	5	29				15	1()	0		5		
Mvmt Flow	365	550				105	35	5	18		149		
	•												
Maior/Minor	Maior1					Maior2			Minor2				
Conflicting Flow All	140	0				majorz)	1/02		122	 	
Stage 1		-				_	,		1403		123		
Stage 2	_	_				_		_	120		-		
Critical Hdwy	4 15	_				_		_	25		25		
Critical Hdwy Sta 1		_						_	Z.J 5 /		2.0		
Critical Hdwy Stg 2	_	_						_	5.4		-		
Follow-up Hdwy	2 245	_				_			2.4		25		
Pot Cap-1 Maneuver	1425	_				_		_	2.0		1370		
Stage 1	1420	_				_			12/0		13/3		
Stage 2	_	_							245		-		
Platoon blocked %		_						-	213		-		
Mov Cap-1 Maneuver	1425	_				_			633		1370		
Mov Cap-2 Maneuver		_						_	633		1373		
Stage 1	_	_							12/0		-		
Stage 2	_	_						_	1243 037		-		
						-		-	201		-		
Approach	FB					WB			SB				
HCM Control Delay s	33					0			<u> </u>			 	· · ·
HCM LOS	0.0					0			0.2				
HOM EOO									A				
Miner Long (Martin Miner)					- 10								
	EBL	EBI	WRI	WRK 8	SBLN1	SBLn2	······································					 	
Capacity (veh/h)	1425	-	-	-	633	1379							
HCM Lane V/C Ratio	0.256	-	-	-	0.029	0.108							
HCM Control Delay (s)	8.4	-	-	-	10.9	7.9							
HCM Lane LOS	А	-	-	-	В	А							
HCM 95th %tile Q(veh)	1	-	-	-	0.1	0.4							

Intersection

Int Delay, s/veh

Vol, veh/h 1 842 229 10 18 0	
Conflicting Peds, #/hr 0 0 0 0 0 0	
Sign Control Free Free Free Stop Stop	
RT Channelized - None - None - None	
Storage Length 0 -	
Veh in Median Storage, # - 0 0 - 0 -	
Grade, % - 0 0 - 0 -	
Peak Hour Factor 93 93 93 93 93 93 93	
Heavy Vehicles, % 0 4 8 0 0 0	
Mvmt Flow 1 905 246 11 19 0	
Major/Minor Major1 Major2 Minor2	
Conflicting Flow All 257 0 - 0 1160 252	
Stage 1 252 -	
Stage 2 908 -	
Critical Hdwy 4.1 4.5 4.5	
Critical Hdwy Stg 1 5.4 -	
Critical Hdwy Stg 2 5.4 -	
Follow-up Hdwy 2.2 4.5 4.5	
Pot Cap-1 Maneuver 1320 355 681	
Stage 1 639 -	
Stage 2 343 -	
Platoon blocked, %	
Mov Cap-1 Maneuver 1320 354 681	
Mov Cap-2 Maneuver 354 -	
Stage 1 639 -	
Stage 2 342 -	
Approach EB WB SB	
HCM Control Delay, s 0 0 15.8	
HCM LOS C	
Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1	
Capacity (veh/h) 1320 354	
HCM Lane V/C Ratio 0.001 0.055	
HCM Control Delay (s) 7.7 0 15.8	
HCM Lane LOS A A C	
HCM 95th %tile Q(veh) 0 0.2	

Intersection

Int Delay, s/veh

Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	372	17	1	499	81	18	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	78	78	78	78	78	78	
Heavy Vehicles, %	3	21	100	2	0	0	
Mymt Flow	477	22	1	640	104	23	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	499	0	1130	488	
Stage 1	-	-	-	-	488	-	
Stage 2	-	-	-	-	642	-	
Critical Hdwv	-	-	5.1	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	-	-	3.1	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	705	-	492	724	
Stage 1	-	-	-	-	583	-	
Stage 2	-	-	-	-	498	-	
Platoon blocked. %	-	-		-			
Mov Cap-1 Maneuver	-	-	705	-	491	724	
Mov Cap-2 Maneuver	-	-	-	-	491	-	
Stage 1	-	-	-	-	583	-	
Stage 2	-	-	-	-	497	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0		13.5		
HCM LOS					В		
Minor Lane/Major Mvmt	NBLn1 NBLn2	EBT	EBR WBL	WBT			
Capacity (veh/h)	491 724	-	- 705	-			· · · ·
HCM Lane V/C Ratio	0.211 0.032	-	- 0.002	-			
HCM Control Delay (s)	14.3 10.1	-	- 10.1	0			
HCM Lane LOS	B B	-	- B	Ā			
HCM 95th %tile Q(veh)	0.8 0.1	-	- 0	-			

2021 Build Conditions Weekday Morning Peak Hour

	٠	-	\rightarrow	4	-	*	1	1	1	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ				\$			4			\$,
Volume (vph)	154	248	10	12	434	54	31	312	12	29	216	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.985			0.996			0.950	
Flt Protected	0.950				0.999			0.996			0.996	
Satd. Flow (prot)	1770	2019	0	0	2094	0	0	2033	0	0	1943	0
Flt Permitted	0.253				0.991			0.926			0.950	
Satd. Flow (perm)	471	2019	0	0	2077	0	0	1890	0	0	1854	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			2			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	159	256	10	12	447	56	32	322	12	30	223	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	266	0	0	515	0	0	366	0	0	402	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	-
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		CI+Ex	Cl+Ex		Cl+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

2021 Build Conditions Weekday Morning Peak Hour

Lane Group EBL EBT EBR WBL WBT NBL NBT NBL SBL SBL SBR Permitted Phases 7 4 8 8 2 6 6 Switch Phase 7 4 8 8 2 6 6 Minimum Split(s) 11.0 15.0 15.0 15.0 15.0 3		≯		\mathbf{i}	1	4	*	1	Ť	1	1	ŧ	-
Permitted Phases 4 8 2 6 Detector Phase 7 4 8 8 2 2 6 6 Minimum Initial (s) 6.0 10.0 10.0 10.0 6.0 6.0 6.0 Minimum Split (s) 11.0 15.0 60.0 45.0 35.0 35.0 35.0 35.0 Total Split (s) 15.8% 63.2% 47.4% 47.4% 36.8% 36.8% 36.8% 38.8% 36.8% 38.8% 36.8% 38.8% 36.	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase 7 4 8 8 2 2 6 6 Switch Phase Minimum Initial (s) 10.0	Permitted Phases	4			8			2			6		
Switch Phase Switch Phase Output	Detector Phase	7	4		8	8		2	2		6	6	
Minimum Initial (s) 6.0 10.0 10.0 10.0 6.0 6.0 6.0 Max Minimum Split (s) 11.0 15.0 60.0 45.0 35.0 35.0 35.0 36.0 36.8% <t< td=""><td>Switch Phase</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Switch Phase												
Minimum Split (s) 11.0 15.0 15.0 15.0 11.0 <td>Minimum Initial (s)</td> <td>6.0</td> <td>10.0</td> <td></td> <td>10.0</td> <td>10.0</td> <td></td> <td>6.0</td> <td>6.0</td> <td></td> <td>6.0</td> <td>6.0</td> <td></td>	Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Total Spiit (%) 15.0 60.0 45.0 45.0 35.0 35.0 35.0 35.0 Total Spiit (%) 15.8% 63.2% 47.4% 47.4% 36.8%	Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (%) 15.8% 63.2% 47.4% 73.4% 38.8% 36.8% 36.8% 36.8% Maximum Green (s) 10.0 55.0 40.0 40.0 30.0 30.0 30.0 30.0 Vellow Time (s) 1.0	Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Maximum Green (s) 10.0 55.0 40.0 40.0 30.0 40.0 <td>Total Split (%)</td> <td>15.8%</td> <td>63.2%</td> <td></td> <td>47.4%</td> <td>47.4%</td> <td></td> <td>36.8%</td> <td>36.8%</td> <td></td> <td>36.8%</td> <td>36.8%</td> <td></td>	Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Yellow Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Al. All-Red Time (s) 1.0 </td <td>Maximum Green (s)</td> <td>10.0</td> <td>55.0</td> <td></td> <td>40.0</td> <td>40.0</td> <td></td> <td>30.0</td> <td>30.0</td> <td></td> <td>30.0</td> <td>30.0</td> <td></td>	Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
All-Red Time (s) 1.0 LeadLaper Leag 1.0	Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s) 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 Lead/Lag Lag Lag Lag Lag Lag Lag Lead/Lag Optimize? Yes Yes Yes Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 Recall Mode None None None None None None None Acturated g/C Ratio 0.36 0.24 0.73 0.68 0.73 Control Delay 10.4 8.7 26.6 29.5 29.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 Total Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C C C 27.7 27.5 23.1 23.1 23.1 23.1 <	All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 LeadLag Optimize? Yes Yes Yes Yes Yes Vehicle Extension (s) 3.0	Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Lead/Lag Lead Lag Lag Lead-Lag Optimize? Yes Yes Yes Yes Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 Actaled JC Ratio 0.56 0.56 0.34 0.28 0.28 vic Ratio 0.36 0.24 0.73 0.668 0.73 Control Delay 10.4 8.7 26.6 29.5 29.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Cost Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C C Approach LOS A C C C C C Approach LOS A C	Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead-Lag Optimize? Yes Yes Yes Yes Vehicle Extension (s) 3.0 <	Lead/Lag	Lead			Lag	Lag							
Vehicle Extension (s) 3.0	Lead-Lag Optimize?	Yes			Yes	Yes						~ •	
Recall Mode None None None None Min	Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Act Eff G Green (s) 37.2 37.2 22.5 18.9 18.9 Actuated g/C Ratio 0.56 0.56 0.34 0.28 0.28 Vic Ratio 0.36 0.24 0.73 0.68 0.73 Control Delay 10.4 8.7 26.6 29.5 29.7 Queue Delay 10.0 8.7 26.6 29.5 29.7 LOS B A C C C Approach Delay 9.4 26.6 29.5 29.7 LOS B A C C C Approach LOS A C C C C 90th %ile Term Code Max Hold Gap Gap Max Max Max 70th %ile Term Code Max Hold Gap	Recall Mode	None	None		None	None		Min	Min		Min	Min	
Actuated g/C Ratio 0.56 0.56 0.34 0.28 0.28 v/c Ratio 0.36 0.24 0.73 0.68 0.73 Control Delay 10.4 8.7 26.6 29.5 29.7 Queue Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C Approach Delay 9.4 26.6 29.5 29.7 Approach Delay 9.4 26.6 29.5 29.7 Approach LOS A C C C 90th %ile Green (s) 10.0 51.0 36.0 30.0 30.0 30.0 90th %ile Green (s) 10.0 42.5 27.5 23.1 23.1 23.1 70th %ile Green (s) 10.0 37.3 22.3 18.5 18.5 18.5 50th %ile Green (s) 10.0 37.3 22.3 18.5 18.5 18.5 50th %ile Green (s) 9.2 31.3 17.1	Act Effct Green (s)	37.2	37.2			22.5			18.9			18.9	
vic Ratio 0.36 0.24 0.73 0.68 0.73 Control Delay 10.4 8.7 26.6 29.5 29.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 Total Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C C Approach Delay 9.4 26.6 29.5 29.7 Approach LOS A C C C C Oth %ile Green (s) 10.0 51.0 36.0 30.0 30.0 30.0 30.0 90th %ile Green (s) 10.0 42.5 27.5 27.5 23.1 25.5 25.5 25.5	Actuated g/C Ratio	0.56	0.56			0.34			0.28			0.28	
Control Delay 10.4 8.7 26.6 29.5 29.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 Total Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C Approach Delay 9.4 26.6 29.5 29.7 LOS B A C C C C O 0.0 30.	v/c Ratio	0.36	0.24			0.73			0.68			0.73	
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C Approach Delay 9.4 26.6 29.5 29.7 Approach LOS A C C C C 90th %ile Green (s) 10.0 51.0 36.0 30.0 30.0 30.0 90th %ile Green (s) 10.0 42.5 27.5 23.1 23.1 23.1 23.1 70th %ile Green (s) 10.0 37.3 22.3 18.5 18.5 18.5 18.5 50th %ile Green (s) 10.0 37.3 22.3 22.3 18.5 18.5 18.5 50th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 30th %ile Green (s) 6.9 24.5 12.6 10.7 10.7 10.7 10th %ile Term Code Gap Hol	Control Delay	10.4	8.7			26.6			29.5			29.7	
Total Delay 10.4 8.7 26.6 29.5 29.7 LOS B A C C C C Approach Delay 9.4 26.6 29.5 29.7 Approach LOS A C C C C 90th %ile Green (s) 10.0 51.0 36.0 36.0 30.0 30.0 30.0 90th %ile Green (s) 10.0 42.5 27.5 23.1 23.1 23.1 23.1 70th %ile Green (s) 10.0 42.5 27.5 27.5 23.1 23.1 23.1 23.1 70th %ile Green (s) 10.0 37.3 22.3 22.3 18.5 18.5 18.5 18.5 50th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 30th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 30th %ile Green (s) 6.9 24.5 12.6 10.7 10.7 10.7 10.7 10th %ile Green (s) 6.9 24.5 1	Queue Delay	0.0	0.0			0.0			0.0			0.0	
LOS B A C C C C C Approach Delay 9.4 26.6 29.5 29.7 Approach LOS A C C C C Oth %ile Green (s) 10.0 51.0 36.0 30.0 30.0 30.0 30.0 90th %ile Green (s) 10.0 42.5 27.5 27.5 23.1 23.1 23.1 23.1 70th %ile Green (s) 10.0 42.5 27.5 27.3 18.5 18.5 18.5 18.5 50th %ile Green (s) 10.0 37.3 22.3 28.5 18.5 18.5 18.5 18.5 50th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 14.6 30th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 14.6 30th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 14.6	Total Delay	10.4	8.7			26.6			29.5			29.7	
Approach Delay 9.4 26.6 29.3 25.7 Approach LOS A C C C 90th %ile Green (s) 10.0 51.0 36.0 36.0 30.0 30.0 30.0 90th %ile Green (s) 10.0 42.5 27.5 27.5 23.1 23.1 23.1 23.1 70th %ile Green (s) 10.0 42.5 27.5 27.5 23.1 23.1 23.1 23.1 70th %ile Green (s) 10.0 37.3 22.3 22.3 18.5 18.5 18.5 50th %ile Green (s) 10.0 37.3 22.3 22.3 18.5 18.5 18.5 50th %ile Green (s) 10.0 37.3 22.3 22.3 18.5 18.5 18.5 50th %ile Green (s) 9.2 31.3 17.1 17.1 14.6 14.6 14.6 30th %ile Green (s) 6.9 24.5 12.6 12.6 10.7 10.7 10.7 10.7 10th %ile Green (s) 6.9 24.5 12.6 12.6 10.7 10.7 10.7 <td>LOS</td> <td>В</td> <td>A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20.7</td> <td></td>	LOS	В	A									20.7	
Approach LOS A C <thc< th=""> C C <thc< th=""> <thc< td=""><td>Approach Delay</td><td></td><td>9.4</td><td></td><td></td><td>26.6</td><td></td><td></td><td>29.0</td><td></td><td></td><td>29.7</td><td></td></thc<></thc<></thc<>	Approach Delay		9.4			26.6			29.0			29.7	
90th %ile Green (s) 10.0 51.0 36.0	Approach LOS	40.0	A		00.0			20.0	20.0		20.0	20.0	
90th %ile term Code Max	90th %ile Green (s)	10.0	51.0		36.0	30.0		30.0 Mov	JU.U Mov		May	May	
70th %ile Green (s) 10.0 42.5 27.5 27.5 23.1	90th %ile Term Code	IVIAX	HOID		Gap	Gap 97 5		1VIAX	1VIAX 22.1		1VIAA 22.1	23.1	
Yoth %ile Term Code Max Hold Gap Gap Hold Hold Hold Gap	70th %ile Green (s)	10.0	42.0		21.0	27.0		ZJ. I Hold	20.1 Hold		Gan	Gan	
Soth %lie Green (s) 10.0 37.3 22.3 22.3 10.4 14.6 14.6 14.6 14.6 14.6 14.6 14.6 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7	70th %ile Term Code		1010		Gap	Gap 222		18.5	18.5		18 5	18 5	
South %ile ferm Code Max Hold Gap Ga	50th %ile Green (S)	IU.U Mov	৩7.৩ দলন		Con	Can		Hold	Hold		Gan	Gan	
John Wile Green (s) 9.2 31.3 17.1 17.1 14.0 10.7 10.1 10.1 10.0 1		IVIAX	21.2		17 1	17 1		14.6	14.6		14 G	14 6	
Sour faile ferm Code Gap Hold Gap Gap Hold Hold Gap Gap <thg< td=""><td>30th %ile Green (S)</td><td>9.2</td><td>01.0 Hold</td><td></td><td>Gan</td><td>Gan</td><td></td><td>Hold</td><td>Hold</td><td></td><td>Gan</td><td>Gan</td><td></td></thg<>	30th %ile Green (S)	9.2	01.0 Hold		Gan	Gan		Hold	Hold		Gan	Gan	
10th %ile Green (s) 0.9 24.3 12.0 12.0 10.1 1	30th %ile Croon (a)	Gap	24.5		12 Gap	12.6		10.7	10.7		10 7	10.7	
Num vie reinficule Gap Hold Gap Hold Hol	10th %ile Green (5)	Con	Z4.J Hold		Gan	Gan		Hold	Hold		Gap	Gap	
Queue Length 95th (ft) 72 114 336 264 277 Internal Link Dist (ft) 6820 920 1920 920 Turn Bay Length (ft) 150 150 900 900 Base Capacity (vph) 469 1677 1322 901 900 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 0.34 0.16 0.39 0.41 0.45	Oucue Longth 50th (ff)	0ap 27	/7		Oap	176		(loid	129		oup	134	
Internal Link Dist (ft) 6820 920 1920 920 Turn Bay Length (ft) 150 920 1920 920 Base Capacity (vph) 469 1677 1322 901 900 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 0.34 0.16 0.39 0.41 0.45 Intersection Summary	Queue Length 50th (it)	72	114			336			264			277	
Turn Bay Length (ft) 150 Base Capacity (vph) 469 1677 1322 901 900 Starvation Cap Reductn 0 0 0 Spillback Cap Reductn 0 0 0 Storage Cap Reductn 0 0 0 Storage Cap Reductn 0 0 0 1 0.45	Internal Link Dist (ff)	12	6820			920			1920			920	
Base Capacity (vph) 469 1677 1322 901 900 Starvation Cap Reductn 0 0 0 0 0 Spillback Cap Reductn 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 Reduced v/c Ratio 0.34 0.16 0.39 0.41 0.45 Intersection Summary	Turn Bay Longth (ff)	150	0020			020							
Starvation Cap Reductin 0 0 0 0 Starvation Cap Reductin 0 0 0 0 Spillback Cap Reductin 0 0 0 0 Storage Cap Reductin 0 0 0 0 Storage Cap Reductin 0 0 0 0 Reduced v/c Ratio 0.34 0.16 0.39 0.41 0.45 Intersection Summary	Rase Canacity (vnh)	469	1677			1322			901			900	
Spillback Cap Reductin 0	Starvation Can Reductin	-05	0			0			0			0	
Spiniback Cap Reductin 0	Stal Valion Cap Reductin	0	0 0			0			0			0	
Reduced v/c Ratio 0.34 0.16 0.39 0.41 0.45 Intersection Summary Area Type: Other	Storage Can Reducto	0	Õ			0			Ő			0	
Intersection Summary Area Type: Other Other	Reduced v/c Ratio	0.34	0 16			0.39			0.41			0.45	
Area Type: Other		0.04	5.10			2.20							
Alea Type. Only Outle Leastly OF	Area Type:	Other											
CVCIE L'ENDIN' 90	Cycle Length: 95												
Actuated Cycle Length: 66.7	Actuated Cycle Length: 66	6.7											

Natural Cycle: 60 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.73 Intersection Signal Delay: 23.7 Intersection Capacity Utilization 80.5% Analysis Period (min) 15 90th %ile Actuated Cycle: 91 70th %ile Actuated Cycle: 75.6 50th %ile Actuated Cycle: 65.8 30th %ile Actuated Cycle: 55.9 10th %ile Actuated Cycle: 45.2

Intersection LOS: C ICU Level of Service D

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

1 ø2			
35 s	60 s		
øs	→ _{ø7}	80	
25 c	15 c	49.5	

Intersection

Int Delay, s/veh

Movement	EBL	EBR	NB	L NBT		SBT	SBR	
Vol, veh/h	0	0		6 370)	180	6	
Conflicting Peds, #/hr	0	0		0 C		0	0	
Sign Control	Stop	Stop	Fre	e 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	96	96	9	6 96	1	96	96	
Heavy Vehicles, %	0	100	3	32		7	0	
Mvmt Flow	0	0		6 385	i	188	6	
							-	
Major/Minor	Minor2		Major	1		Major2		
Conflicting Flow All	589	191	19	4 C		-	0	
Stage 1	191	-				-	-	
Stage 2	398	-				-	-	
Critical Hdwy	6.4	7.2	4.4	3-		-	-	
Critical Hdwy Stg 1	5.4	-				-	-	
Critical Hdwy Stg 2	5.4	-				-	-	
Follow-up Hdwy	3.5	4.2	2.49	7 -		-	-	
Pot Cap-1 Maneuver	474	653	121	4 -		-	-	
Stage 1	846	-				-	-	
Stage 2	683	-				-	-	
Platoon blocked, %				-		-	-	
Mov Cap-1 Maneuver	471	653	121	4 -		-	-	
Mov Cap-2 Maneuver	471	-				-	-	
Stage 1	846	-				-	-	
Stage 2	679	-				-	-	
Approach	EB		NE	3		SB		
HCM Control Delay, s	0		0.1	1		0		
HCM LOS	А							
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBF	र				
Capacity (veh/h)	1214		-	-				
HCM Lane V/C Ratio	0.005		-	-				
HCM Control Delay (s)	8	0 0	-	-				
HCM Lane LOS	A	A A	-	-				
HCM 95th %tile Q(veh)	0		-	-				

HCM 2010 TWSC	2021 Build Conditions
3: Main Street (Route 126)/Main Street & Summer Street (Route 126)	Weekday Morning Peak Hour

Intersection													
Int Delay, s/veh	3.7											 	
Movement	FRI	FRT)	CDI		CDD		
Vol veh/h	3/3	517				120	22	<u>`</u>	3DL 17		170	 	
Conflicting Peds #/br	0+0	017				139	33 C) \	0		170		
Sign Control	Free	Free				Eree	Eroc	,	Ston		Stop		
RT Channelized	-	None				1100	None	2	otop -	1	None		
Storage Length	250	-				_		_	100	1			
Veh in Median Storage. #	-	0				0	-	-	0		-		
Grade. %	-	0				ñ	_	-	0		_		
Peak Hour Factor	94	94				94	94	L	94		94		
Heavy Vehicles, %	5	29				15	10)	0		5		
Mymt Flow	365	550				148	35	, i	18		181		
						110	00	, 	10		101		
Maior/Minor	Maior1					Maior2			Minor2				
Conflicting Flow All	183	Λ				Majorz		۱	1445		165		
Stage 1	100					-	0	,	1440		100		
Stage 2						-	•	-	100		-		
Critical Hdwy	4 15	_				_			25		25		
Critical Hdwy Sto 1		_				_			2.J 5./		2.0		
Critical Hdwy Stg 7	_	-				_			5.4		-		
Follow-up Hdwy	2 245	-				_		-	2.5		25		
Pot Cap-1 Maneuver	1374	-				_		-	836		1350		
Stage 1	-	_				_		-	1100		1000		
Stage 2	-	-				_		-	310		_		
Platoon blocked. %		-				_	_	-	010		-		
Mov Cap-1 Maneuver	1374	-				-			614		1350		
Mov Cap-2 Maneuver	-	-				-	-		614		1000		
Stage 1	-	-				-			1190		_		
Stage 2	-	-				-			234		_		
									204		_		
Approach	EB					WB			SB				
HCM Control Delay, s	3.4					0			8.4			 	
HCM LOS									A				
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	SBLn1	SBLn2						 	
Capacity (veh/h)	1374	-	-	-	614	1359							
HCM Lane V/C Ratio	0.266	-	-	-	0.029	0.133							
HCM Control Delay (s)	8.6	-	-	-	11	8.1							
HCM Lane LOS	А	-	-	-	В	А							
HCM 95th %tile Q(veh)	1.1	-	-	-	0.1	0.5							

Intersection

Int Delay, s/veh

Vol, veh/h 1 842 229 80 18 0 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Free Free Free Stop Stop RT Channelized - None - None - Storage Length - - 0 - - Veh in Median Storage, # - 0 - - - Grade, % - 0 - 0 - -
Conflicting Peds, #/hr00000Sign ControlFreeFreeFreeStopStopRT Channelized-None-NoneNoneStorage Length0-Veh in Median Storage, #-0-0-Grade, %00-0-
Sign ControlFreeFreeFreeStopStopRT Channelized-None-NoneNoneStorage Length0-Veh in Median Storage, #-0-0-Grade, %00-0-
RT Channelized - None - None Storage Length - 0 Veh in Median Storage, # - 0 0
Storage Length - - - 0 - Veh in Median Storage, # - 0 0 - 0 - Grade, % 0 0 0 0 0 -
Veh in Median Storage, # - 0 - 0 -
Peak Hour Factor 93 93 93 93 93 93 93 93
Heavy Vehicles, % 0 4 8 0 0 0
Mvmt Flow 1 905 246 86 19 0
Major/Minor Major1 Major2 Minor2
Conflicting Flow All 332 0 - 0 1197 289
Stage 1 289 -
Stage 2 908 -
Critical Hdwy 4.1 4.5 4.5
Critical Hdwy Stg 1 5.4 -
Critical Hdwy Stg 2 5.4 -
Follow-up Hdwy 2.2 4.5 4.5
Pot Cap-1 Maneuver 1239 345 664
Stage 1 618 -
Stage 2 343 -
Platoon blocked, %
Mov Cap-1 Maneuver 1239 344 664
Mov Cap-2 Maneuver 344 -
Stage 1 618 -
Stage 2 342 -
Approach EB WB SB
HCM Control Delay, s 0 0 16.1
HCM LOS C
Minor Lane/Maior Mymt EBL EBT WBT WBR SBL n1
Canacity (veh/h) 1239 344
HCM Lane V/C Ratio $0.001 = - 0.056$
HCM Control Delay (s) 79 0 - 161
HCM Lane $ OS A A - C$
HCM 95th %tile $Q(yeh)$ 0 0.2

Intersection

Int Delay, s/veh

Movement	E	BT	EBR		WBL	WBT		NBL	NBR	
Vol, veh/h	ć	372	77		1	499		81	18	
Conflicting Peds, #/hr		0	0		0	0		0	0	
Sign Control	F	ree	Free		Free	Free		Stop	Stop	
RT Channelized		-	None		-	None		-	None	
Storage Length		-	-		-	-		0	160	
Veh in Median Storage, #		0	-		-	0		0	-	
Grade, %		0	-		-	0		0	-	
Peak Hour Factor		78	78		78	78		78	78	
Heavy Vehicles, %		3	21		100	2		0	0	
Mvmt Flow	4	477	99		1	640		104	23	
Major/Minor	Maj	ior1		M	ajor2		٩	/linor1		
Conflicting Flow All		0	0		576	0		1168	526	
Stage 1		-	· -		-	-		526	-	
Stage 2		-	-		-	-		642	-	
Critical Hdwy		-	-		5.1	-		3.8	3.8	
Critical Hdwy Stg 1		-	-		-	-		5.4	-	
Critical Hdwy Stg 2		-	-		-	-		5.4	-	
Follow-up Hdwy		-	-		3.1	-		3.8	3.8	
Pot Cap-1 Maneuver		-	-		651	-		480	709	
Stage 1		-	-		-	-		561	-	
Stage 2		-	-		-	-		498	-	
Platoon blocked, %		-	-			-				
Mov Cap-1 Maneuver		-	-		651	-		479	709	
Mov Cap-2 Maneuver		-	-		-	-		479	-	
Stage 1		-	-		-	-		561	-	
Stage 2		-	-		-	-		497	-	
Approach		EB			WB			NB		
HCM Control Delay, s		0			0			13.8		
HCM LOS		•			-			В		
		0	- D-T			WOT				
			FRI	FRK	VVBL	WRI				· · · · · · · · · · · · · · · · · · ·
Capacity (veh/h)	4/9	/09	-	-	651	-				
HCM Lane V/C Ratio	0.217 0.	033	-	- (J.002	-				
HCM Control Delay (s)	14.6	10.2	-	-	10.5	0				
HCM Lane LOS	В	В	-	-	В	А				
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0	-				

Intersection

Int Delay, s/veh

4.3

Movement	EBL	EBT			WB	Т	WBR	S	BL	SBR	
Vol, veh/h	130	18			1	0	70		0	0	
Conflicting Peds, #/hr	0	0				0	0		0	0	
Sign Control	Free	Free			Fre	e	Free	S	top	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			ç)2	92		92	92	
Heavy Vehicles, %	0	0				0	0		0	0	
Mymt Flow	141	20			1	1	76		0	0	
Major/Minor	Major1				Мајо	r2		Min	or2		
Conflicting Flow All	87	0				-	0	4	351	49	
Stage 1	-	-				-	-		49	-	
Stage 2	-	-				-	-		302	-	
Critical Hdwy	4.1	-				-	-		6.4	6.2	
Critical Hdwy Stg 1	-	-				-	-		5.4	-	
Critical Hdwy Stg 2	-	-				-	-		5.4	-	
Follow-up Hdwy	2.2	-				-	-		3.5	3.3	
Pot Cap-1 Maneuver	1522	-				-	• -	(650	1025	
Stage 1	-	-				-	-	9	979	-	
Stage 2	-	-				-	-		755	-	
Platoon blocked, %		-				-	-				
Mov Cap-1 Maneuver	1522	-				-	-		589	1025	
Mov Cap-2 Maneuver	-	-				-	-	:	589	-	
Stage 1	-	-				-	-		979	-	
Stage 2	-	-				-	-	-	684	· –	
Approach	EB				v	/B			SB		
HCM Control Delay, s	6.7					0			0		
HCM LOS									А		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR SI	BLn1						
Capacity (veh/h)	1522	-	-	-	-						
HCM Lane V/C Ratio	0.093	-	-	-	-						
HCM Control Delay (s)	7.6	0	-	-	0						
HCM Lane LOS	А	А	-	-	А						
HCM 95th %tile Q(veh)	0.3	-	-	-	-						

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\Response\790 B AM (Site Driveway).syn MDM Transportation Consultants, Inc.

2014 Existing Conditions Weekday Evening Peak Hour

	≯	-	\rightarrow	1	+	*	1	Ť	1	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ኻ	ĵ.			4)			4			4	
Volume (vph)	114	435	43	21	384	43	22	174	9	31	344	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.987			0.994			0.968	
Fit Protected	0.950				0.998			0.995			0.997	
Satd. Flow (prot)	1770	2008	0	0	2097	0	0	2027	0	0	1969	0
Flt Permitted	0.274				0.964			0.933			0.971	
Satd. Flow (perm)	510	2008	0	0	2026	0	0	1900	0	0	1917	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	118	448	44	22	396	44	23	179	9	32	355	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	492	0	0	462	0	0	211	0	0	507	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	U		12	Ŭ		0	U		0	Ŭ
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	CI+Ex		Cl+Ex	Cl+Ex		CI+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

2014 Existing Conditions Weekday Evening Peak Hour

	٦	->	$\mathbf{\hat{z}}$	<	-	*	1	Ť	1	1	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.3	32.3			21.8			23.6			23.6	
Actuated g/C Ratio	0.48	0.48			0.33			0.35			0.35	
v/c Ratio	0.28	0.51			0.69			0.31			0.74	
Control Delay	11.5	13.5			27.4			19.7			28.2	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	11.5	13.5			27.4			19.7			28.2	
LOS	В	В			С			В			С	
Approach Delay		13.1			27.4			19.7			28.2	
Approach LOS		В			С			В			С	
90th %ile Green (s)	10.0	47.1		32.1	32.1		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	41.2		26.2	26.2		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	9.4	36.0		21.6	21.6		24.3	24.3		24.3	24.3	
50th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.0	30.3		17.3	17.3		18.9	18.9		18.9	18.9	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	12.5		12.5	12.5		14.1	14.1		14.1	14.1	
10th %ile Term Code	Skip	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	25	125			1/5			65			184	
Queue Length 95th (ft)	56	225			300			140			356	
Internal Link Dist (π)	450	6820			920			1920			920	
Turn Bay Length (ft)	150	4040			4007							
Base Capacity (vpn)	453	1616			1297			938			954	
Starvation Cap Reductin	0	0			0			0			0	
Spinback Cap Reductin	0	0			0			0			0	
Storage Cap Reducin	0 00	0 00			0			0			0	
Reduced V/C Ratio	0.26	0.30			0.36			0.22			0.53	
Intersection Summary	Other											
Area Type: Cyclo Longth: 05	Other											
Actuated Cycle Length: 66	:0											
Actuated Cycle Length: 60	.3											

Natural Cycle: 60 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.74 Intersection Signal Delay: 21.8 Intersection Capacity Utilization 93.7% Analysis Period (min) 15 90th %ile Actuated Cycle: 87.1 70th %ile Actuated Cycle: 81.2 50th %ile Actuated Cycle: 70.3 30th %ile Actuated Cycle: 59.2 10th %ile Actuated Cycle: 36.6

Intersection LOS: C ICU Level of Service F

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

₫ 2	
35 s	GO S
₽ ø6	▶ ø7 ₹ø8
35 s.	15 5

Intersection							
Int Delay, s/veh C	.1						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	2	4	0	213	385	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	2	4	0	222	401	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	623	401	401	0	-	0	
Stage 1	401	-	-	-	-	-	
Stage 2	222	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	_	-	-	-	-	
Critical Hdwy Sto 2	5.4	-	-	-	-	_	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	453	481	1008	-	-	-	
Stage 1	681	-	-	_	-	-	
Stage 2	820	-	-	_	-	-	
Platoon blocked. %				-	-	-	
Mov Cap-1 Maneuver	453	481	1008	-	-	-	
Mov Cap-2 Maneuver	453	-	-	-	-	-	
Stage 1	681	-	_	-	-	_	
Stage 2	820	-	-	_	-	_	
olugo z	020						
Approach	FB		NB		SB		
HCM Control Delay s	12 7				0.0		
HCM LOS	12.7 R		0		U		
	U						
Minor Lane/Maior Mvmt	NBI	NBT FBI n1	SBT SBR				
Capacity (veh/h)	1008	- 471					
HCM Lane V/C Ratio		- 0.013					
HCM Control Delay (s)	Ω	- 127					
HCM Lane LOS	Δ	- R	- -				
HCM 95th %tile O(veh)	0	- 0					
nom our mile a(voil)	0	0	-				

HCM 2010 TWSC	2014 Existing Conditions
3: Main Street (Route 126)/Main Street & Summer Street (Route 126)	Weekday Evening Peak Hour

Intersection													
Int Delay, s/veh	4.8												
Movement	EBL	EBT				WBT	WBF	२	SBL		SBR		
Vol, veh/h	199	400				476	14	4	37		352		
Conflicting Peds, #/hr	0	0				0	(0	0		0		
Sign Control	Free	Free				Free	Free	е	Stop		Stop		
RT Channelized	-	None				-	None	е	-	1	None		
Storage Length	250	-				-		-	100		0		
Veh in Median Storage, #	-	0				0		-	0		-		
Grade, %	-	0				0		-	0		-		
Peak Hour Factor	94	94				94	94	4	94		94		
Heavy Vehicles, %	5	8				20	1	0	0		1		
Mvmt Flow	212	426				506	1	5	39		374		
Major/Minor	Major1					Major2			Minor2				
Conflicting Flow All	521	0				-	(0	1363		514		
Stage 1	-	-				-		-	514		-		
Stage 2	-	-				-		-	849		-		
Critical Hdwy	4.15	-				-		-	4.1		3.4		
Critical Hdwy Stg 1	-	-				-		-	5.4		-		
Critical Hdwy Stg 2	-	-				-		-	5.4		-		
Follow-up Hdwy	2.245	-				-		-	4.1		3.4		
Pot Cap-1 Maneuver	1030	-				-		-	366		823		
Stage 1	-	-				-		-	537		-		
Stage 2	-	-				-		-	383		-		
Platoon blocked, %		-				-		-					
Mov Cap-1 Maneuver	1030	-				-		-	291		823		
Mov Cap-2 Maneuver	-	-				-		-	291		-		
Stage 1	-	-				-		-	537		-		
Stage 2	-	-				-		-	304		-		
Approach	EB					WB			SB				
HCM Control Delay, s	3.1					0			13.6				
HCM LOS									В				
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2							
Capacity (veh/h)	1030	-	-	-	291	823							
HCM Lane V/C Ratio	0.206	-	-	-	0.135	0.455							
HCM Control Delay (s)	9.4	-	-	-	19.3	13							
HCM Lane LOS	А	-	-	-	С	В							
HCM 95th %tile Q(veh)	0.8	-	-	-	0.5	2.4							

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBF	र	SBL		SBR	
Vol, veh/h	4	563				796	32	2	36		0	
Conflicting Peds, #/hr	0	0				0	()	0		0	
Sign Control	Free	Free				Free	Free	Э	Stop		Stop	
RT Channelized	-	None				-	None	Э	-		None	
Storage Length	-	-				-		-	0		-	
Veh in Median Storage, #	-	0				0		-	0		-	
Grade, %	-	0				0		-	0		-	
Peak Hour Factor	94	94				94	94	4	94		94	
Heavy Vehicles, %	25	2				3	1()	9		0	
Mymt Flow	4	599				847	34	1	38		0	
Major/Minor	Major1				Ν	lajor2			Minor2			
Conflicting Flow All	881	0				-	(C	1471		864	
Stage 1	-	-				-		-	864		-	
Stage 2	-	-				-		-	607		-	
Critical Hdwy	4.35	-				-		-	4.5		4.5	
Critical Hdwy Stg 1	-	-				-		-	5.49		-	
Critical Hdwy Stg 2	-	-				-		-	5.49		-	
Follow-up Hdwy	2.425	-				-		-	4.5		4.5	
Pot Cap-1 Maneuver	679	-				-		-	278		444	
Stage 1	-	-				-		-	350		-	
Stage 2	-	-				-		-	452		-	
Platoon blocked, %		-				-		-				
Mov Cap-1 Maneuver	679	-				-		-	275		444	
Mov Cap-2 Maneuver	-	-				-		-	275		-	
Stage 1	-	-				-		-	350)	-	
Stage 2	-	-				-		-	448	1	-	
Approach	EB					WB			SB			
HCM Control Delay, s	0.1					0			20.2	2		
HCM LOS									C	;		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	SBLn1							
Capacity (veh/h)	679	-	-	-	275							
HCM Lane V/C Ratio	0.006	-	-	-	0.139							
HCM Control Delay (s)	10.3	0	-	-	20.2							
HCM Lane LOS	В	А	-	-	С							
HCM 95th %tile Q(veh)	0	-	-	-	0.5							

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 EXPM.syn MDM Transportation Consultants, Inc.

1

Int Delay, s/veh

Vol, ve/h 463 115 9 475 65 6 Conflicting Peds, #hr 0	Movement		EBT	EBR		WBL	WBT	NBL	I	NBR	
Conflicting Peds, #hr 0	Vol, veh/h		463	115		9	475	65		6	
Sign Control Free Free Free Free Stop Stop RT Channelized - None - 0 160 Veh in Median Storage, # 0 - - 0 0 Grade, % 0 - - 0 0 - Peak Hour Factor 86 86 86 86 86 86 Heavy Vehicles, % 2 1 13 3 5 0 Major/Minor Major1 Major2 Minor1 605 - Stage 1 - - - 605 - Stage 1 - - - 573 - - 573 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 513 - - - 513 <td>Conflicting Peds, #/hr</td> <td></td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td></td>	Conflicting Peds, #/hr		0	0		0	0	0		0	
RT Channelized - None - None - None Storage Length - - - 0 0 - Grade, % 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 86 86 86 86 86 86 Heavy Vehicles, % 2 1 13 3 5 0 Minort Major/1 Major2 Minort - 605 - Stage 1 - - - 605 - - Stage 2 - - - 605 - - Critical Hdwy Stg 1 - - - 5.45 - - Critical Hdwy Stg 2 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.30 - - - 5.30 - -	Sign Control		Free	Free		Free	Free	Stop	;	Stop	
Storage Length - - - 0 160 Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 86 86 86 86 86 86 86 Heary Vehicles, % 2 1 13 3 5 0 Minort Major1 Major2 Minort - 605 - Conflicting Flow All 0 0 672 0 1178 605 Stage 1 - - - 605 - - 5138 3.8 3.8 Critical Hdwy Stg 1 - - - 545 - - - 615 - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545	RT Channelized		-	None		-	None	-	Ν	lone	
Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 86 86 86 86 86 86 Heavy Vehicles, % 2 1 13 3 5 0 Major/Minor Major Major2 Minort - - 76 7 Major/Minor Major1 Major2 Minort - - - 605 - Stage 1 - - - - 605 - - - - 545 - - - 545 - - - 545 - - - 545 - - 10/4 up Holy 10/4 up Holy - 2.317 - 3.8 3.8 POI Cap-1 Maneuver - 2.317 - 3.8 3.8 POI Cap-1 Maneuver - - 513 - - 140	Storage Length		-	-		-	-	0		160	
Grade, % 0 - - 0 0 - Peak Hour Factor 86 86 86 86 86 86 Heavy Vehicles, % 2 1 13 3 5 0 Mvmt Flow 538 134 10 552 76 7 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 672 0 1178 605 Stage 1 - - - 605 - 543 - - 545 - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 513 - - 513 - - - 513 - - -	Veh in Median Storage, #		0	-		-	0	0		-	
Peak Hour Factor 86	Grade, %		0	-		-	0	0		-	
Heavy Vehicles, % 2 1 13 3 5 0 Mymt Flow 538 134 10 552 76 7 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 672 0 1178 605 Stage 1 - - - 605 - - 573 - Critical Hdwy Stg 1 - - - 545 - - - 545 - Critical Hdwy Stg 2 - - 2.317 - 3.8 3.8 - - - 545 - - - - 545 - - - 545 - - - 545 - - - 545 - - - 545 - - - 513 - - - 513 - - - 513 - - - 530 - - - 513 - - - 521 - - - 521	Peak Hour Factor		86	86		86	86	86		86	
Mvmt Flow 538 134 10 552 76 7 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 672 0 1178 605 Stage 1 - - - 605 - 573 - Critical Hdwy 1 - - 573 - - 605 - Critical Hdwy Stg 1 - - 4.23 - 3.8 3.8 - - 545 - - - 545 - - - 545 - - - 545 - - 545 - - - 545 - - 545 - - 513 - - 513 - - 513 - Stage 1 - - - 513 - - 513 - - 521 - - 521 - - 521	Heavy Vehicles, %		2	1		13	3	5		0	
Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 672 0 1178 605 Stage 1 - - - 605 - - 573 - Critical Hdwy - - 4.23 - 3.8 3.8 - Critical Hdwy Stg 1 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - 5.13 - - - 5.13 - - - 5.30 - - - 5.13 - - -	Mvmt Flow		538	134		10	552	76		7	
Indication Indication Indication Indication Conflicting Flow All 0 0 672 0 1178 605 Stage 1 - - - 605 - 573 - Critical Hdwy Stg 1 - - 4.23 - 3.8 3.8 - Critical Hdwy Stg 2 - - - 5.45 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.45 - - - 5.30 - - - 5.30 - - - 5.30 - - -<	Maior/Minor	М	aior1		M	laior2		Minor1			
Stage 1 - - - 605 - Stage 2 - - - 605 - Critical Hdwy - - 4.23 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Follow-up Hdwy - - 2.317 - 3.8 3.8 Pot Cap-1 Maneuver - - - 513 - Stage 2 - - - 530 - Platoon blocked, % - - - 500 - Mov Cap-1 Maneuver - - - 513 - Stage 1 - - - 521 - Mov Cap-2 Maneuver - - - 521 - Stage 2 - - - 521 - - Approach EB WB WB - - 521 - Minor Lane//Major Mvmt <td>Conflicting Flow All</td> <td></td> <td><u>j-: i</u></td> <td>0</td> <td></td> <td>672</td> <td>0</td> <td>1178</td> <td></td> <td>605</td> <td></td>	Conflicting Flow All		<u>j-: i</u>	0		672	0	1178		605	
Stage 2 - - - 573 - Critical Hdwy - - 4.23 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Follow-up Hdwy - 2.317 - 3.8 3.8 Pot Cap-1 Maneuver - - 513 - Stage 1 - - - 530 - Platoon blocked, % - - - 530 - Mov Cap-1 Maneuver - - - 530 - Mov Cap-2 Maneuver - - - 513 - Stage 1 - - - 521 - Stage 2 - - - 521 - Approach EB WB WB - - 521 - Minor Lane//Major Mvmt NBLn1 NBLn2 <td< td=""><td>Stage 1</td><td></td><td>-</td><td>-</td><td></td><td></td><td>-</td><td>605</td><td></td><td>-</td><td></td></td<>	Stage 1		-	-			-	605		-	
Critical Hdwy - - 4.23 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Follow-up Hdwy - - 2.317 - 3.8 3.8 Pot Cap-1 Maneuver - - 613 - - Stage 1 - - - 530 - Platoon blocked, % - - - - 530 - Mov Cap-1 Maneuver - - - - 530 - Stage 1 - - - - - 533 - Stage 1 - - - - 513 - Stage 2 - - - 513 - Stage 2 - - - 521 - Approach EB WB NB - HCM Control Delay, s 0 0.2 13.8 HCM Lane V/C Ratio 0.	Stage 2		-	_		-	-	573		-	
Critical Hdwy Stg 1 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Critical Hdwy Stg 2 - - - 5.45 - Follow-up Hdwy - - 2.317 - 3.8 3.8 Pot Cap-1 Maneuver - - - 513 - Stage 1 - - - 530 - Platoon blocked, % - - - 530 - Mov Cap-1 Maneuver - 869 469 677 Mov Cap-2 Maneuver - - - 513 - Stage 1 - - - 513 - Stage 1 - - - 521 - Stage 2 - - - 521 - Approach EB WB NB	Critical Hdwy		-	_		4 23	-	38		38	
Ontool 1 day Sig 1 - - - 5.15 Follow-up Hdwy - - 2.317 - 3.8 3.8 Pot Cap-1 Maneuver - - 869 - 477 677 Stage 1 - - - 513 - Stage 2 - - - 530 - Platoon blocked, % - - - - Mov Cap-1 Maneuver - 869 - 469 677 Mov Cap-2 Maneuver - - - 513 - Stage 1 - - - 513 - Stage 1 - - - 513 - Stage 1 - - - 513 - Stage 2 - - - 521 - Approach EB WB NB - HCM Control Delay, s 0 0.2 13.8 HCM Lane V/C Ratio 0.161 0.01 - 0.012 HCM Lane LOS B B - - A HCM Stitla Cover 0.6 0 - 0 -	Critical Hdwy Sto 1		-	-			-	5 45		- 0.0	
Follow-up-Hdwy - - 2.317 - 3.8 3.8 Pot Cap-1 Maneuver - - 869 - 477 677 Stage 1 - - - 513 - Stage 2 - - - 530 - Platoon blocked, % - - - 530 - Mov Cap-1 Maneuver - - - - - Mov Cap-1 Maneuver - - - - - Mov Cap-2 Maneuver - - - - - Stage 1 - - - - 513 - Stage 2 - - - - 521 - Approach EB WB NB - - 521 - HCM Control Delay, s 0 0.2 13.8 - - 8 - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT - - - - - - - - <td>Critical Hdwy Stg 2</td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>_</td> <td>5 45</td> <td></td> <td>-</td> <td></td>	Critical Hdwy Stg 2		-	-		-	_	5 45		-	
Approach EB WB NB HCM Control Delay, s 0 0.2 13.8 Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT Capacity (veh/h) 469 677 - 521 Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT Capacity (veh/h) 469 677 - 869 HCM Control Delay, s 0 0.2 13.8 HCM Control Delay, s 0 0.2 13.8 HCM LOS B B -	Follow-un Hdwy		-	-		2 317	-	3.8		38	
Stage 1 - - - 513 - Stage 2 - - - 530 - Platon blocked, % - - - - 530 - Mov Cap-1 Maneuver - - 869 - 469 677 Mov Cap-2 Maneuver - - - 469 - Stage 1 - - - 513 - Stage 2 - - - 513 - Approach EB WB NB - - HCM Control Delay, s 0 0.2 13.8 - - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT - - Capacity (veh/h) 469 677 - 869 - - - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT - - - - Capacity (veh/h) 469 677 - 869 - - - - HCM Lane LOS <td>Pot Can-1 Maneuver</td> <td></td> <td>-</td> <td>-</td> <td></td> <td>869</td> <td>-</td> <td>477</td> <td></td> <td>677</td> <td></td>	Pot Can-1 Maneuver		-	-		869	-	477		677	
Stage 2 - - - 530 - Platon blocked, % - - - - - Mov Cap-1 Maneuver - - 869 - 469 6777 Mov Cap-2 Maneuver - - - 469 - - 513 - Stage 1 - - - 513 - - 521 - Approach EB WB NB NB - - - 521 - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT - - 8 Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT - <	Stage 1		-	-		-	-	513			
Platon blocked, % - - - Mov Cap-1 Maneuver - - 869 - 469 677 Mov Cap-2 Maneuver - - - 469 - - Stage 1 - - - 513 - - 521 - Stage 2 - - - - 521 - - - 521 - Approach EB WB NB NB - - - 521 - - - - 521 - - - 521 -	Stage 2		-	-		-	-	530		-	
Mov Cap-1 Maneuver - - 869 - 469 677 Mov Cap-2 Maneuver - - - 469 - Stage 1 - - - 513 - Stage 2 - - - 521 - Approach EB WB NB HCM Control Delay, s 0 0.2 13.8 HCM LOS B B - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT Capacity (veh/h) 469 677 - 869 - HCM LOS B B - - 0.012 - HCM LOS B B - - 0.012 - HCM Lane V/C Ratio 0.161 0.01 - 9.2 0 HCM Control Delay (s) 14.1 10.4 - 9.2 0 HCM Lane LOS B B - A A	Platoon blocked %		_	-			-	000			
Mov Cap-2 Maneuver - - - 469 - Stage 1 - - - 513 - Stage 2 - - - 521 - Approach EB WB NB HCM Control Delay, s 0 0.2 13.8 HCM LOS B B Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBT Capacity (veh/h) 469 677 - 869 - HCM Lane V/C Ratio 0.161 0.01 - 0.012 - HCM Control Delay (s) 14.1 10.4 - 9.2 0 HCM Lane LOS B B - - A HCM 25tb % tile O(veh) 0.6 0 - 0 -	Mov Cap-1 Maneuver		_	-		869	-	469		677	
Stage 1 - - - 513 - Stage 2 - - - 521 - Approach EB WB NB - - HCM Control Delay, s 0 0.2 13.8 - HCM LOS B B - - - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT Capacity (veh/h) 469 677 - 869 - HCM Lane V/C Ratio 0.161 0.01 - 0.012 - HCM Control Delay (s) 14.1 10.4 - 9.2 0 HCM Lane LOS B B - - A HCM Q5th % tile Q(veh) 0.6 0 - 0 -	Mov Cap-2 Maneuver		-	-		-	-	469		-	
Stage 2 - - - 513 Approach EB WB NB HCM Control Delay, s 0 0.2 13.8 HCM LOS B B - - 869 - Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT Capacity (veh/h) 469 677 - 869 - HCM Lane V/C Ratio 0.161 0.01 - 0.012 - HCM Control Delay (s) 14.1 10.4 - 9.2 0 HCM Lane LOS B B - A A HCM Q5th % tile Q(veb) 0.6 0 - A A	Stage 1		-	_		_	-	513		-	
Approach EB WB NB HCM Control Delay, s 0 0.2 13.8 HCM LOS B B	Stage 2		-	-		_	_	521		-	
ApproachEBWBNBHCM Control Delay, s00.213.8HCM LOSBBMinor Lane/Major MvmtNBLn1 NBLn2EBTEBRWBLWBTCapacity (veh/h)469677-869HCM Lane V/C Ratio0.1610.010.012HCM Control Delay (s)14.110.4-9.20HCM Lane LOSBBAHCM Q5th %tilg O(veb)0.600								Ű21			
HCM Control Delay, s 0 0.2 13.8 HCM LOS B Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT Capacity (veh/h) 469 677 - - 869 - HCM Lane V/C Ratio 0.161 0.01 - - 0.012 - HCM Control Delay (s) 14.1 10.4 - - 9.2 0 HCM Lane LOS B B - - A A	Approach		EB			WB		 NB			
HCM LOS B Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT Capacity (veh/h) 469 677 - 869 - HCM Lane V/C Ratio 0.161 0.01 - - 0.012 - HCM Control Delay (s) 14.1 10.4 - - 9.2 0 HCM Lane LOS B B - - A A HCM 95th %/iii Q (veb) 0.6 0 - - 0 -	HCM Control Delay, s		0			0.2		13.8			
Minor Lane/Major Mvmt NBLn1 NBLn2 EBT EBR WBL WBT Capacity (veh/h) 469 677 - - 869 - HCM Lane V/C Ratio 0.161 0.01 - - 0.012 - HCM Control Delay (s) 14.1 10.4 - - 9.2 0 HCM Lane LOS B B - - A A	HCM LOS							В			
Capacity (veh/h) 469 677 - 869 - HCM Lane V/C Ratio 0.161 0.01 - - 0.012 - HCM Control Delay (s) 14.1 10.4 - - 9.2 0 HCM Lane LOS B B - - A A HCM 95th % iii Q (veh) 0.6 0 - 0 -	Minor Lane/Maior Mymt	NBLn1 N	BLn2	EBT	EBR	WBL	WBT				
HCM Lane V/C Ratio 0.161 0.01 - - 0.012 - HCM Control Delay (s) 14.1 10.4 - - 9.2 0 HCM Lane LOS B B - - A A HCM S5th % tile O(veb) 0.6 0 - - 0	Canacity (veh/h)	469	677			869		 			
HCM Control Delay (s) 14.1 10.4 9.2 0 HCM Lane LOS B B A A HCM 95th %tile O(veb) 0.6 0 0	HCM Lane V/C Ratio	0 161	0.01	-	-	0.012	-				
HCM Lane LOS B B A A HCM $95th$ %tile O(yeb) 0.6 0 m m 0	HCM Control Delay (s)	14 1	10.4	-	_	92	0				
	HCM Lane LOS	R	R	_	-	Δ	Δ				
	HCM 95th %tile O(veh)	06	0	-	-	0	- -				

2021 No-Build Conditions Weekday Evening Peak Hour

	۶	-	\mathbf{i}	-	+	*	1	†	1	1	Ŧ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ţ,			4			\$			\$	
Volume (vph)	118	451	45	22	378	45	23	180	9	32	356	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25		-	25		-
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.986			0.994			0.968	
Flt Protected	0.950				0.998			0.995			0.997	
Satd. Flow (prot)	1770	2006	0	0	2095	0	0	2027	0	0	1969	0
Flt Permitted	0.274		-	·	0.961	-	÷	0.930	•	•	0.970	· ·
Satd, Flow (perm)	510	2006	0	0	2017	0	0	1894	0	0	1915	0
Right Turn on Red	-		Yes	-		Yes	÷		Yes	·		Yes
Satd. Flow (RTOR)		9			7			2	100		17	100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adi, Flow (vnh)	122	465	46	23	390	46	24	186	, /s	22	367	124
Shared Lane Traffic (%)	166	100	10	20	000	10	21	100	0	00	007	124
Lane Group Flow (vph)	122	511	0	0	459	0	0	219	0	٥	524	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	left	left	Right	left	l eft	Right	l eff	l eff	Right	Íoft	Íoft	Right
Median Width(ft)	2011	12	rugin	Lon	12	ragin	Lon	0	rugitt	Lon	0	rugin
Link Offset(ft)		12			12			0			0	
Crosswalk Width(ff)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Eactor	1 00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	1.00	0.00	0.00 Q	15	0.00	0.00 Q	0.00	0.00	0.00 Q	0.00	0.00	0.00
Number of Detectors	1	2	0	1	2	0	1	2	5	10	2	5
Detector Template	left	Thru		left	Thru		l eft	Thru		ا 1 مft	∠ Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	20	100		20	001		20	001		20	001	
Detector 1 Position/ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ev	CI+Ev										
Detector 1 Channel					ONEX							
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Size(ft)		54			94 6			94			94	
Detector 2 Size(II)												
Detector 2 Channel		UPEX			UTEX			OFEX			UTEX	
Detector 2 Extend (s)		<u>_</u>			0.0			0.0			~ ~	
Turn Turn	nm⊥nł			Dorm	U.U NIA		Derm	U.U		De		
Protoctod Dhosos	pm±br	NA A		Pellil	NA o		Perm	INA O		Perm	NA	
	1	4			õ			2			6	

2021 No-Build Conditions Weekday Evening Peak Hour

	٠	-+	\mathbf{Y}	¥	-	*	1	1	۴	1	¥	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.4	32.4			21.9			24.3			24.3	
Actuated g/C Ratio	0.48	0.48			0.32			0.36			0.36	
v/c Ratio	0.29	0.53			0.70			0.32			0.75	
Control Delay	11.8	14.1			27.8			19.7			28.8	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	11.8	14.1			27.8			19.7			28.8	
LOS	В	В			С			В			С	
Approach Delay		13.7			27.8			19.7			28.8	
Approach LOS		В			С			В			С	
90th %ile Green (s)	10.0	47.1		32.1	32.1		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	41.3		26.3	26.3		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	9.5	36.1		21.6	21.6		25.6	25.6		25.6	25.6	
50th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.1	30.7		17.6	17.6		20.0	20.0		20.0	20.0	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	12.7		12.7	12.7		14.9	14.9		14.9	14.9	
10th %ile Term Code	Skip	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	27	138			179			68			194	
Queue Length 95th (ft)	58	237			299			145			#402	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	448	1599			1280			919			937	
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	0.27	0.32			0.36			0.24			0.56	
Intersection Summary												
Area Type:	Other											
Actuated Cycle Length: 67	.7											

 Natural Cycle: 60

 Control Type: Actuated-Uncoordinated

 Maximum v/c Ratio: 0.75

 Intersection Signal Delay: 22.3
 Intersection LOS: C

 Intersection Capacity Utilization 95.5%
 ICU Level of Service F

 Analysis Period (min) 15
 90th %ile Actuated Cycle: 87.1

 70th %ile Actuated Cycle: 81.3
 50th %ile Actuated Cycle: 71.7

 30th %ile Actuated Cycle: 37.6
 #

 # 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2	- - ••••••		
35 s	60 s		
v ▼ø5	▶ ø7	Ba	
35 s	15 s	45 s	

HCM 2010 TWSC 2: Summer Street (Route 126) & Exelon Power Dwy

Intersection							
Int Delay, s/veh 0	.1						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol veh/h	2	4	0	220	399	0	
Conflicting Peds. #/hr	0	0	Ő	0	0	Ő	
Sign Control	Stop	Ston	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage. #	0	-	-	0	0	-	
Grade. %	0	-	-	Ō	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mymt Flow	2	4	0	229	416	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	645	416	416	0	-	0	
Stage 1	416	+	-	-	-	-	
Stage 2	229	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	440	471	995	-	-	-	
Stage 1	670	-	-	-	-	-	
Stage 2	814	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	440	471	995	-	-	-	
Mov Cap-2 Maneuver	440	-	-	-	-	-	
Stage 1	670	-	-	-	-	-	
Stage 2	814	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	12.9		0		0		
HCM LOS	В						
			007 000				
Minor Lane/Major Mvmt	NBL	NBI EBLN1	SB1 SBR				
Capacity (veh/h)	995	- 460					
HCM Lane V/C Ratio	-	- 0.014					
HCM Control Delay (s)	0	- 12.9					
HCM Lane LOS	А	- B					

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 NB PM.syn MDM Transportation Consultants, Inc.

0

HCM 95th %tile Q(veh)

0

-

...

-

HCM 2010 TWSC	2021	No-Build Conditions
3: Main Street (Route 126)/Main Street & Summer Street (Route 1	126)	Weekday Evening Peak Hour

Intersection									
Int Delay, s/veh	5								
Movement	EBL	EBT		WB	Т	WBR	SBL	SBR	
Vol, veh/h	206	414		49)3	14	38	365	
Conflicting Peds, #/hr	0	0			0	0	0	0	
Sian Control	Free	Free		Fre	e	Free	Stop	Stop	
RT Channelized	-	None			-	None	-	None	
Storage Length	250	-			-	-	100	0	
Veh in Median Storage. #	-	0			0	-	0	-	
Grade. %	-	Ō			0	-	0	-	
Peak Hour Factor	94	94		ç	94	94	94	94	
Heavy Vehicles, %	5	8		2	20	10	0	1	
Mvmt Flow	219	440		52	24	15	40	388	
Major/Minor	Major1			Majo	r2		Minor2		
Conflicting Flow All	539	0		· · · · · · · · · · · · · · · · · · ·	-	0	1411	532	
Stage 1		-			-	-	532		
Stage 2	-	-			-	-	879	-	
Critical Hdwy	4.15	-			-	-	4.1	3.4	
Critical Hdwy Stg 1	-	-			-	-	5.4	-	
Critical Hdwy Stg 2	-	-			_	-	54	-	
Follow-up Hdwy	2,245	-			_	-	4.1	3.4	
Pot Can-1 Maneuver	1014	-			_	-	354	815	
Stage 1	-	-			-	-	527	-	
Stage 2	-	-			_	-	372	-	
Platoon blocked %		-			-	_	0.1		
Mov Cap-1 Maneuver	1014	-			_	-	278	815	
Mov Cap-2 Maneuver	- 101	_			_	-	278	-	
Stare 1	-	_			_	_	527	_	
Stage 2	-	-			-	-	292	-	
Approach	EB			W	/B		SB		
HCM Control Delay s	32				0		14		
HCM LOS	0.2				Ŭ		В		
Minor Lane/Maior Mvmt	EBL	EBT	WBT	WBR SBLn1 SBL	n2				
Capacity (veh/h)	1014	-	-	- 278 8	15				ana an
HCM Lane V/C Ratio	0 216	-	_	- 0.145 0.4	76				
HCM Control Delay (s)	9.5	-	-	- 20.1 13	3.4				
HCM Lane LOS	2.0 A	-	-	- C	В				

0.5 2.6

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 NB PM.syn MDM Transportation Consultants, Inc.

0.8

_

-

-

HCM 95th %tile Q(veh)

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBF	२	SBL		SBR	
Vol, veh/h	4	583				825	3	3	37	,	0	
Conflicting Peds, #/hr	0	0				0	(0	0)	0	
Sign Control	Free	Free				Free	Fre	е	Stop	1	Stop	
RT Channelized	-	None				-	Non	е	-		None	
Storage Length	-	-				-		-	0		-	
Veh in Median Storage, #	-	0				0		-	0		-	
Grade, %	-	0				0		-	0		-	
Peak Hour Factor	94	94				94	94	4	94		94	
Heavy Vehicles, %	25	2				3	1	0	9		0	
Mvmt Flow	4	620				878	3	5	39	1	0	
Major/Minor	Major1				М	laior2			Minor2			
Conflicting Flow All	913	0					(n	1524		895	
Stage 1	-	-				-		-	895			
Stage 2	-	_				-		-	629		-	
Critical Hdwy	4.35	-				-		-	4.5		45	
Critical Hdwy Stg 1	-	-				-		-	5.49		-	
Critical Hdwy Stg 2	-	-				-		-	5.49		-	
Follow-up Hdwy	2.425	-				-		-	4.5		4.5	
Pot Cap-1 Maneuver	659	-				-		-	266		434	
Stage 1	-	-				-		-	340		-	
Stage 2	-	-				-		-	443	l	-	
Platoon blocked, %		-				-		-				
Mov Cap-1 Maneuver	659	-				-		-	264		434	
Mov Cap-2 Maneuver	-	-				-		-	264		-	
Stage 1	-	-				-		-	340	I	-	
Stage 2	-	-				-		-	439	I	-	
Approach	EB					WB			SB			
HCM Control Delay, s	0.1					0			21			
HCM LOS									C			
Minor Lane/Maior Mvmt	EBL	EBT	WBT	WBR S	BI n1							
Capacity (veh/h)	659				264							
HCM Lane V/C Ratio	0.006	-	-	_ (0 149							
HCM Control Delay (s)	10.5	0	-	_	21							
HCM Lane LOS	10.0 R	Ă	-	_	Ċ							
HCM 95th %tile Q(veh)	0	-	-	-	0.5							

1

Inte	rsection	
	136640011	

Int Delay, s/veh

Movement		EBT	EBR		WBL	WBT	N	3L	NBR	
Vol, veh/h		480	119		9	492		67	6	
Conflicting Peds, #/hr		0	0		0	0		0	0	
Sign Control		Free	Free		Free	Free	St	op	Stop	
RT Channelized		-	None		-	None		-	None	
Storage Length		-	-		-	-		0	160	
Veh in Median Storage, #		0	-		-	0		0	-	
Grade, %		0	-		-	0		0	-	
Peak Hour Factor		86	86		86	86		86	86	
Heavy Vehicles, %		2	1		13	3		5	0	
Mvmt Flow		558	138		10	572		78	7	
Major/Minor	Ν	/lajor1		М	ajor2		Minc	or1		
Conflicting Flow All		0	0		697	0	12	20	627	,
Stage 1		-	-		-	-	6	27	-	
Stage 2		-	-		-	-	5	93	-	
Critical Hdwy		-	-		4.23	-	3	8.8	3.8	
Critical Hdwy Stg 1		-	-		-	-	5.	45	-	
Critical Hdwy Stg 2		-	-		-	-	5.	45	-	
Follow-up Hdwy		-	-	2	2.317	-	3	3.8	3.8	
Pot Cap-1 Maneuver		-	-		850	-	4	65	668	
Stage 1		-	-		-	-	5	01	-	
Stage 2		-	-		-	-	5	19	-	
Platoon blocked, %		-	-			-				
Mov Cap-1 Maneuver		-	-		850	-	4	57	668	
Mov Cap-2 Maneuver		-	-		-	-	4	57	-	
Stage 1		-	-		-	-	5	01	-	
Stage 2		-	-		-	-	5	10	-	
Approach		EB			WB		1	۱B		
HCM Control Delay, s		0			0.2		14	1.2		
HCM LOS								В		
Minor Lane/Maior Mvmt	NBLn1 N	VBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	457	668	-	-	850					
HCM Lane V/C Ratio	0.17	0.01	-	- (0.012	-				
HCM Control Delay (s)	14.5	10.4	-	-	9.3	0				
HCM Lane LOS	B	B	-	-	A	Ă				
HCM 95th %tile Q(veh)	0.6	Ō	-	-	0	-				
2021 Build Conditions Weekday Evening Peak Hour

	٠		\rightarrow	4	-	*	1	1	1	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ኘ	ĥ			\$			\$			4	
Volume (vph)	118	451	45	22	378	45	23	210	9	32	356	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	Ó		0	Ó		Ō	Ō		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.986			0.995			0.968	
Flt Protected	0.950				0.998			0.995			0.997	
Satd. Flow (prot)	1770	2006	0	0	2095	0	0	2029	0	0	1969	0
Flt Permitted	0.273				0.961			0.937			0.968	
Satd. Flow (perm)	509	2006	0	0	2017	0	0	1911	0	0	1911	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	122	465	46	23	390	46	24	216	9	33	367	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	511	0	0	459	0	0	249	0	0	524	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	U		12	•		0	Ũ		0	U
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	CI+Ex		Cl+Ex	Cl+Ex		CI+Ex	Cl+Ex		CI+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

2021 Build Conditions Weekday Evening Peak Hour

	٦		\rightarrow	*	-	*	1	1	1	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.4	32.4			21.9			24.4			24.4	
Actuated g/C Ratio	0.48	0.48			0.32			0.36			0.36	
v/c Ratio	0.30	0.53			0.70			0.36			0.75	
Control Delay	11.8	14.2			27.9			20.1			28.8	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	11.8	14.2			27.9			20.1			28.8	
LOS	В	В			С			С			С	
Approach Delay		13.7			27.9			20.1			28.8	
Approach LOS		В			С			С			С	
90th %ile Green (s)	10.0	47.1		32.1	32.1		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	41.3		26.3	26.3		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	9.5	36.1		21.6	21.6		25.7	25.7		25.7	25.7	
50th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.1	30.7		17.6	17.6		20.1	20.1		20.1	20.1	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %lie Green (s)	0.0	12.7		12.7	12.7		15.0	15.0		15.0	15.0	
10th %ile Term Code	Skip	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	27	138			1/9			79			194	
Queue Length 95th (ft)	58	237			299			164			#403	
Internal Link Dist (ft)	450	6820			920			1920			920	
Turn Bay Length (ft)	150	4500			4070			000				
Base Capacity (vph)	447	1598			1279			926			933	
Starvation Cap Reduction	0	0			0			0			0	
Spiliback Cap Reductin	0	0			0			0			0	
Storage Cap Reductin	0	0			0			0			0	
Reduced v/c Ratio	0.27	0.32			0.36			0.27			0.56	
Intersection Summary	Other			· .								
Cycle Length: 05	Oulei											
Actuated Cycle Length: 62	77											
Asidaled Oyole Lengill. Of	.,											

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

Natural Cycle: 60 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.75 Intersection Signal Delay: 22.3 Intersection Capacity Utilization 96.2% Analysis Period (min) 15 90th %ile Actuated Cycle: 87.1 70th %ile Actuated Cycle: 81.3 50th %ile Actuated Cycle: 71.8 30th %ile Actuated Cycle: 60.8 10th %ile Actuated Cycle: 37.7 # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

≪n, ø2	- p4		
35 s	60 s		
▼ ø6	▶ ø7	8a	
35 s	15 s	45 s	1966 -

0.1

Intersection

Int Delay, s/veh

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	2	4	0	250	399	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	2	4	0	260	416	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	676	416	416	0		0	· · · · · · · · · · · · · · · · · · ·
Stage 1	416	-	-	-	-	-	
Stage 2	260	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	422	471	995	-	-	-	
Stage 1	670	-	-	-	-	-	
Stage 2	788	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	422	471	995	-	-	-	
Mov Cap-2 Maneuver	422	-	-	-	-	-	
Stage 1	670	-	-	-	-	-	
Stage 2	788	-	-	-	-	-	
5							
Approach	EB		NB		SB		
HCM Control Delay, s	13.1		0		0		
HCM LOS	В						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	995	- 453					
HCM Lane V/C Ratio	-	- 0.014					
HCM Control Delay (s)	0	- 13.1					
HCM Lane LOS	А	- B					
HCM 95th %tile Q(veh)	0	- 0					
. ,							

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

3: Main Street (Ro	ute 126	6)/Main	Street & Summer	Street	t (Route 126)	We	ekday Evening Peak Hour
Intersection							
Int Delay, s/veh 5	.1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Vol, veh/h	236	414	493	14	38	365	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None		None	
Storage Length	250	-	-	-	100	0	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	Ö	0	-	0	-	
Peak Hour Factor	94	94	94	94	94	94	
Heavy Vehicles, %	5	8	20	10	0	1	
Mvmt Flow	251	440	524	15	40	388	
Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	539	0	-	0	1475	532	
Stage 1	-	-	-	-	532	-	
Stage 2	-	-	-	-	943	-	
Critical Hdwy	4.15	-	-	-	4.1	3.4	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	2.245	-	-	-	4.1	3.4	
Pot Cap-1 Maneuver	1014	-	-	-	338	815	
Stage 1	-	-	-	-	527	-	
Stage 2	-	-	-	-	348	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1014	-	-	-	254	815	
Mov Cap-2 Maneuver	-	-	-	-	254	-	
Stage 1	-	-	-	-	527	-	
Stage 2	-	-	-	-	262	-	
A					00		
Approacn	EB		WB		SB		
HCM Control Delay, s HCM LOS	3.5		0		14.2 B		
Minor Lano/Major Mymt	Ері	ERT 1					

	adjor manne			1101	TIDIA -	ODENT	ODLITZ
Capacity (ve	h/h)	1014	-	-	-	254	815
HCM Lane V	//C Ratio	0.248	-	-	-	0.159	0.476
HCM Contro	l Delay (s)	9.7	-	-	-	21.8	13.4
HCM Lane L	.OS	А	-	-	-	С	В
HCM 95th %	tile Q(veh)	1	-	-	-	0.6	2.6

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

HCM 2010 TWSC23: Main Street (Route 126)/Main Street & Summer Street (Route 126)

2

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBF	२	SBL	SBR	
Vol, veh/h	4	583				825	3	3	107	0	
Conflicting Peds, #/hr	0	0				0	(0	0	0	
Sign Control	Free	Free				Free	Fre	е	Stop	Stop	
RT Channelized	-	None				-	Non	е	-	None	
Storage Length	-	-				-		-	0	-	
Veh in Median Storage, #	-	0				0		-	0	-	
Grade, %	-	0				0		-	0	-	
Peak Hour Factor	94	94				94	9	4	94	94	
Heavy Vehicles, %	25	2				3	1	0	9	0	
Mvmt Flow	4	620				878	3	5	114	0	
Major/Minor	Major1				Ν	lajor2			Minor2		
Conflicting Flow All	913	0				-	I	0	1524	895	
Stage 1	-	-				-		-	895	-	
Stage 2	-	-				-		-	629	-	
Critical Hdwy	4.35	-				-		-	4.5	4.5	
Critical Hdwy Stg 1	-	-				-		-	5.49	-	
Critical Hdwy Stg 2	-	-				-		-	5.49	-	
Follow-up Hdwy	2.425	-				-		-	4.5	4.5	
Pot Cap-1 Maneuver	659	-				-		-	266	434	
Stage 1	-	-				-		-	340	-	
Stage 2	-	-				-		-	443	-	
Platoon blocked, %		-				-		-			
Mov Cap-1 Maneuver	659	-				-		-	264	434	
Mov Cap-2 Maneuver	-	-				-		-	264	-	
Stage 1	-	-				-		-	340	-	
Stage 2	-	-				-		-	439	-	
Approach	EB					WB			SB		
HCM Control Delay, s	0.1					0			28.6		
HCM LOS									D		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	SBLn1						
Capacity (veh/h)	659	-	-	-	264						
HCM Lane V/C Ratio	0.006	-	-	-	0.431						
HCM Control Delay (s)	10.5	0	-	-	28.6						
HCM Lane LOS	В	А	-	-	D						
HCM 95th %tile Q(veh)	0	-	-	-	2						

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

1.8

Intersection

Int Delay, s/veh

Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	480	119	9	492	127	6	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	86	86	86	86	86	86	
Heavy Vehicles, %	2	1	13	3	5	0	
Mvmt Flow	558	138	10	572	148	7	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	697	0	1220	627	
Stage 1	-	-	-	-	627	-	
Stage 2	-	-	-	-	593	-	
Critical Hdwy	-	-	4.23	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.45	-	
Critical Hdwy Stg 2	-	-	-	-	5.45	-	
Follow-up Hdwy	-	-	2.317	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	850	-	465	668	
Stage 1	-	-	-	-	501	-	
Stage 2	-	-	-	-	519	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	850		457	668	
Mov Cap-2 Maneuver	-	-	-	-	457	-	
Stage 1	-	-	-	-	501	-	
Stage 2	-	-	-	-	510	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0.2		16.3		
HCM LOS					С		
Minor Lane/Major Mvmt	NBLn1 NBLn2	EBT	EBR WBL	WBT			
Capacity (veh/h)	457 668	-	- 850				
HCM Lane V/C Ratio	0.323 0.01	-	- 0.012	-			
HCM Control Delay (s)	16.6 10.4	-	- 9.3	0			
HCM Lane LOS	С В	-	- A	A			
HCM 95th %tile Q(veh)	1.4 0	-	- 0	-			

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

7

Intersection

Int Delay, s/veh

HCM 95th %tile Q(veh)

Movement	EBL	EBT				WBT	WBF	2	SBL	-	SBR		
Vol, veh/h	0	37				37	()	7()	130		
Conflicting Peds, #/hr	0	0				0	()	()	0		
Sign Control	Free	Free				Free	Free	Э	Stop)	Stop		
RT Channelized	-	None				-	None	Э	•	-	None		
Storage Length	-	_				-		-	()	-		
Veh in Median Storage, #	-	0				0		-	()	-		
Grade, %	-	0				0		-	()	-		
Peak Hour Factor	92	92				92	92	2	92	2	92		
Heavy Vehicles. %	0	0				0	()	()	0		
Mymt Flow	0	40				40	()	76	3	141		
	-							-					
Major/Minor	Major1				Ν	/lajor2			Minor	2			
Conflicting Flow All	40	0				-	()	80)	40		
Stage 1	-	-				-		-	4()	-		
Stage 2	-	-				-		-	4()	-		
Critical Hdwy	4.1	-				-		_	6.4	1	6.2		
Critical Hdwy Stg 1	-	-				-		-	5.4	1	-		
Critical Hdwy Stg 2	-	-				-		-	5.4	1	-		
Follow-up Hdwy	2.2	-				-		-	3.5	5	3.3		
Pot Cap-1 Maneuver	1583	-				-		-	92	7	1037		
Stage 1	-	-				-		-	98	3	-		
Stage 2	-	-				_		-	98	3	-		
Platoon blocked. %		-				-		-					
Mov Cap-1 Maneuver	1583	-				-		-	92 ⁻	7	1037		
Mov Cap-2 Maneuver	-	-				-		-	92	7	-		
Stage 1	-	_				-		-	98	8	-		
Stage 2	-	_				-		-	98	8	-		
Approach	EB					WB			SI	3			
HCM Control Delay, s	0					0			9.	6			
HCM LOS									/	4			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1							 	
Capacity (veh/h)	1583	-	-	-	996								
HCM Lane V/C Ratio	-	-	-	-	0.218								
HCM Control Delay (s)	0	-	-	-	9.6								
HCM Lane LOS	А	-	-	-	А								

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\Response\790 B PM (Site Driveway).syn MDM Transportation Consultants, Inc.

-

- 0.8

0

-

Trip Generation Data

Existing Truck Trip Generation:

- Replenishment of on-site fuel oil = 408,000 Gallons/Day .
- **Oil Delivery = 9,000 Gallons/Truck** •
- Working Hours = 24 Hours /Day •
 - 408,000 / 9,000 = 45.33 = 46 Oil Trucks/Day

46/24 = 1.92 = 2 Trucks In per Hour / 2 Trucks Out per Hour

Proposed Truck Trip Generation:

- Replenishment of on-site fuel oil = 364,800 Gallons/Day .
- Oil Delivery = 9,000 Gallons/Truck .
- Working Hours = 24 Hours /Day .

364,800 / 9,000 = 40.53 = 41 Oil Trucks/Day

- + 1 Amonia Truck/Day
- + 1 Wastewater Truck/Day
- Total = 43 Trucks/Day

43 / 24 = 1.79 = 2 Trucks In per Hour / 2 Trucks Out per Hour

Employee Trip Generation:

- **14 Existing Employees**
- **6 Additional Employees**

Weekday Morning Peak Hour

	Entering	= 3 ExistingTrips / 14 x 6	= 1.26 Trips Entering	Say 1 Trip Entering
	Exiting	= 1 Existing Trips / 14 x 6	= 0.42 Trips Exiting	Say 0 Trips Exiting
Wee	kday Mornir	ng Peak Hour		
	Entering	= 1 ExistingTrips / 14 x 6	= 0.42 Trips Entering	Say 0 Trips Entering
	Exiting	= 3 Existing Trips / 14 x 6	= 1.26 Trips Exiting	Say 1 Trip Exiting

TRANSPORTATION CONSULTANTS, INC.

Attachment

Empirical Trip Generation Calculations

□ Trip Distribution Calculations



Trip Distribution Calculation - Step 1 Weekday Morning Peak Hour TrafficVolumes (Entering)

TRANSPORTATION CONSULTANTS, INC. Planners & Engineers

Traffic Impact Assessment Medway, Massachusetts



DM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers Attachment

Trip Distribution Calculation - Step 2 Weekday Evening Peak Hour TrafficVolumes (Exiting)



MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers

Attachment

Trip Distribution Calculation - Step 3 Average Capacity Analyses

LEVEL OF SERVICE METHODOLOGY

Capacity analysis of intersections is developed using the Synchro® computer software, which implements the methods of the 2010 Highway Capacity Manual (HCM). The resulting analysis presents a level-of-service (LOS) designation for individual intersection movements and (for signalized intersections) for the entire intersection. The LOS is a letter designation that provides a qualitative measure of operating conditions based on several factors including roadway geometry, speeds, ambient traffic volumes, traffic controls, and driver characteristics. Since the LOS of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of LOS, depending on the time of day, day of week, or period of year. A range of six levels of service are defined on the basis of average delay, ranging from LOS A (the least delay) to LOS F (delays greater than 50 seconds for unsignalized movements, and greater than 80 seconds for signalized movements).

Signalized Intersection Performance Measures

The six LOS designations for signalized intersections may be described as follows:

- *LOS A* describes operations with low control delay; most vehicles do not stop at all.
- *LOS B* describes operations with relatively low control delay. However, more vehicles stop than LOS A.
- *LOS C* describes operations with higher control delays. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
- *LOS D* describes operations with control delay in the range where the influence of congestion becomes more noticeable. Many vehicles stop and individual cycle failures are noticeable.
- *LOS E* describes operations with high control delay values. Individual cycle failures are frequent occurrences.
- *LOS F* describes operations with high control delay values that often occur with over-saturation. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

The LOS for signalized intersections are calculated using the operational analysis methodology of the 2010 *Highway Capacity Manual.*¹ This method assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on delay. LOS designations are based on the criterion of control or signal delay per vehicle. Control or signal delay is a measure of driver discomfort, frustration, and fuel consumption, and includes initial deceleration delay approaching the traffic signal, queue move-up time, stopped delay and final acceleration delay. **Table A1** summarizes the relationship between LOS and control delay. The tabulated control delay criterion may be applied in assigning LOS designations to individual lane groups, to individual intersection approaches, or to entire intersections.

Table A1 LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS¹

	Control (Signal) Delay per Vehicle
Level of Service	(Seconds)
А	<u>≤</u> 10.0
В	10.1 to 20.0
С	20.1 to 35.0
D	35.1 to 55.0
Е	55.1 to 80.0
F	>80.0

¹Source: *Highway Capacity Manual 2010;* Transportation Research Board; Washington, DC; 2010.

¹Highway Capacity Manual 2010; Transportation Research Board; Washington, DC; 2010.

Unsignalized Intersection Performance Measures

The six LOS designations for unsignalized intersections may be described as follows:

- LOS A represents a condition with little or no control delay to minor street traffic.
- LOS B represents a condition with short control delays to minor street traffic.
- *LOS C* represents a condition with average control delays to minor street traffic.
- LOS D represents a condition with long control delays to minor street traffic.
- *LOS E* represents operating conditions at or near capacity level, with very long control delays to minor street traffic.
- *LOS F* represents a condition where minor street demand volume exceeds capacity of an approach lane, with extreme control delays resulting.

The LOS designations of unsignalized intersections are determined by application of a procedure described in the 2010 *Highway Capacity Manual.*² LOS is measured in terms of average control delay. Mathematically, control delay is a function of the capacity and degree of saturation of the lane group and/or approach under study and is a quantification of motorist delay associated with traffic control devices such as traffic signals and STOP signs. Control delay includes the effects of initial deceleration delay approaching a STOP sign, stopped delay, queue move-up time, and final acceleration delay from a stopped condition. Definitions for LOS at unsignalized intersections are also given in the *Highway Capacity Manual 2010*. **Table A2** summarizes the relationship between LOS and average control delay.

Table A2 LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS¹

······································	Level o	f Service
Average Control Delay (seconds per vehicle)	v/c≤1	v/c > 1
≤ 10.0	А	F
10.1 to 15.0	В	F
15.1 to 25.0	С	F
25.1 to 35.0	D	F
35.1 to 50.0	Ε	F
>50.0	F	F

¹Source: *Highway Capacity Manual 2010*, Transportation Research Board; Washington, DC; 2010.

2014 Existing Conditions Weekday Morning Peak Hour

	٠		\mathbf{F}	€		€	*	1	1	1	ŧ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	ţ,			\$			\$			÷	
Volume (vph)	194	310	13	16	544	67	39	391	15	37	234	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.986			0.996			0.946	
Fit Protected	0.950				0.999			0.996			0.996	
Satd. Flow (prot)	1770	2019	0	0	2096	0	0	2033	0	0	1939	0
Flt Permitted	0.216				0.988			0.889			0.904	
Satd. Flow (perm)	402	2019	0	0	2073	0	0	1815	0	0	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			2			37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1000			1000			2000			1000	
Travel Time (s)		22.7			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	200	320	13	16	561	69	40	403	15	38	241	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	200	333	0	0	646	0	0	458	0	0	467	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	Ũ		12			0	÷		0	-
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	Cl+Ex		Cl+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXAM.syn MDM Transportation Consultants, Inc.

2014 Existing Conditions Weekday Morning Peak Hour

	≯	-	\mathbf{i}	•	◄	*	1	1	1	1	ŧ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	45.2	45.2			30.1			24.3			24.3	
Actuated g/C Ratio	0.57	0.57			0.38			0.30			0.30	
v/c Ratio	0.51	0.29			0.82			0.83			0.83	
Control Delay	13.8	10.2			32.3			41.3			39.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	13.8	10.2			32.3			41.3			39.5	
LOS	В	В			С			D			D	
Approach Delay		11.5			32.3			41.3			39.5	
Approach LOS		В			C			D			D	
90th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	10.0	53.2		38.2	38.2		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	
50th %ile Green (s)	10.0	47.8		32.8	32.8		26.9	26.9		26.9	26.9	
50th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Gap	Gap	
30th %ile Green (s)	10.0	40.3		25.3	25.3		21.1	21.1		21.1	21.1	
30th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
10th %ile Green (s)	8.2	30.4		17.2	17.2		14.9	14.9		14.9	14.9	
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	48	84			295			219			208	
Queue Length 95th (ft)	89	141			450			#406			#397	
Internal Link Dist (ft)		920			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	405	1448			1084			710			710	
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	0.49	0.23			0.60			0.65			0.66	
Intersection Summary												
Area Type:	Other			•								
Cycle Length: 95												
Actuated Cycle Length: 79	9.9											

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXAM.syn MDM Transportation Consultants, Inc. Natural Cycle: 60Control Type: Actuated-UncoordinatedMaximum v/c Ratio: 0.83Intersection Signal Delay: 30.6Intersection LOS: CIntersection Capacity Utilization 96.1%ICU Level of Service FAnalysis Period (min) 1590th %ile Actuated Cycle: 9590th %ile Actuated Cycle: 93.250th %ile Actuated Cycle: 84.730th %ile Actuated Cycle: 71.410th %ile Actuated Cycle: 55.3#95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

^场 g2	
35's	60:si
▼ [™] ø6	▶ø7 ₹ø8
35°s	15 s

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol. veh/h	0	1	3	449	227	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sian 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	96	96	96	96	96	96	
Heavy Vehicles. %	0	100	33	2	7	0	
Mvmt Flow	0	1	3	468	236	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	710	236	236	0	-	0	
Stage 1	236	-	-	-	-	-	
Stage 2	474	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	403	612	1169	-	-	-	
Stage 1	808	-	-	-	-	-	
Stage 2	630	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	402	612	1169	-	-	-	
Mov Cap-2 Maneuver	402	-	-	-	-	-	
Stage 1	808	-	-	-	-	-	
Stage 2	628	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	10.9		0.1		0		
HCM LOS	В						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	1169	- 612					
HCM Lane V/C Ratio	0.003	- 0.002					
HCM Control Delay (s)	8.1	0 10.9					
HCM Lane LOS	А	A B					
HCM 95th %tile Q(veh)	0	- 0					

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXAM.syn MDM Transportation Consultants, Inc.

HCM 2010 TV 3: Main Street	VSC (Route 12	6)/Main Stree	t & Summer	Street (Route ⁻	201 126)	14 Existing Conditions Weekday Morning Peak Hour
Intersection						
Int Delay, s/veh	5.2					

Movement	EBL	EBT					WBT	W	'BR	SBL		SE	BR			
Vol, veh/h	375	492					241		41	21		1	98			
Conflicting Peds, #/hr	0	0					0		0	0			0			
Sign Control	Free	Free					Free	F	ree	Stop		St	ор			
RT Channelized	-	None					-	N	one	-		No	ne			
Storage Length	250	-					-		-	100			0			
Veh in Median Storage, #	-	0					0		-	0			-			
Grade, %	-	0					0		-	0			-			
Peak Hour Factor	94	94					94		94	94			94			
Heavy Vehicles, %	5	4					5		10	0			5			
Mvmt Flow	399	523					256		44	22		2	11			
Maior/Minor	Maior1					Ν	/lajor2			Minor2						
Conflicting Flow All	300	0					-		0	 1599)	2	78			
Stage 1	-	-					-		-	278			-			
Stage 2	_	-					-		-	1321			-			
Critical Hdwy	4,15	-					-		-	6.4	Ļ	6.	25			
Critical Hdwy Sto 1	-	-					-		-	5.4	Ļ		-			
Critical Hdwy Stg 2	-	-					-		-	5.4	Ļ		-			
Follow-up Hdwy	2.245	-					-		-	3.5	5	3.3	45			
Pot Cap-1 Maneuver	1244	-					-		-	118	}	7	54			
Stage 1	-	-					-		-	774	Ļ		-			
Stage 2	-	-					-		-	252	2		-			
Platoon blocked, %		-					-		-							
Mov Cap-1 Maneuver	1244	-					-		-	80)	7	'54			
Mov Cap-2 Maneuver	-	-					-		-	80)		-			
Stage 1	-	-					-		-	774	ļ		-			
Stage 2	-	-					-	-	-	171	l		-			
0																
Approach	EB						WB	}		SE	3					
HCM Control Delay, s	4						0)		16.9)					
HCM LOS										C)					
Minor Lane/Major Mymt	FBI	FBT	WBT	WBF	R SB	ll n1 :	SBI n2	>								
Capacity (veh/h)	1244				-	80	754	L						 	 	
HCM Lane V/C Ratio	0.321	-	_		- 0	279	0.279	Э								
HCM Control Delay (s)	93	-	-		- 1	66.6	11 6	5								
HCM Lane LOS	0.0 A	-	_		-		B	3								
HCM 95th %tile O(veb)	14	-	-		_	1	1.1									
HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh)	9.3 A 1.4	- - -			- (- -	66.6 F 1	11.6 B 1.1	5 3 1								

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXAM.syn MDM Transportation Consultants, Inc.

2014 Existing Conditions Weekday Evening Peak Hour

	≯	-	\rightarrow	¥	-	*	1	†	1	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	14			44			\$			44	
Volume (vph)	134	512	50	25	452	51	28	205	10	37	405	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.987			0.994			0.968	
Fit Protected	0.950				0.998			0.994			0.997	
Satd. Flow (prot)	1752	2063	0	0	2103	0	0	2110	0	0	2054	0
Flt Permitted	0.232				0.958			0.880			0.965	
Satd. Flow (perm)	428	2063	0	0	2019	0	0	1868	0	0	1988	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1000			1000			2000			1000	
Travel Time (s)		22.7			22.7			45.5			22.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	0%	0%	1%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	141	539	53	26	476	54	29	216	11	39	426	143
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	592	0	0	556	0	0	256	0	0	608	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	Ū		12	Ŭ		0	0		0	0.0
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	CI+Ex		Cl+Ex	CI+Ex		Cl+Ex	CI+Ex		Cl+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXPM.syn MDM Transportation Consultants, Inc.

2014 Existing Conditions Weekday Evening Peak Hour

	٦	-+	\mathbf{r}	•		•	1	1	1	1	ŧ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	41.8	41.8			27.5			28.3			28.3	
Actuated g/C Ratio	0.52	0.52			0.34			0.35			0.35	
v/c Ratio	0.38	0.55			0.80			0.39			0.86	
Control Delay	13.0	14.9			33.3			23.4			38.8	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	13.0	14.9			33.3			23.4			38.8	
LOS	В	В			С			С			D	
Approach Delay		14.5			33.3			23.4			38.8	
Approach LOS		В			С			С			D	
90th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Max	Max		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	47.3		32.3	32.3		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	10.0	42.6		27.6	27.6		30.0	30.0		30.0	30.0	
50th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
30th %ile Green (s)	9.0	37.5		23.5	23.5		29.5	29.5		29.5	29.5	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	6.9	28.7		16.8	16.8		21.4	21.4		21.4	21.4	
10th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	36	193			257			95			275	
Queue Length 95th (ft)	64	277			373			192			#568	
Internal Link Dist (ft)		920			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	391	1448			1032			715			770	
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	0.36	0.41			0.54			0.36			0.79	
Intersection Summary	Other											
Area Type. Cycle Length: 95	Oulei											
Actuated Cycle Length &) 4											
Aduated Oyole Lengul. Ot	/, r											

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXPM.syn MDM Transportation Consultants, Inc. Natural Cycle: 60Control Type: Actuated-UncoordinatedMaximum v/c Ratio: 0.86Intersection Signal Delay: 27.3Intersection Capacity Utilization 107.7%Icu Level of Service GAnalysis Period (min) 1590th %ile Actuated Cycle: 9570th %ile Actuated Cycle: 87.350th %ile Actuated Cycle: 82.630th %ile Actuated Cycle: 7710th %ile Actuated Cycle: 60.1# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2	₽ ø4	
35 s	60 s	
↓ [®] ø6	▶ ø7	4 ₹ ø8
35 s	15 s	45 s

Intersection							
Int Delay, s/veh	0						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	0	3	1	216	460	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	98	98	98	98	98	98	
Heavy Vehicles, %	0	0	0	1	3	0	
Mvmt Flow	0	3	1	220	469	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	691	469	469	0	-	0	
Stage 1	469	-	-	-	-	-	
Stage 2	222	-	-	-	-	-	
Critical Hdwv	6.4	6.2	4.1	-	· _	-	
Critical Hdwy Sto 1	5.4		-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	_	
Follow-up Hdwy	3.5	3.3	2.2	-	-	-	
Pot Cap-1 Maneuver	413	598	1103	-	-	-	
Stage 1	634		_	-	-	-	
Stage 2	820	-	-	-	-	-	
Platoon blocked. %				-	-	-	
Mov Cap-1 Maneuver	413	598	1103	-	-	-	
Mov Cap-2 Maneuver	413	-	-	-	-	_	
Stage 1	634	-	-	-	-	-	
Stage 2	819	-	_	-	-	-	
Oldgo 2	010						
Approach	EB		NB		SB		
HCM Control Delay s	11 1		0		0		
HCM LOS	B		•				
	2						
Minor Lane/Major Mymt	NBI	NBT FBI n1	SBT SBR				
Canacity (voh/h)	1102	- 509			· · · · · · · · · · · · · · · · · · ·		
HCM Lane V/C Patio	0.001	- 0.90					
HOM Control Doloy (a)	ו טט.ט מים	- 0.000					
HCM Lang LOS	0.3						
	A	A B					
רטעו שסנוו ‰נוופ ע(ven)	U	- 0					

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 EXPM.syn MDM Transportation Consultants, Inc.

LCM 2010	
	14400

3: Main Street (Route 126)/Main Street & Summer Street (Route 126)

Weekday Evening Peak Hour

Intersection							
_						_	

Int Delay, s/veh	12.3
in Boldy, or ton	

Movement EB	L EBT	WBT	WBR	SBL	SBR	
Vol, veh/h 18	9 381	536	16	44	405	
Conflicting Peds, #/hr	0 0	0	0	0	0	
Sign Control Fre	e Free	Free	Free	Stop	Stop	
RT Channelized	- None	-	None	-	None	
Storage Length 25	0 -	-	-	100	0	
Veh in Median Storage. #	- 0	0	-	0	-	
Grade. %	- 0	0	-	0	-	
Peak Hour Factor	4 94	94	94	94	94	
Heavy Vehicles. %	0 0	1	0	0	1	
Mymt Flow 20	1 405	570	17	47	431	
Major/Minor Majo	1	Major2		Minor2		
Conflicting Flow All 58	70	-	0	1386	579	
Stage 1		-	-	579	-	
Stage 2		-	-	807	-	
Critical Hdwv 4	1 -	-		6.4	6.21	
Critical Hdwy Sto 1		-	-	5.4	-	
Critical Hdwy Stg 2				5.4	-	
Follow-up Hdwy 2	2 -			3.5	3.309	
Pot Cap-1 Maneuver 99	- 8			159	517	
Stage 1				564	-	
Stage 2				442	-	
Platoon blocked, %	-					
Mov Cap-1 Maneuver 99	- 8			127	517	
Mov Cap-2 Maneuver			. <u>-</u>	127	-	
Stage 1				564	-	
Stage 2				353	-	
Clugo L						
Approach	В	WE	3	SB		
HCM Control Delay, s	.2	()	39		
HCMLOS				E		
Minor Lane/Major Mvmt El	BL EBT	WBT WBR SBLn1 SBLn2	2			
Capacity (veh/h) 9	98	127 51	7			
HCM Lane V/C Ratio 0.2	01	0.369 0.833	3			
HCM Control Delay (s)			`			
	.5	49 37.9	•			
HCM Lane LOS	.5 A	49 37.9 E F	e E			

2021 No-Build Conditions Weekday Morning Peak Hour

	≯		\mathbf{i}	*	-	*	•	t	1	1	Ŧ	∢
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	î,			\$			4			4	
Volume (vph)	201	321	13	17	564	69	40	405	16	38	242	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.986			0.995			0.945	
Flt Protected	0.950				0.999			0.996			0.996	
Satd. Flow (prot)	1770	2019	0	0	2096	0	0	2031	0	0	1937	0
Flt Permitted	0.210				0.986			0.884			0.898	
Satd. Flow (perm)	391	2019	0	0	2069	0	0	1803	0	0	1746	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			2			38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1000			1000			2000			1000	
Travel Time (s)		22.7			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	207	331	13	18	581	71	41	418	16	39	249	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	344	0	0	670	0	0	475	0	0	483	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	Cl+Ex		CI+Ex	Cl+Ex		Cl+Ex	CI+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0,	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0		_	0.0		_	0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 No-Build AM.syn MDM Transportation Consultants, Inc.

2021 No-Build Conditions Weekday Morning Peak Hour

	٦		\mathbf{i}	✓		*	1	Ť	1	1	ŧ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	46.6	46.6			31.5			25.6			25.6	
Actuated g/C Ratio	0.56	0.56			0.38			0.31			0.31	
v/c Ratio	0.54	0.30			0.84			0.85			0.85	
Control Delay	14.8	10.6			34.4			43.4			41.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	14.8	10.6			34.4			43.4			41.5	
LOS	В	В			С			D			D	
Approach Delay		12.1			34.4			43.4			41.5	
Approach LOS		В			С			D			D	
90th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	
50th %ile Green (s)	10.0	49.7		34.7	34.7		30.0	30.0		30.0	30.0	
50th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	
30th %ile Green (s)	10.0	42.2		27.2	27.2		23.1	23.1		23.1	23.1	
30th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
10th %ile Green (s)	8.5	31.8		18.3	18.3		16.2	16.2		16.2	16.2	
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	55	97			333			240			227	
Queue Length 95th (ft)	92	147			475			#431			#422	
Internal Link Dist (ft)		920			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	393	1394			1042			679			680	
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	0.53	0.25			0.64			0.70			0.71	
Intersection Summary	<u></u>											
Area Type:	Uther											
Actuated Cycle Length: 82	2.6											

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 No-Build AM.syn MDM Transportation Consultants, Inc.

 Natural Cycle: 65

 Control Type: Actuated-Uncoordinated

 Maximum v/c Ratio: 0.85

 Intersection Signal Delay: 32.3

 Intersection Capacity Utilization 99.0%

 Icu Level of Service F

 Analysis Period (min) 15

 90th %ile Actuated Cycle: 95

 70th %ile Actuated Cycle: 89.7

 30th %ile Actuated Cycle: 75.3

 10th %ile Actuated Cycle: 58

 #

 95th percentile volume exceeds capacity, queue may be longer.

 Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

₫ 1 _ Ø2	→ ø4	
35 s	60 s	
↓ [™] ø6	▶ ø7	¶ ∲ ø8
35 s	15 s	45 <i>5</i>

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	0	3	5	465	235	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	0	3	5	484	245	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	740	245	245	0	-	0	
Stage 1	245	· –	-	-	-	-	
Stage 2	495	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	387	604	1160	-	-	-	
Stage 1	800	-	-	-	-	-	
Stage 2	617	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	385	604	1160	-	-	-	
Mov Cap-2 Maneuver	385	-	-	-	-	-	
Stage 1	800	-	-	-	-	-	
Stage 2	613	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	11		0.1		0		
HCM LOS	В						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	1160	- 604					
HCM Lane V/C Ratio	0.004	- 0.005					
HCM Control Delay (s)	8.1	0 11					
HCM Lane LOS	Α	A B					
HCM 95th %tile Q(veh)	0	- 0					
	-	-					

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 No-Build AM.syn MDM Transportation Consultants, Inc.

3: Main Street (Ro	ute 126	i)/Mai	n Stre	et &	Sur	nmer	Stre	eet	(Route 12	26)	We	ekday Mori	ning Peak Hou
Intersection													
Int Delay, s/veh 5	.5												
Movement	FBI	FBT				WBT	WBF	R	SBI	S	BR		
Vol veh/h	391	510				250	4	2	22		207		
Conflicting Peds #/hr	0	0				200	т. 	0	0		0		
Sign Control	Free	Free				Free	Fre	e	Stop	S	top		
RT Channelized	-	None					Non	e	-	N	one		
Storage Length	250	-				-	11011	-	100		0		
Veh in Median Storage. #		0				0		-	0		-		
Grade %	-	õ				Ő		-	Ő		-		
Peak Hour Factor	94	94				94	9	4	94		94		
Heavy Vehicles %	5	4				5	1	0	0		5		
Mvmt Flow	416	543				266	4	5	23	:	220		
Major/Minor	Maior1					Maior2			Minor2				
Conflicting Flow All	311							0	1662		288		
Stage 1	-	-				_		-	288		-		
Stage 2	_	_				-		_	1374		-		
Critical Hdwy	4 15	_				-		-	64	F	25		
Critical Hdwy Sto 1	-1.10	-				-		-	5.4				
Critical Hdwy Stg 2	-	-				-		-	54		_		
Follow-up Hdwy	2,245	-				-		-	3.5	3.3	345		
Pot Cap-1 Maneuver	1233	-				-		-	108		744		
Stage 1	-	-				-		-	766		_		
Stage 2	-	-				-		-	237		-		
Platoon blocked. %		-				-		-					
Mov Cap-1 Maneuver	1233	-				-		-	72		744		
Mov Cap-2 Maneuver	-	-				-		-	72		-		
Stage 1	-	-				-		-	766		-		
Stage 2	-	-				-		-	157		-		
Approach	EB					WB			SB				
HCM Control Delay s	4 1					0			18.2				
HCM LOS						Ū			C				
Minor Lane/Maior Mymt	FBI	EBT	WBT	WBR	SBLn1	SBLn2							
Capacity (veh/h)	1233				70	744							
HCM Lane V/C Ratio	0 337	-	-	-	0.325	0 206							
HCM Control Delay (s)	N D	-	-	-	77 A	11 0							
HCM Lane LOS	Δ	_	-	-	۲.,, F	- 1.0 R							
HCM 95th %tile Q(veh)	1.5	-	-	-	1.2	1.2							

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 No-Build AM.syn MDM Transportation Consultants, Inc.

2021 No-Build Conditions

HCM 2010 TWSC

2021 No-Build Conditions Weekday Evening Peak Hour

	۶		\mathbf{F}	*	←	*	1	1	1	1	Ŧ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦ آ	4			4			\$			\$	
Volume (vph)	139	530	52	26	468	53	29	212	10	38	420	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.987			0.994			0.968	
Flt Protected	0.950				0.998			0.994			0.997	
Satd. Flow (prot)	1752	2063	0	0	2103	0	0	2110	0	0	2054	0
Flt Permitted	0.224				0.956			0.864			0.964	
Satd. Flow (perm)	413	2063	0	0	2015	0	0	1834	0	0	1986	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1000			1000			2000			1000	
Travel Time (s)		22.7			22.7			45.5			22.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	0%	0%	1%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	146	558	55	27	493	56	31	223	11	40	442	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	146	613	0	0	576	0	0	265	0	0	630	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		CI+Ex	Cl+Ex		CI+Ex	CI+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 No-Build PM.syn MDM Transportation Consultants, Inc.

2021 No-Build Conditions Weekday Evening Peak Hour

	۶		\mathbf{r}	*	-	*	1	Ť	1	1	Ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	43.0	43.0			28.7			29.6			29.6	
Actuated g/C Ratio	0.52	0.52			0.35			0.36			0.36	
v/c Ratio	0.40	0.57			0.82			0.40			0.88	
Control Delay	13.4	15.4			34.7			24.1			41.4	
Queue Delav	0.0	0.0			0.0			0.0			0.0	
Total Delay	13.4	15.4			34.7			24.1			41.4	
LOS	В	В			С			C			D	
Approach Delay	-	15.0			34.7			24.1			41.4	
Approach LOS		В			С			C			D	
90th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Max	Max		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	49.7		34.7	34.7		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	10.0	43.8		28.8	28.8		30.0	30.0		30.0	30.0	
50th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
30th %ile Green (s)	9.2	38.6		24.4	24.4		30.0	30.0		30.0	30.0	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Max	Max	
10th %ile Green (s)	7.1	30.2		18.1	18.1		26.5	26.5		26.5	26.5	
10th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	38	203		1-	271			102		F	298	
Queue Length 95th (ft)	66	291			392			200			#599	
Internal Link Dist (ff)		920			920			1920			920	
Turn Bay Lenoth (ft)	150											
Base Capacity (vph)	379	1394			992			675			741	
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	0.39	0.44			0.58			0.39			0.85	
Intersection Summary												
Area Type:	Other					*						
Cycle Length: 95												
Actuated Cycle Length: 82.8												

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 No-Build PM.syn MDM Transportation Consultants, Inc.

 Natural Cycle: 60

 Control Type: Actuated-Uncoordinated

 Maximum v/c Ratio: 0.88

 Intersection Signal Delay: 28.6
 Intersection LOS: C

 Intersection Capacity Utilization 111.1%
 ICU Level of Service H

 Analysis Period (min) 15
 90th %ile Actuated Cycle: 95

 70th %ile Actuated Cycle: 89.7
 50th %ile Actuated Cycle: 83.8

 30th %ile Actuated Cycle: 78.6
 10th %ile Actuated Cycle: 66.7

 #
 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

	≪¶ø2	₩ ₩ ₩ Ø4	
69	515 State of the second state of the	60 s	
	¢6	∮ _{ø7} ∉ _{ø8}	
24	Sc	15 s	1964) 1964)
Intersection

Int Delay, s/veh 0.1

Mayamant	EDI		NDI	NDT	срт	CDD	
			INDL	004	וםט דרג		
Vol, veh/h	U	5	3	224	4//	U	
Conflicting Peds, #/hr	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, #	1	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	98	98	98	98	98	98	
Heavy Vehicles, %	0	0	0	1	3	0	
Mvmt Flow	0	5	3	229	487	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	722	487	487	0	-	0	
Stage 1	487	-	-	-	-	-	
Stage 2	235	-	-	-	-	-	
Critical Hdwy	6.4	6.2	4.1	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.3	2.2	-	-	-	
Pot Cap-1 Maneuver	397	585	1086	-	-	-	
Stage 1	622	-	-	-	-	-	
Stage 2	809	-	-	-	-	-	
Platoon blocked. %				-	· · · ·	-	
Moy Cop 1 Manauvor	306	585	1086	-	-	-	

mor oup i manouroi							
Mov Cap-2 Maneuver	495	-	-	-	-	-	
Stage 1	622	-	-	-	-	-	
Stage 2	807	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	11.2		0.1		0		
HCM LOS	В						

Minor Lane/Major Mvmt	NBL	NBT E	EBLn1	SBT	SBR	
Capacity (veh/h)	1086	-	585	-	-	
HCM Lane V/C Ratio	0.003	-	0.009	-	-	
HCM Control Delay (s)	8.3	0	11.2	-	-	
HCM Lane LOS	А	А	В	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 2010 TWSC	2021 No-Build Conditions
3: Main Street (Route 126)/Main Street & Summer Street (Route 126	 Weekday Evening Peak Hour

Intersection														
Int Delay, s/veh 14	.8													
Movement	FBI	FBT				WBT	WBR		SBI	SE	38			
Vol veh/h	198	305				555	17		46	4	21	A	· · ·	
Conflicting Peds #/hr	150	000				000	0		-0 0	7	0			
Sign Control	Free	Free				Froo	Free		Stop	St	00			
RT Channelized	-	None				-	None		0.00	No	op ne			
Storage Length	250	-				-	-		100		0			
Veh in Median Storage #	200	٥				٥	_		0		-			
Grade %	_	0				0			0		_			
Peak Hour Factor	- ۵۸	Q/				Q/	- ۵/		94		<u>9</u> 1			
Heavy Vohicles %	04	04				1	0		0		1			
Mumt Flow	211	120				500	18		10	1	18			
	211	420				090	10		43	4	40			
	••••													
Major/Minor	Major1				N	Aajor2			Minor2					
Conflicting Flow All	609	0				-	0)	1440	5	99			
Stage 1	-	-				-	-	•	599		-			
Stage 2	-	-				-	-	•	841		-			
Critical Hdwy	4.1	-				-	-	•	6.4	6.	21			
Critical Hdwy Stg 1	-	-				-	-	•	5.4		-			
Critical Hdwy Stg 2	-	-				-	-	•	5.4		-			
Follow-up Hdwy	2.2	-				-	-	-	3.5	3.3	09			
Pot Cap-1 Maneuver	979	-				-	-	•	148	5	03			
Stage 1	-	-				-	-	•	553		-			
Stage 2	-	-				-	-	•	426		-			
Platoon blocked, %		-				-	-	•						
Mov Cap-1 Maneuver	979	-				-	-	-	116	5	03			
Mov Cap-2 Maneuver	-	-				-	-	-	116		-			
Stage 1	-	-				-	-	-	553		-			
Stage 2	-	-				-	-	-	334		-			
Approach	EB					WB			SB					
HCM Control Delay, s	3.2					0			47.5					
HCM LOS						•			E					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	BLn1	SBLn2								
Capacity (veh/h)	979	-	-	-	116	503								
HCM Lane V/C Ratio	0.215	-	-	-	0.422	0.89								
HCM Control Delay (s)	9.7	-	-	-	57	46.5								
HCM Lane LOS	А	-	-	-	F	E								
HCM 95th %tile Q(veh)	0.8	-	-	-	1.8	10								

Lanes, Volumes, Timings 1: Summer Street (Route 126) & Milford Street (Route 109)

2021 Build Conditions Weekday Morning Peak Hour

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
Lane Configurations \checkmark \clubsuit \clubsuit \clubsuit \clubsuit \clubsuit \clubsuit Volume (vph)201321131756469404051638242Ideal Flow (vphpl)1900	SBR
Volume (vph) 201 321 13 17 564 69 40 405 16 38 242 Ideal Flow (vphpl) 1900 1 1900 1900 1900 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 </td <td></td>	
Ideal Flow (vphpl) 1900 1	189
Lane Width (ft) 12 15 15 16 </td <td>900</td>	900
Storage Length (ft) 150 0	16
Storage Lanes 1 0 <	0
Taper Length (ft)25252525Lane Util. Factor1.001.001.001.001.001.001.001.00Frt0.9940.9860.9950.945Flt Protected0.9500.9990.9960.996Satd. Flow (prot)17702019002096002031001937Flt Permitted0.2100.9860.9860.8840.8980.8980.898	0
Lane Util. Factor 1.00 <td></td>	
Frt 0.994 0.986 0.995 0.945 Fit Protected 0.950 0.999 0.996 0.996 Satd. Flow (prot) 1770 2019 0 0 2031 0 0 1937 Fit Permitted 0.210 0.986 0.884 0.898	1.00
Flt Protected 0.950 0.999 0.996 0.996 Satd. Flow (prot) 1770 2019 0 0 2096 0 0 2031 0 0 1937 Flt Permitted 0.210 0.986 0.884 0.898	
Satd. Flow (prot) 1770 2019 0 0 2096 0 0 2031 0 0 1937 Flt Permitted 0.210 0.986 0.884 0.898	
Flt Permitted 0.210 0.986 0.884 0.898	0
Satd. Flow (perm) 391 2019 0 0 2069 0 0 1803 0 0 1746	0
Right Turn on Red Yes Yes Yes	Yes
Satd. Flow (RTOR) 4 8 2 38	
Link Speed (mph) 30 30 30 30	
Link Distance (ft) 1000 1000 2000 1000	
Travel Time (s) 22.7 22.7 45.5 22.7	
Peak Hour Factor 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97	0.97
Heavy Vehicles (%) 2% 3% 0% 0% 1% 3% 5% 5% 7% 3% 7%	2%
Adi. Flow (vph) 207 331 13 18 581 71 41 418 16 39 249	195
Shared Lane Traffic (%)	
Lane Group Flow (vph) $207 344 0 0 670 0 0 475 0 0 483$	0
Enter Blocked Intersection No	No
Lane Alignment Left Left Right Rig	Right.
Median Width(ff) 12 12 0 0	
Link Offset/ff) 0 0 0 0	
Crosswalk Width(ft) 16 16 16 16	
Two way Left Turn Lane	
Headway Eactor 100 0.88 0.88 0.85 0.85 0.85 0.85 0.85 0.	0 85
Turning Speed (mph) 15 9 15 9 15 9 15	9
Number of Detectors $1 2 1 2 1 2 1 2 1 2$	Ũ
Detector Template Left Thru Left Thru Left Thru Left Thru	
Leading Detector (ff) 20 100 20 100 20 100 20 100	
Trailing Detector (ff) $0 0 0 0 0 0 0 0 0 0$	
Detector 1 Position(ff) $0 0 0 0 0 0 0 0 0 0 0$	
Detector 1 Size(ff) 20 6 20 6 20 6 20 6	
Detector 1 Type CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex	
Detector 1 Channel	
Detector 1 Extend (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Detector 1 Queue (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	
Detector 1 Delay (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Detector 2 Position(ft) 94 94 94 94	
Detector 2 Size(ff) 6 6 6 6	
Detector 2 Type CI+Ex CI+Ex CI+Ex	
Detector 2 Channel	
Οιστοιοι 2 ελιοία (σ) 0.0	
Protected Phases 7 4 8 2 6	

Lanes, Volumes, Timings 1: Summer Street (Route 126) & Milford Street (Route 109)

2021 Build Conditions Weekday Morning Peak Hour

	٦	-	\mathbf{i}	4	-	*	1	1	1	1	Ŧ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	46.6	46.6			31.5			25.6			25.6	
Actuated g/C Ratio	0.56	0.56			0.38			0.31			0.31	
v/c Ratio	0.54	0.30			0.84			0.85			0.85	
Control Delay	14.8	10.6			34.4			43.4			41.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	14.8	10.6			34.4			43.4			41.5	
LOS	В	В			С			D			D	
Approach Delay		12.1			34.4			43.4			41.5	
Approach LOS		В			С			D			D	
90th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	
50th %ile Green (s)	10.0	49.7		34.7	34.7		30.0	30.0		30.0	30.0	
50th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	
30th %ile Green (s)	10.0	42.2		27.2	27.2		23.1	23.1		23.1	23.1	
30th %ile Term Code	Max	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
10th %ile Green (s)	8.5	31.8		18.3	18.3		16.2	16.2		16.2	16.2	
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	55	97			333			240			227	
Queue Length 95th (ft)	92	147			475			#431			#422	
Internal Link Dist (ft)		920			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	393	1394			1042			679			680	
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	0.53	0.25			0.64			0.70			0.71	
Intersection Summary												
Area Type:	Other											
Cycle Length: 95	c											
Actuated Cycle Length: 82.	0											

Natural Cycle: 65 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.85 Intersection Signal Delay: 32.3 Intersection LOS: C Intersection Capacity Utilization 99.0% ICU Level of Service F Analysis Period (min) 15 90th %ile Actuated Cycle: 95 70th %ile Actuated Cycle: 95 50th %ile Actuated Cycle: 89.7 30th %ile Actuated Cycle: 75.3 10th %ile Actuated Cycle: 58 # 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

≪\ 1 ø2	 ø4	
35 ś	60 s	
↓ ø6	≠ ø7	4 ₩ 8
35 s	15 s	45 s

0.1

Intersection

Int Delay, s/veh

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	0	3	6	465	235	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	57	2	7	0	
Mvmt Flow	0	3	6	484	245	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	742	245	245	0	-	0	
Stage 1	245	-	-	-	-	-	
Stage 2	497	-	-	-	-	-	
Critical Hdwy	6.4	7.2	4.67	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.713	-	-	-	
Pot Cap-1 Maneuver	386	604	1058	-	-	-	
Stage 1	800	-	-	-	-	-	
Stage 2	615	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	383	604	1058	-	-	-	
Mov Cap-2 Maneuver	383	-	-	-	-	-	
Stage 1	800	-	-	-	-	-	
Stage 2	610	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	11		0.1		0		
HCM LOS	В						
Minor Lane/Maior Mymt	NBL	NBT EBLn1	SBT SBR				
Canacity (veh/h)	1058	- 604					
HCM Lane V/C Ratio	0.006	- 0.005					
HCM Control Delay (s)	84	0 11					
HCM Lane LOS	Δ	A R					
HCM 95th %tile O(veh)	0	- 0					
	0	U					

Intersection

Int Delay, s/veh 5.5

Movement E	BL E	EBT				WBT	WE	3R	S	BL	SBR	 	
Vol. veh/h 39	92	510				250		42		22	207		
Conflicting Peds, #/hr	0 -	0				0		0		0	0		
Sign Control Fro	e F	Free				Free	Fr	ee	S	top	Stop		
RT Channelized	- N	lone				-	No	ne		-	None		
Storage Length 2	50	-				-		-	1	100	0		
Veh in Median Storage. #	-	0				0		-		0	-		
Grade. %	-	0				0		-		0	-		
Peak Hour Factor	94	94				94		94		94	94		
Heavy Vehicles. %	5	4				5		10		0	5		
Mymt Flow 4	17	543				266		45		23	220		
Major/Minor Majo	r1					Major2			Min	or2		 	<u> </u>
Conflicting Flow All 3	11	0				-		0	10	665	288		
Stage 1	-	-				-		-	:	288	-		
Stage 2	-	-				-		-	1:	377	-		
Critical Hdwv 4	15	-				-		-		6.4	6.25		
Critical Hdwy Stg 1	-	-				-		-		5.4	-		
Critical Hdwy Stg 2	-	-				-		-		5.4	-		
Follow-up Hdwy 2.2	45	-				-		-		3.5	3.345		
Pot Cap-1 Maneuver 12	33	-				-	•	-		108	744		
Stage 1	-	-				-	•	-		766	-		
Stage 2	-	-				-		-		237	-		
Platoon blocked, %		-				-	-	-					
Mov Cap-1 Maneuver 12	33	-				-	-	-		71	744		
Mov Cap-2 Maneuver	-	-				-	-	-		71	-		
Stage 1	-	-				-	-	-		766	-		
Stage 2	-	-				-	-	-		157	•		
Approach	EB					WE	3			SB			
HCM Control Delay, s	4.1					C)			18.3			
HCM LOS										С			
Minor Lane/Major Mvmt	BL	EBT	WBT	WBR	SBLn1	SBLn2	2						
Capacity (veh/h) 1	233	-	-		71	744	4						
HCM Lane V/C Ratio 0.	338	-	-	-	0.33	0.296	6						
HCM Control Delay (s)	9.4	-	-	-	78.9	11.9	9						
HCM Lane LOS	A	-	-	-	F	E	3						
HCM 95th %tile Q(veh)	1.5	-	-	-	1.2	1.2	2						

Lanes, Volumes, Timings <u>1: Summer Street (Route 126) & Milford Street (Route 109)</u>

2021 Build Conditions Weekday Evening Peak Hour

	۶		\rightarrow	1	-	*	1	1	1	1	↓ i	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ĥ			4			4			4	
Volume (vph)	139	530	52	26	468	53	29	212	10	38	420	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.987			0.994			0.968	
Flt Protected	0.950				0.998			0.994			0.997	
Satd. Flow (prot)	1752	2063	0	0	2103	0	0	2110	0	0	2054	0
Flt Permitted	0.224				0.956			0.864			0.964	
Satd. Flow (perm)	413	2063	0	0	2015	0	0	1834	0	0	1986	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1000			1000			2000			1000	
Travel Time (s)		22.7			22.7			45.5			22.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	0%	0%	1%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	146	558	55	27	493	56	31	223	11	40	442	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	146	613	0	0	576	0	0	265	0	0	630	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	•		12	-		0	•		0	•
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		CI+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

Lanes, Volumes, Timings <u>1: Summer Street (Route 126) & Milford Street (Route 109)</u>

2021 Build Conditions Weekday Evening Peak Hour

	۶		$\mathbf{\hat{z}}$	¥		*	1	1	۴	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	43.0	43.0			28.7			29.6			29.6	
Actuated g/C Ratio	0.52	0.52			0.35			0.36			0.36	
v/c Ratio	0.40	0.57			0.82			0.40			0.88	
Control Delay	13.4	15.4			34.7			24.1			41.4	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	13.4	15.4			34.7			24.1			41.4	
LOS	В	В			С			С			D	
Approach Delay		15.0			34.7			24.1			41.4	
Approach LOS		В			С			С			D	
90th %ile Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Max	Max		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	49.7		34.7	34.7		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	10.0	43.8		28.8	28.8		30.0	30.0		30.0	30.0	
50th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
30th %ile Green (s)	9.2	38.6		24.4	24.4		30.0	30.0		30.0	30.0	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Max	Max	
10th %ile Green (s)	7.1	30.2		18.1	18.1		26.5	26.5		26.5	26.5	
10th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	38	203			271			102			298	
Queue Length 95th (ft)	66	291			392			200			#599	
Internal Link Dist (ft)		920			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	379	1394			992			675			741	
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	0.39	0.44			0.58			0.39			0.85	
Intersection Summary												
Area Type:	Other											
Cycle Length: 95 Actuated Cycle Length: 82.	8											

 Natural Cycle: 60

 Control Type: Actuated-Uncoordinated

 Maximum v/c Ratio: 0.88

 Intersection Signal Delay: 28.6
 Intersection LOS: C

 Intersection Capacity Utilization 111.1%
 ICU Level of Service H

 Analysis Period (min) 15
 90th %ile Actuated Cycle: 95

 70th %ile Actuated Cycle: 89.7
 50th %ile Actuated Cycle: 83.8

 30th %ile Actuated Cycle: 78.6
 10th %ile Actuated Cycle: 66.7

 #
 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2	- -	
35 s	60 S	
↓ Ø 6	▶ ₉₇ ★ ₉₈	
35 s	15 s 45 s	

Intersection	

Int Delay, s/veh 0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	0	6	3	224	477	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	1	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	98	98	98	98	98	98	
Heavy Vehicles, %	0	57	75	1	3	0	
Mvmt Flow	0	6	3	229	487	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	722	487	487	0	-	0	
Stage 1	487	-	-	-	-	-	
Stage 2	235	-	-	-	-	-	
Critical Hdwy	6.4	6.77	4.85	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.813	2.875	-	-	-	
Pot Cap-1 Maneuver	397	484	784	-	-	-	
Stage 1	622	-	-	-	-	-	
Stage 2	809	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	395	484	784	-	-	-	
Mov Cap-2 Maneuver	494	-	-	-	-	-	
Stage 1	622	-	-	-	-	-	
Stage 2	806	-	-	-	-	-	
-							
Approach	EB		NB		SB		
HCM Control Delay, s	12.5		0.1		0		
HCM LOS	В						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	784	- 484					
HCM Lane V/C Ratio	0.004	- 0.013					
HCM Control Delay (s)	9.6	0 12.5					
HCM Lane LOS	А	A B					
HCM 95th %tile Q(veh)	0	- 0					
· /							

Intersection											
Int Delay, s/veh 14	4.9										
Movement	EBL	EBT				WBT	WBR	SI	BL	SBR	
Vol, veh/h	198	395				555	17		46	422	
Conflicting Peds, #/hr	0	0				0	0		0	0	
Sign Control	Free	Free				Free	Free	St	ор	Stop	
RT Channelized	-	None				-	None		-	None	
Storage Length	250	-				-	-	1	00	0	
Veh in Median Storage, #	-	0				0	-		0	-	
Grade, %	-	0				0	-		0	-	
Peak Hour Factor	94	94				94	94	1	94	94	
Heavy Vehicles, %	0	0				1	0		0	1	
Mvmt Flow	211	420				590	18		49	449	
Maior/Minor	Maior1					Maior2		Minc	or2		
Conflicting Flow All	609	0				-	0	14	40	599	
Stane 1	-	-				-	-	5	99	-	
Stage 2	-	-				-	-	8	41	_	
Critical Hdwv	4 1	-				-	-	f	5.4	6.21	
Critical Hdwy Sto 1	-	-				_	-	Ę	5.4	-	
Critical Hdwy Stg 2	-	-				_	-	Į	5.4	-	
Follow-up Hdwy	2.2	-				-	-		3.5	3.309	
Pot Can-1 Maneuver	979	-				-	-	1	48	503	
Stage 1	-	-				-	-	5	53	-	
Stage 2	-	-				-	-	4	26	-	
Platoon blocked. %		-				-	-				
Mov Cap-1 Maneuver	979	-				-	-	1	16	503	
Mov Cap-2 Maneuver		-				_	-	1	16	-	
Stage 1	-	-				-	-	5	53	-	
Stage 2	-	-				-	-	3	334	-	
Annroach	FR					W/B			SR		
Approach	20							<u>۸</u> .	7 9		
HOM CONTROL Delay, S	J.Z					0		4	7.0 E		
									L		
					001.4	001.0					
Minor Lane/Major Mvmt	EBL	FRI	WBT	WRK	SBLn1	SBLn2					
Capacity (veh/h)	979	-	-	-	116	503					
HCM Lane V/C Ratio	0.215	-	-	-	0.422	0.893					
HCM Control Delay (s)	9.7	-	-	-	57	46.8					
HCM Lane LOS	A	-	-	-	F	E					

1.8

-

-

-

10

G:\Projects\790 - Medway (Exelon Power)\Synchro\790 Build PM.syn MDM Transportation Consultants, Inc.

0.8

HCM 95th %tile Q(veh)

□ Intersection Delay Study

.

APPENDIX AVERAGE VEHICLE DELAY COMPARISON WEEKDAY EVENING PEAK HOUR - BASELINE CONDITIONS

	Calc	ulated Results ¹		Observed Results ²			
Time Period/Approach	Average Vehicle Delay (seconds)	Maximum Vehicle Queue (vehicles)	LOS	Average Vehicle Delay (seconds)	Maximum Vehicle Queue (vehicles)	LOS	
West Street at Route 109 West Street L Exit	31	2	D	14	4	В	
West Street at Route 126 West Street L Exit	42	2	E	19	2	С	

¹Based on Highway Capacity Manual methodology. ²Based on field data collected on January 6, 2015.

MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280 Marlborough, MA 01752 www.mdmtrans.com

N/S: West Street E/W: Milford Street (Route 109) Medway, MA File Name : 790 West Street at Milford Street (Rt 109) PM Site Code : 79000002 Start Date : 1/6/2015 Page No : 1

L	No.	Joined Queue	Released From	Delay	
n.			Queue		
2	1	3:00:00 PM	3:00:05 PM	5	
2	2	3:02:02 PM	3:02:05 PM	3	
2	3	3.03.51 PM	3.04.05 PM	14	
2	4	3.04.49 PM	3.04.53 PM	4	
2	5	3.05.23 PM	3:05:33 DM	10	
2	6	3:05:42 DM	3:05:47 DM	5	
2	0	3.05.42 FM	3.03.47 PM	5	
2	1	3:06:17 PM	3:06:43 PM	26	
2	8	3:07:22 PM	3:07:35 PM	13	
2	9	3:08:53 PM	3:08:58 PM	5	
2	10	3:10:12 PM	3:10:15 PM	3	
2	11	3:11:35 PM	3:11:38 PM	3	
2	12	3:13:06 PM	3:13:14 PM	8	
2	13	3:14:00 PM	3:14:08 PM	8	
2	14	3:14:38 PM	3:14:46 PM	8	
2	15	3.15.39 PM	3.15.45 PM	6	
2	16	3:17:04 PM	3.17.10 DM	6	
2	17	3.18.10 DM	3.18.24 DM	5	
4	10	0.10.10 PW	J. 10.24 MW	2	
4	10	3.10.52 PW	13.10.33 PW	3	
2	19	1 3:19:50 PM	1 3:19:55 PM	5	
2	20	3:20:21 PM	3:20:24 PM	3	
2	21	3:20:22 PM	3:20:28 PM	6	
2	22	3:21:24 PM	3:21:28 PM	4	
2	23	3:21:51 PM	3:22:16 PM	25	
2	24	3:23:44 PM	3:23:52 PM	8	
2	25	3:23:57 PM	3:24:01 PM	4	
2	26	3:24:05 PM	3:24:38 PM	33	
2	27	3:24:32 PM	3.25.02 PM	30	
2	28	3.24.33 PM	3:25:05 PM	32	
2	20	2:24:35 DM	3.25.15 DM	40	
2	29	3.24.30 PIVI	3.23.13 FW	40	
2	30	3.25.23 PIVI	3:25:31 PM	- 0	
2	31	3:27:24 PW	3:27:35 PM	11	
2	32	3:27:42 PM	3:27:50 PM	8	
2	33	3:28:21 PM	3:28:26 PM	5	
2	34	3:30:33 PM	3:30:41 PM	8	
2	35	3:31:11 PM	3:31:29 PM	18	
2	36	3:33:51 PM	3:34:06 PM	15	
2	37	3:33:52 PM	3:34:11 PM	19	
2	38	3:34:48 PM	3:35:08 PM	20	
2	39	3:35:45 PM	3:35:51 PM	6	
2	40	3:35:55 PM	3:36:00 PM	5	
2	41	3:36:16 PM	3:36:43 PM	27	
5	42	3:37:31 PM	3.37.38 DM	7	
2	13	3:38:00 PM	3:39:52 DM	12	
4	40	2.20.03 FIVI	2:20:15 DM	40	
4	44	1 3.30.33 MIVI	3.39.15 PW	42	
2	40	3.40.29 PW	3:40:30 PM	1	
2	46	3:42:25 PM	3:42:46 PM	21	
2	4/	3:43:42 PM	3:44:06 PM	24	
2	48	3:45:10 PM	3:45:21 PM	11	
2	49	3:45:11 PM	3:45:29 PM	18	
2	50	3:45:41 PM	3:45:44 PM	3	
2	51	3:47:26 PM	3:47:53 PM	27	
2	52	3:49:46 PM	3:49:54 PM	8	
2	53	3:50:54 PM	3:51:32 PM	38	
5	54	3.51.53 PM	3.51.58 PM	5	
2	55	3.52.18 DM	3.52.22 DM	1	├
2	50	0.02.10 FIVI	3.52.22 FIVI		
4	57	3.52.50 PIVI	3.33.02 PIVI	24	
2	10/	1 3:52:55 PM	3:53:16 PM	<u> 21</u>	
12	1 58	I STATIO PM	1.3153135 PM	1.5	1 1

Marlborough, MA

N/S: West Street E/W: Route 126 Medway, MA

File Name : 790 West Street at Main Street Delay PM Site Code : 07900005 Start Date : 1/6/2015 Page No : 1

NO.	Joined Queue	Released From	Delay
		Queue	
1	3:01:00 PM	3:01:53 PM	53
2	3:01:13 PM	3:02:07 PM	54
3	3:02:57 PM	3:03:14 PM	17
4	3:04:34 PM	3:04:36 PM	2
5	3:05:50 PM	3:05:54 PM	4
6	3:07:13 PM	3:07:26 PM	13
7	3:08:20 PM	3:08:48 PM	28
8	3:11:17 PM	3:11:19 PM	2
9	3:15:59 PM	3:16:03 PM	
10	3:20:22 PM	3:20:53 PM	31
11	3:20:46 PM	3:20:57 PM	
12	3:36:28 PM	3:36:51 PM	23
13	3:37:07 PM	3:37:15 PM	8
14	3:37:19 PM	3:37:23 PM	4
15	3:37:21 PM	3:39:50 PM	149
16	3:40:05 PM	3:40:12 PM	7
17	3:41:18 PM	3:41:34 PM	16
18	3:41:45 PM	3:42:11 PM	26
19	3:42:00 PM	3:42:17 PM	17
20	3:42:20 PM	3:42:28 PM	8
21	3:43:00 PM	3:43:11 PM	11
22	3:44:58 PM	3:45:09 PM	11
23	3:45:52 PM	3:46:00 PM	8
24	3:46:42 PM	3:47:05 PM	23
25	3:47:32 PM	3:47:36 PM	4
26	3:48:10 PM	3:48:25 PM	15
27	3:48:27 PM	3:48:29 PM	2
28	3:49:12 PM	3:49:30 PM	18
29	3:50:45 PM	3:51:09 PM	24
30	3:52:01 PM	3:52:03 PM	2
31	3:53:29 PM	3:53:30 PM	
32	3:56:25 PM	3:56:34 PM	9
33	3:58:32 PM	3:59:10 PM	38
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	1 3:01:00 PM 2 3:01:13 PM 3 3:02:57 PM 4 3:04:34 PM 5 3:05:50 PM 6 3:07:13 PM 7 3:08:20 PM 8 3:11:17 PM 9 3:15:59 PM 10 3:20:22 PM 11 3:20:46 PM 12 3:36:28 PM 13 3:37:07 PM 14 3:37:19 PM 15 3:37:21 PM 16 3:40:05 PM 17 3:41:18 PM 18 3:41:45 PM 19 3:42:00 PM 20 3:42:20 PM 21 3:43:00 PM 22 3:44:58 PM 23 3:45:52 PM 24 3:46:42 PM 25 3:47:32 PM 26 3:48:10 PM 27 3:48:27 PM 28 3:49:12 PM 29 3:50:45 PM 30 3:52:01 PM 31 3:	Operation Queue 1 3:01:00 PM 3:01:53 PM 2 3:01:13 PM 3:02:07 PM 3 3:02:57 PM 3:03:14 PM 4 3:04:36 PM 3:04:36 PM 5 3:05:50 PM 3:05:54 PM 6 3:07:13 PM 3:07:26 PM 7 3:08:20 PM 3:08:48 PM 8 3:11:17 PM 3:11:19 PM 9 3:15:59 PM 3:16:03 PM 10 3:20:22 PM 3:20:57 PM 11 3:20:46 PM 3:20:57 PM 12 3:36:28 PM 3:36:51 PM 13 3:37:07 PM 3:37:15 PM 14 3:37:19 PM 3:37:23 PM 15 3:37:21 PM 3:39:50 PM 16 3:40:05 PM 3:40:12 PM 17 3:41:18 PM 3:42:11 PM 18 3:41:45 PM 3:42:21 PM 20 3:42:20 PM 3:43:11 PM 21 3:45:52 PM 3:46:00 PM 23 3:45:52 PM 3:46:00 PM

Summary Information:

3:01:00 PM - 4:00:00 PM	SB Left
Total Vehicle Count:	33
Delayed Vehicle Count:	33
Through Vehicle Count:	0
Average Stopped Time:	19.48
Maximum Stopped Time:	149
Min. Secs. for Delay:	0
Average Queue:	0.18
Queue Density:	1.10
Maximum Queue:	2
Delay in Vehicle Hour:	0.18
Total Delay:	643

28 Lord Road, Suite 280 Marlborough, MA 01752 *www.mdmtrans.com*

> File Name : 790 West Street at Milford Street (Rt 109) PM Site Code : 79000002 Start Date : 1/6/2015 Page No : 2

L	No.	Joined Queue	Released From	Delay	
n.			Queue		
2	59	3:54:48 PM	3:55:30 PM	42	
2	60	3:56:09 PM	3:56:21 PM	12	
2	61	3:56:34 PM	3:56:44 PM	10	

Su	ın	n	n	aı	гy	I	nf	or	m	ıa	ti	o	n	
												_	_	

3:00:00 PM - 3:57:00 PM	NB Left
Total Vehicle Count:	61
Delayed Vehicle Count:	61
Through Vehicle Count:	0
Average Stopped Time:	13.89
Maximum Stopped Time:	43
Min. Secs. for Delay:	0
Average Queue:	0.25
Queue Density:	1.16
Maximum Queue:	4
Delay in Vehicle Hour:	0.25
Total Delay:	847

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

	No	Joined Queue	Released From	Delay	7
n.			Queue		
1	1	6:58:00 AM	6:58:01 AM	1	
1	2	6:58:04 AM	6:58:07 AM	3	
1	3	6:58:07 AM	6:58:09 AM	2	
1	4	6:58:09 AM	6:58:11 AM	2	
1	5	6:58:12 AM	6:58:14 AM	2	
1	6	6:58:53 AM	6:58:54 AM	1	
1	7	6:50:33 AM	6:50:46 AM	3	
1	0	6.50.45 AM	6:50:40 AM		
1	0	6.50.48 AM	6:50:51 AM		
	3	7.01.28 AM	7:01:33 AM	5	
	10	7.01.20 AIVI	7.01.35 AM		
	10	7.01.31 AlVI	7.01.30 AM		
	12	7:01:37 AIVI	7.01.30 AIVI	2	
	13	7:01:40 AM	7.01.43 Alvi		
1	14	7:01:44 AM	7:01:47 AIVI	3	
1	15	7:01:46 AM	7:01:49 AM	3	
1	16	7:02:21 AM	7:02:25 AM	4	
1	17	7:03:18 AM	7:03:21 AM	3	
1	18	7:04:04 AM	7:04:07 AM	3	
1	19	7:04:11 AM	7:04:21 AM	10	
1	20	7:04:26 AM	7:04:28 AM	2	
1	21	7:04:28 AM	7:04:30 AM	2	
1	22	7:04:42 AM	7:04:43 AM	1	
1	23	7:05:42 AM	7:05:43 AM	1	
1	24	7:05:46 AM	7:05:48 AM	2	
1	25	7:06:56 AM	7:06:59 AM	3	
1	26	7:06:57 AM	7:07:01 AM	4	
1	27	7:07:01 AM	7:07:04 AM	3	
1	28	7:07:04 AM	7:07:06 AM	2	
1	29	7:07:07 AM	7:07:18 AM	11	
1	30	7:08:15 AM	7:08:17 AM	2	
1	31	7:09:09 AM	7:09:12 AM	3	
1	32	7:09:54 AM	7:09:58 AM	4	
1	33	7:09:57 AM	7:10:02 AM	5	
1	34	7.11.12 AM	7:11:14 AM	2	
1	35	7.11.54 AM	7:11:56 AM	2	
1	36	7.11:58 AM	7:12:07 AM	9	
1	37	7:12:17 AM	7.12.19 AM	2	
+	38	7.12.17 AM	7.12.13 ΛM	1	
1	30	7.12.22 AW	7.12.20 AM	2	
-	40	7.12.24 AM	7:12:23 AM	5	
1	40	7.13.10 AIVI	7.13.23 AM	7	
	41	7.13.21 AIVI	7.13.20 AIVI		
	42	7:14:10 AIVI	7.14.20 AM	4	
	43	7:15:18 AM	7:15:23 AM	0	
1	44	7:15:22 AM	7:15:25 AM	3	
1	45	7:15:24 AM	7:15:28 AM	4	
1	46	7:16:01 AM	7:16:01 AM	0	
1	4/	7:16:22 AM	7:16:25 AM	3	
1	48	/:16:48 AM	7:16:51 AM	3	
1	49	7:16:49 AM	7:16:54 AM	5	
1	50	7:16:52 AM	7:16:57 AM	5	
1	51	7:17:00 AM	7:17:10 AM	10	
1	52	7:17:03 AM	7:17:13 AM	10	
1	53	7:17:14 AM	7:17:15 AM	1	
1	54	7:17:30 AM	7:17:32 AM	2	
1	55	7:18:10 AM	7:18:12 AM	2	
1	56	7:18:16 AM	7:18:19 AM	3	
1	57	7:18:25 AM	7:18:29 AM	4	
1	58	7:19:32 AM	7:19:34 AM	2	
1	59	7:19:36 AM	7:19:42 AM	6	
1	60	7:19:37 AM	7:19:44 AM	7	
1	61	7:20:36 AM	7:20:42 AM	6	
1	62	7:20:41 AM	7:20:45 AM	4	
1	63	7:21:04 AM	7:21:04 AM	0	

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

L	No.	Joined Queue	Released From	Delay	
n.			Queue		
1	64	7:21:44 AM	7:21:46 AM	2	
1	65	7:21:49 AM	7:21:50 AM	1	
1	66	7:21:54 AM	7:21:57 AM	3	
1	67	7:21:56 AM	7:21:59 AM	3	
1	68	7:21:58 AM	7:22:03 AM	5	
1	69	7:22:07 AM	7:22:10 AM	3	
1	70	7:22:46 AM	7:22:50 AM	4	
1	71	7:23:18 AM	7:23:19 AM	1	
1	72	7:23:28 AM	7:23:31 AM	3	<u> </u>
1	73	7:23:34 AM	7:23:39 AM	5	
1	74	7:23:36 AM	7:23:42 AM	6	
1	75	7:24:33 AM	7:24:40 AM	7	
1	76	7:24:48 AM	7.24.49 AM	1	
1	77	7.24.40 AM	7.24.45 AM	2	<u>+</u>
1	70	7.24.30 AM	7.24.32 AM	1	
1	70	7.25.44 AIVI	7.25.49 AM		
	/9	7.20.40 AIVI	7.25.40 AW	2	
	80	7:20:01 AM	7:26:09 AM	0	
1	81	1:27:05 AM	/:2/:08 AM	3	<u> </u>
1	82	1:27:20 AM	/:27:22 AM	2	
1	83	7:27:23 AM	7:27:25 AM	2	
1	84	7:27:25 AM	7:27:31 AM	6	
1	85	7:27:34 AM	7:27:49 AM	15	
1	86	7:28:25 AM	7:28:27 AM	2	
1	87	7:29:10 AM	7:29:16 AM	6	
1	88	7:29:20 AM	7:29:23 AM	3	
1	89	7:30:12 AM	7:30:18 AM	6	
1	00	7:30:12 AM	7:30:20 AM	6	
+	01	7.30.14 AM	7:30:20 AM	7	
	91	7.30.13 AM	7.30.22 AW	- /	
1	92	7:30:17 AIVI	7:30:26 AM	9	
1	93	7:30:27 AM	7:30:30 AM	3	
1	94	7:30:30 AM	7:30:33 AM	3	
1	95	7:30:40 AM	7:30:47 AM	7	
1	96	7:31:07 AM	7:31:09 AM	2	
1	97	7:31:51 AM	7:31:55 AM	4	
1	98	7:31:53 AM	7:31:58 AM	5	
1	99	7:33:07 AM	7:33:19 AM	12	
1	100	7:33:11 AM	7:33:22 AM	11	
1	101	7:33:12 AM	7:33:24 AM	12	
1	102	7:33:16 AM	7:33:27 AM	11	
	102	7.33.10 AW	7:33:27 AM	6	
	103	7.00.20 ANA	7.33.29 AIVI		
H	104	7:33:20 AIVI	7:33:33 AIVI	0	
1	105	7:33:33 AM	/:33:36 AM	3	<u> </u>
1	106	7:33:35 AM	7:33:39 AM	4	
1	107	7:34:29 AM	7:34:37 AM	8	
1	108	7:34:46 AM	7:34:54 AM	8	
1	109	7:34:51 AM	7:34:56 AM	5	
1	110	7:35:07 AM	7:35:09 AM	2	
1	111	7:35:45 AM	7:35:49 AM	4	
1	112	7:35:55 AM	7:35:59 AM	4	
1	113	7:35:56 AM	7:36:00 AM	4	
1	114	7:35:57 AM	7:36:07 AM	10	
1	115	7:36:16 AM	7:36:10 AM	12	
	110	7.30.10 AN	7.37.10 AM	2	
+	147	7.37.10 AIVI	7.37.13 AM	2	+
	11/	7.37.24 AIVI	7.07.04 AM		
1	118	7:37:29 AM	/:37:31 AM	2	
1	119	7:37:36 AM	7:37:41 AM	5	
1	120	7:37:37 AM	7:37:42 AM	5	
1	121	7:37:39 AM	7:37:44 AM	5	
1	122	7:38:21 AM	7:38:31 AM	10	
1	123	7:39:01 AM	7:39:02 AM	1	
1	124	7:39:06 AM	7:39:09 AM	3	
1	125	7:39:14 AM	7:39:27 AM	13	
1	126	7:40:30 AM	7:40:34 AM	4	
	1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 7	1 1

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

File Name	: 790 Summer street at Hartford Ave AM
Site Code	: 7900001
Start Date	: 1/6/2015
Page No	: 3

L	No.	Joined Queue	Released From	Delay	
n.			Queue		
1	127	7:40:45 AM	7:40:47 AM	2	
1	128	7:40:46 AM	7:40:48 AM	2	
1	129	7:40:50 AM	7:40:52 AM	2	
1	130	7:40:54 AM	7:40:55 AM	1	
1	131	7:40:57 AM	7:40:59 AM	2	
1	132	7:41:35 AM	7:41:37 AM	2	
1	133	7:41:50 AM	7.41.54 AM	4	
1	13/	7:42:44 AM	7:42:46 AM	2	
1	135	7:42:08 AM	7:43:10 AM	2	
4	136	7:43:17 ΔΜ	7:43:10 AM	2	
	127	7:43:17 AM	7.43.13 AM	2	
	13/	7.43.20 AW	7.43.29 AN	1	
	130	7.43.20 AIVI	7.43.32 AIVI	2	
1	139	7:44:18 AM	7.44.20 AN	2	
1	140	7:44:23 AM	7:44:25 AM	2	
1	141	7:44:32 AM	7:44:38 AIVI	0	
1	142	7:44:34 AM	7:44:44 AM	10	
1	143	7:44:35 AM	7:44:50 AM	15	
1	144	7:44:36 AM	7:44:56 AM	20	
1	145	7:44:37 AM	7:44:58 AM	21	
1	146	7:44:45 AM	7:45:00 AM	15	
1	147	7:44:52 AM	7:45:03 AM	11	
1	148	7:45:04 AM	7:45:07 AM	3	
1	149	7:45:57 AM	7:46:00 AM	3	
1	150	7:46:21 AM	7:46:22 AM	1	
1	151	7:47:24 AM	7:47:29 AM	5	
1	152	7:47:32 AM	7:47:34 AM	2	
1	153	7:47:33 AM	7:47:38 AM	5	
1	154	7.47.40 AM	7:47:41 AM	1	
1	155	7:48:58 AM	7.48.59 AM	1	
1	156	7:40:02 AM	7:49:04 AM	2	
+	157	7:40:16 AM	7:40:21 AM	5	
+	150	7.49.10 AW	7:49:21 AM	7	
-	100	7.49.17 AIVI	7:49:24 AM	5	
+	109	7.49.34 AIVI	7:50:35 AM	6	
1	160	7:50:29 AW	7:50:35 AM	2	
	101	7:50:37 AIVI	7.50.39 AN	7	
	162	7:50:40 AM	7.50.47 AN	24	
1	163	7:50:42 AM	7.51.00 AlV	24	
1	164	7:50:46 Alvi	7.51:08 AM	10	
1	165	7:50:52 AM	7:51:10 AM		
1	166	7:50:52 AM	7:51:14 AM	22	
1	167	7:50:54 AM	7:51:17 AM	23	
1	168	7:50:56 AM	7:51:18 AM	22	
1	169	7:50:58 AM	7:51:22 AM	24	
1	170	7:51:05 AM	7:51:26 AM	21	
1	171	7:52:05 AM	7:52:06 AM	1	
1	172	7:52:09 AM	7:52:14 AM	5	
1	173	7:52:12 AM	7:52:16 AM	4	
1	174	7:52:25 AM	7:52:29 AM	4	
1	175	7:52:28 AM	7:52:32 AM	4	
1	176	7:52:34 AM	7:52:37 AM	3	
1	177	7:53:41 AM	7:53:44 AM	3	
T	178	7:54:02 AM	7:54:05 AM	3	
1	179	7:55:18 AM	7:55:21 AM	3	
1	180	7:55:22 AM	7:55:28 AM	6	
1	181	7:56:13 AM	7:56:15 AM	2	
-	182	7.56.34 AM	7:56:38 AM	4	
	192	7.56.36 ΔΜ	7:56:40 AM	4	
	103	7.50.30 AIVI	7:56:47 AM	5	
H	104	7.50.42 AIVI	7:57:35 AM	8	
닏	185	7.57.27 AIVI	7.57.55 AIVI	6	
	186	7:57:45 AM	7.57.51 AW		
1	18/	7:57:46 AIM	7.50.40 AM	0	
1	188	/:58:45 AM	7:00:50 AM	0	
2	2 1	7:08:41 AM	17:08:52 AM		

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

File Name: 790 Summer street at Hartford Ave AM

Site Code : 7900001

Start Date : 1/6/2015

Page No : 4

L	No.	Joined Queue	Released From	Delay				
n.			Queue					
2	2	7:08:45 AM	7:09:03 AM	18	 			
2	3	7:15:27 AM	7:15:34 AM	7				
2	4	7:15:32 AM	7:15:37 AM	5			 	
2	5	7:21:18 AM	7:21:48 AM	30	 	 	 	
2	6	7:26:35 AM	7:26:41 AM	6				
2	7	7:35:48 AM	7:35:53 AM	5				
2	8	7:37:20 AM	7:37:26 AM	6		 		
2	9	7:44:48 AM	7:45:10 AM	22	 			
2	10	7:47:46 AM	7:47:51 AM	5				
2	11	7:52:13 AM	7:52:23 AM	10		 		
2	12	7:53:52 AM	7:54:11 AM	19	 	 		

Summary Information:

6:58:00 AM - 7:59:00 AM	Right Turns	Left Turns
Total Vehicle Count:	188	12
Delayed Vehicle Count:	188	12
Through Vehicle Count:	0	0
Average Stopped Time:	5.19	12.000
Maximum Stopped Time:	24	30
Min. Secs. for Delay:	0	0
Average Queue:	0.27	0.052
Queue Density:	1.49	1.067
Maximum Queue:	8	2
Delay in Vehicle Hour:	0.27	0.05
Total Delay:	975	144

MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280 Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

L	No.	Joined Queue	Released From	Delay
1	1	4·44·01 PM	4·44·03 PM	2
<u>+</u>	2	4:44:06 PM	4:44:07 PM	1
1	3	4·44·11 PM	4:44:15 PM	4
1	4	4:44:14 PM	4:44:19 PM	5
1	5	4·45·15 PM	4:45:25 PM	10
1	6	4:45:23 PM	4:45:37 PM	14
1	7	4:45:28 PM	4:45:39 PM	11
1	8	4:45:30 PM	4:45:54 PM	24
1	9	4:45:32 PM	4:45:57 PM	25
1	10	4:45:33 PM	4:45:59 PM	26
1	11	4:45:38 PM	4:46:06 PM	28
1	12	4:45:40 PM	4:46:08 PM	28
1	13	4:45:50 PM	4:46:14 PM	24
1	14	4:46:39 PM	4:46:51 PM	12
1	15	4:46:41 PM	4:46:53 PM	12
1	16	4:46:44 PM	4:46:54 PM	10
1	17	4:46:47 PM	4:46:54 PM	7
1	18	4:46:58 PM	4:47:08 PM	10
1	19	4:47:00 PM	4:47:09 PM	9
1	20	4:47:00 PM	4:47:24 PM	24
1	21	4:47:02 PM	4:47:27 PM	25
1	22	4:47:06 PM	4:47:29 PM	23
1	23	4:47:53 PM	4:47:55 PM	2
1	24	4:48:01 PM	4:48:24 PM	23
1	25	4:48:05 PM	4:48:31 PM	26
1	26	4:48:09 PM	4:48:34 PM	25
1	27	4:48:13 PM	4:48:36 PM	23
1	28	4:48:21 PM	4:48:41 PM	20
1	29	4:48:24 PM	4:48:54 PM	30
1	30	4:48:27 PM	4:48:57 PM	30
1	31	4:49:26 PM	4:49:40 PM	14
1	32	4:49:31 PM	4:49:43 PM	12
1	33	4:49:36 PM	4:49:46 PIVI	10
1	34	4:49:41 PIVI	4:49:48 PN	1
-	30	4:49:42 PIVI	4:49:33 PIVI	11
1	27	4.30.33 PIVI	4.50.35 PIVI	1
4	30	4.50.30 PIVI	4.50.39 PW	3
1	30	4.51.42 FIVI	4.51.45 PW	3
1	39	4.51.40 PW	4.51.50 FW	4
+	40	4.51.51 PM	4.51.54 FM	2
1	42	4.52.01 IV	4.52.05 PM	2
1	42	4:52:05 PM	4.52.00 PM	4
1	44	4:52:10 PM	4:52:13 PM	3
1	45	4.52.15 PM	4:52:19 PM	4
1	46	4.52.26 PM	4:52:31 PM	5
1	47	4:52:43 PM	4:53:10 PM	27
1	48	4:52:52 PM	4:53:16 PM	24
1	49	4:52:54 PM	4:53:22 PM	28
1	50	4:53:46 PM	4:53:54 PM	8
1	51	4:53:50 PM	4:53:58 PM	8
1	52	4:53:52 PM	4:54:01 PM	9
1	53	4:53:55 PM	4:54:04 PM	9
1	54	4:54:06 PM	4:54:08 PM	2
1	55	4:54:10 PM	4:54:15 PM	5
1	56	4:54:52 PM	4:54:58 PM	6
1	57	4:55:08 PM	4:55:10 PM	2
1	58	4:55:15 PM	4:55:19 PM	4
1	59	4:55:17 PM	4:55:21 PM	4
1	60	4:55:30 PM	4:55:34 PM	4
1	61	4:55:32 PM	4:55:37 PM	5
1	62	4:55:36 PM	4:55:41 PM	5
1	63	4:55:39 PM	4:55:49 PM	10

MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280 Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

L	No.	Joined Queue	Released From	Delay
n.			Queue	
1	64	4:55:40 PM	4:55:51 PM	11
1	65	4:55:45 PM	4:55:53 PM	8
1	66	4:55:46 PM	4:55:56 PM	10
1	67	4:55:46 PM	4:56:08 PM	22
1	68	4:56:59 PM	4:57:03 PM	4
1	69	4:57:27 PM	4:57:29 PM	2
1	70	4:57:30 PM	4:57:31 PM	1
1	70	4:57:32 PM	4:57:35 PM	2
1	72	4:57:36 PM	4:57:40 PM	7
1	72	4.57.38 PM	4.57.43 DM	5
4	73	4.57.30 PM	4.59:03 DM	24
	74	4.57.59 FW	4.50.03 FM	24
1	70	4.57.42 FIVI	4.50.05 FW	21
1	70	4.57.47 PW	4.50.09 FIVI	25
-	70	4.57.46 PIVI	4.30.13 PIVI	20
+	70	4:57:40 PIVI	4.30.32 PIVI	44
	79		4.30.33 PIVI	40
1	80	4:57:55 PIVI	4:58:38 PW	43
1	81	4:58:28 PM	4:58:41 PM	13
1	82	4:58:31 PM	4:08:44 PM	13
1	83	4:58:40 PM	4:58:51 PM	11
1	84	4:58:40 PM	4:58:52 PM	12
1	85	4:59:41 PM	4:59:57 PM	16
1	86	4:59:45 PM	5:00:13 PM	28
1	87	4:59:47 PM	5:00:19 PM	32
1	88	4:59:56 PM	5:00:27 PM	31
1	89	5:00:01 PM	5:00:32 PM	31
1	90	5:01:01 PM	5:01:03 PM	2
1	91	5:01:02 PM	5:01:17 PM	15
1	92	5:01:13 PM	5:01:19 PM	6
1	93	5:01:15 PM	5:01:26 PM	11
1	94	5:01:16 PM	5:01:29 PM	13
1	95	5:01:18 PM	5:01:31 PM	13
1	96	5:02:07 PM	5:02:11 PM	4
1	97	5:02:10 PM	5:02:15 PM	5
1	98	5:02:12 PM	5:02:18 PM	6
1	99	5:02:21 PM	5:02:24 PM	3
1	100	5:02:26 PM	5:02:28 PM	2
1	101	5:02:32 PM	5:02:33 PM	1
1	102	5:02:33 PM	5:02:45 PM	12
1	103	5:02:36 PM	5:02:52 PM	16
1	104	5:03:31 PM	5:03:37 PM	6
1	105	5:03:34 PM	5:03:41 PM	7
1	106	5:03:36 PM	5:03:43 PM	7
$\dot{1}$	107	5:03:38 PM	5:03:48 PM	10
1	108	5:03:40 PM	5:03:51 PM	11
1	109	5.03.49 PM	5:03:55 PM	6
1	110	5:03:50 PM	5:04:00 PM	10
1	111	5.04.28 PM	5:04:41 PM	13
1	112	5.04.34 PM	5:04:46 PM	12
1	112	5.04.50 DM	5:05:07 PM	8
-	110	5.04.03 FIVI	5:05:10 PM	8
1	114	5.05.02 FW	5.05.10 FW	12
4	110	5:05:03 FIVI	5.05.10 FM	11
4	110	5:05:14 PM	5.05.22 DM	8
	110	5.05.14 PIVI	5.05.22 PIVI	0
1	118	5:05:10 PIVI	5:05:24 PIVI	9
1	119	5:05:20 PM	5:05:27 PM	/ E
1	120	5:05:45 PM	5:05:50 PM	15
ļļ.	121	5:05:46 PM	5:05:51 PM	10
1	122	5:05:51 PM	5:05:54 PM	3
1	123	5:05:59 PM	5:06:02 PM	3
1	124	5:06:01 PM	5:06:04 PM	3
1	125	5:06:05 PM	5:06:07 PM	2
1	126	5:06:12 PM	5:06:20 PM	8

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

L	No.	Joined Queue	Released From	Delay
n.			Queue	-
1	127	5:06:15 PM	5:06:23 PM	8
1	128	5:06:17 PM	5:06:31 PM	14
1	129	5:07:14 PM	5:07:18 PM	4
1	130	5:07:17 PM	5:07:21 PM	4
1	131	5:07:28 PM	5:07:34 PM	6
1	132	5:07:28 PM	5:07:34 PM	6
1	133	5:07:30 PM	5:07:34 PM	4
1	134	5:07:30 PM	5:07:34 PM	4
1	135	5:07:42 PM	5:07:43 PM	1
+	136	5:08:33 PM	5:08:37 PM	4
+	137	5:08:38 PM	5:08:42 PM	-т Д
1	130	5:08:40 PM	5.08.44 DM	- -
+	120	5:08:48 DM	5:08:57 DM	<u>ч</u>
1	140	5:08:53 DM	5:08:50 PM	5
	140	5:00:00 DM	5:00:02 DM	2
-	141	5.09.00 PM	5.09.02 PM	2
1	142	5:09:04 PW	5:09:15 PW	15
1	143	5:09:05 PM	5:09:20 PM	15
1	144	5:09:25 PM	5:09:27 PM	2
1	145	5:09:44 PM	5:09:57 PM	13
1	146	5:11:01 PM	5:11:02 PM	
1	147	5:11:03 PM	5:11:05 PM	2
1	148	5:11:04 PM	5:11:13 PM	9
1	149	5:11:50 PM	5:12:03 PM	13
1	150	5:11:57 PM	5:12:20 PM	23
1	151	5:12:06 PM	5:12:34 PM	28
1	152	5:12:32 PM	5:12:39 PM	7
1	153	5:13:02 PM	5:13:07 PM	5
1	154	5:13:08 PM	5:13:10 PM	2
1	155	5:13:12 PM	5:13:23 PM	11
1	156	5:13:15 PM	5:13:31 PM	16
1	157	5:13:16 PM	5:13:33 PM	17
1	158	5:13:19 PM	5:13:36 PM	17
1	159	5:13:20 PM	5:13:43 PM	23
1	160	5:13:26 PM	5:13:47 PM	21
1	161	5:13:56 PM	5:14:06 PM	10
1	162	5:14:08 PM	5.14.09 PM	1
1	163	5.14.00 M	5.14.13 PM	2
1	164	5.14.11 PM	5:14:16 PM	2
1	165	5.14.15 FM	5.14.10 FM	22
4	100	5.14.15 FW	5.14.37 FW	22
1	100	5.14.19 PM	5.14.47 FIVI	20
	107	5.14.25 PIVI	5.15.00 PM	30
1	100	5:14:27 PIVI	5:15:11 PM	44
1	169	5:14:33 PIVI	5:15:16 PM	43
1	170	0.10.20 PIVI	5:15:32 PM	
1	11/1	5:15:28 PM	5:15:33 PM	5
1	1/2	5:15:36 PM	5:15:44 PM	8 7
1	1/3	5:15:40 PM	5:15:47 PM	1
1	1/4	5:15:48 PM	5:15:49 PM	1
1	175	5:15:52 PM	5:15:55 PM	3
1	176	5:15:52 PM	5:15:57 PM	5
1	177	5:15:53 PM	5:16:03 PM	10
1	178	5:15:54 PM	5:16:25 PM	31
1	179	5:15:56 PM	5:16:27 PM	31
1	180	5:15:57 PM	5:16:29 PM	32
1	181	5:16:40 PM	5:16:43 PM	3
1	182	5:16:43 PM	5:16:46 PM	3
1	183	5:16:45 PM	5:16:57 PM	12
1	184	5:16:47 PM	5:17:04 PM	17
1	185	5:16:54 PM	5:17:07 PM	13
1	186	5:16:55 PM	5:17:10 PM	15
1	187	5:16:56 PM	5:17:13 PM	17
1	188	5:16:57 PM	5:17:16 PM	19
1	189	5:17:03 PM	5:17:19 PM	16

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

	No	Joined Queue	Released From	Delav
-			Queue	20109
1	190	5.17.05 PM	5:17:24 PM	19
1	101	5.17.22 PM	5:17:30 PM	8
+	102	5.17.22 PM	5:17:33 PM	10
$\frac{1}{1}$	102	5.17.20 PM	5.17.41 PM	17
1	10/	5.17.24 FIVI	5.17.44 PM	19
+	105	5.17.20 FIVI	5.17.44 FIVI	21
1	190	5-18-26 DM	5-18-40 FIVI	<u> 1</u>
+	190	5.10.30 MIVI	5-10-42 FW	ບ 6
1	197	J. 10:42 MVI	5-19-51 DM	2
-	198	5.10.40 PW	5-19-50 DM	ວ ໑
	199	0.10.00 PIVI	5.10.00 PW	0
1	200	0.10.03 PIVI	5.19.01 PM	0
1	201	5:10:54 PW	5:19:13 HM	19
1	202	5:18:58 PM	5:19:16 PM	18
1	203	5:19:02 PM	5:19:23 PM	21
1	204	5:19:32 PM	5:19:36 PM	4
1	205	5:19:34 PM	5:19:54 PM	20
1	206	5:19:40 PM	5:19:57 PM	1/
1	207	5:19:40 PM	5:20:09 PM	29
1	208	5:19:43 PM	5:20:21 PM	38
1	209	5:19:45 PM	5:20:22 PM	37
1	210	5:19:51 PM	5:20:25 PM	34
1	211	5:20:06 PM	5:20:30 PM	24
1	212	5:20:12 PM	5:20:34 PM	22
1	213	5:20:13 PM	5:20:47 PM	34
1	214	5:21:06 PM	5:21:18 PM	12
1	215	5:21:08 PM	5:21:21 PM	13
1	216	5:21:12 PM	5:21:24 PM	12
1	217	5:21:14 PM	5:21:33 PM	19
1	218	5:21:17 PM	5:21:35 PM	18
_1	219	5:21:22 PM	5:21:43 PM	21
1	220	5:21:23 PM	5:21:56 PM	33
1	221	5:21:37 PM	5:21:59 PM	22
1	222	5:21:38 PM	5:22:03 PM	25
1	223	5:22:13 PM	5:22:16 PM	3
1	224	5:22:30 PM	5:22:34 PM	4
1	225	5:22:32 PM	5:22:37 PM	5
1	226	5:22:35 PM	5:22:57 PM	22
1	227	5:22:36 PM	5:23:02 PM	26
1	228	5:22:49 PM	5:23:14 PM	25
1	229	5:22:53 PM	5:23:17 PM	24
1	230	5:23:02 PM	5:23:24 PM	22
1	231	5:23:04 PM	5:23:28 PM	24
1	232	5:23:05 PM	5:23:34 PM	29
1	233	5:23:05 PM	5:23:38 PM	33
1	234	5:23:20 PM	5:23:44 PM	24
1	235	5:24·19 PM	5:24·24 PM	5
1	236	5.24.20 PM	5:24·27 PM	7
1	237	5.24.20 PM	5:24:30 PM	8
1	230	5.24.23 PM	5.24.32 PM	9
1	220	5.24.27 DM	5.24.36 DM	۵ ۵
1	200	5.24.21 FIVI	5.24.30 FW	12
1	240	5.24.23 FIVI	5.25.06 DM	14
1	241	5.25.02 FIVI	5.25.00 FIVI	10
	242	5.20.07 FIVI	5.25.50 DM	11
	243	0.20.08 MM	5.25.50 MIVI	10
	244	5.25.42 MM	5.25.54 MIVI	12
	245	0:20:50 PM	0.20.07 MVI	10
1	246	0:20:53 PM	5:27:12 PM	19
1	247	1 5:26:55 PM	5:27:13 PM	18
1	248	5:26:57 PM	5:27:16 PM	19
1	249	5:27:06 PM	5:27:20 PM	14
1	250	5:27:13 PM	5:27:23 PM	10
1	251	5:27:14 PM	5:27:26 PM	12
L1_	252	5:27:21 PM	5:27:28 PM	7

28 Lord Road, Suite 280 Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA File Name : 790 summer street at hartford ave pm Site Code : 08030002 Start Date : 1/6/2015 Page No : 5

.

Ĺ	No.	Joined Queue	Released From	Delay
n.			Queue	-
1	253	5:27:25 PM	5:27:38 PM	13
1	254	5:27:26 PM	5:27:42 PM	16
1	255	5:28:31 PM	5:28:40 PM	9
1	256	5:28:36 PM	5:28:42 PM	6
1	257	5:28:37 PM	5:28:52 PM	15
1	258	5:28:44 PM	5:29:15 PM	31
1	259	5.28.45 PM	5.29.17 PM	32
$\frac{1}{1}$	260	5:28:47 PM	5:29:20 PM	33
1	261	5:28:50 PM	5:29:23 PM	33
1	262	5:28:55 PM	5:29:26 PM	31
1	263	5:28:55 PM	5:29:28 PM	33
1	264	5:29:00 PM	5:20:31 PM	31
	265	5:20:02 PM	5:20:34 PM	32
1	200	5:20:42 DM	5:20:44 PM	2
1	200	5.20.50 DM	5:20:53 DM	2
1	207	5:20:52 DM	5:20:56 DM	J 4
1	200	5.29.52 FIVI	5.29.50 FM	7
	209	5.29.52 PW	5.29.39 PW	1
1	270	5:30:03 PW	5:30:17 PM	14
1	2/1	5:30:07 PM	5:30:23 PM	10
1	2/2	5:30:07 PM	5:30:28 PM	21
1	2/3	5:30:11 PM	5:30:32 PM	21
1	2/4	5:30:13 PM	5:30:35 PM	22
1	275	5:30:15 PM	5:30:37 PM	22
1	276	5:30:16 PM	5:30:43 PM	27
1	277	5:30:22 PM	5:30:51 PM	29
1	278	5:30:22 PM	5:30:55 PM	33
1	279	5:30:22 PM	5:30:58 PM	36
1	280	5:30:23 PM	5:31:01 PM	38
1	281	5:30:24 PM	5:31:04 PM	40
1	282	5:31:41 PM	5:31:57 PM	16
1	283	5:31:43 PM	5:32:00 PM	17
1	284	5:31:44 PM	5:32:24 PM	40
1	285	5:31:44 PM	5:32:29 PM	45
1	286	5:31:47 PM	5:32:32 PM	45
1	287	5:31:47 PM	5:32:35 PM	48
1	288	5:32:37 PM	5:32:48 PM	11
1	289	5:33:02 PM	5:33:05 PM	3
1	290	5:33:04 PM	5:33:08 PM	4
1	291	5:33:10 PM	5:33:11 PM	1
1	292	5:33:12 PM	5:33:14 PM	2
1	293	5:33:16 PM	5:33:18 PM	2
1	294	5:33:20 PM	5:33:24 PM	4
1	295	5:33:21 PM	5:33:27 PM	6
1	296	5:33:26 PM	5:33:35 PM	9
1	297	5:33:30 PM	5:34:11 PM	41
1	298	5:33:32 PM	5:34:14 PM	42
1	200	5.33.33 PM	5.34.18 PM	45
1	200	5.33.38 DM	5.34.21 DM	13
1	204	5.33.30 PIVI	5.34.21 FIVI	45
1	202	5.34.22 MI	5.34.20 FW	4
1	302	5.34.24 PW	5.34.34 FW	10
1	303	5:34:27 PW	5.34.37 PWI	10
	304	5:34:30 PIVI	5.34:41 PW	12
1	305	5:34:31 PM	0:34:44 PW	13
1	306	5:34:33 PM	5:34:47 PM	14
1	307	5:34:33 PM	5:34:51 PM	18
1	308	5:34:48 PM	5:34:53 PM	5
1	309	5:35:07 PM	5:35:11 PM	4
1	310	5:35:43 PM	5:35:54 PM	11
1	311	5:35:47 PM	5:35:56 PM	9
1	312	5:35:49 PM	5:36:02 PM	13
1	313	5:35:50 PM	5:36:06 PM	16
1	314	5:35:52 PM	5:36:08 PM	16
1	315	5:35:53 PM	5:36:12 PM	19

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

L	No.	Joined Queue	Released From	Delay
n.			Queue	
1	316	5:36:01 PM	5:36:15 PM	14
1	317	5:36:43 PM	5:36:48 PM	5
1	318	5:36:45 PM	5:36:49 PM	4
1	319	5:36:47 PM	5:37:08 PM	21
1	320	5:36:50 PM	5:37:11 PM	21
1	321	5:36:54 PM	5:37:29 PM	35
1	322	5:36:57 PM	5:37:36 PM	39
1	323	5:36:58 PM	5:37:40 PM	42
1	324	5:38:02 PM	5:38:05 PM	3
1	225	5.30.02 r M	5:38:14 DM	3
1	320	5.30.11 FIVI	5.20.16 DM	3
	320	5.30.13 PIVI	5.30.10 FW	5
1	327	5:38:15 PM	5:38:20 PM	3
1	328	5:38:23 PM	5:38:25 PM	2
1	329	5:38:26 PM	5:38:35 PM	9
1	330	5:38:28 PM	5:38:39 PM	11
1	331	5:38:31 PM	5:38:44 PM	13
1	332	5:38:32 PM	5:38:45 PM	13
1	333	5:39:00 PM	5:39:11 PM	11
1	334	5:39:10 PM	5:39:16 PM	6
1	335	5:39:34 PM	5:39:37 PM	3
1	336	5:39:38 PM	5:39:41 PM	3
1	337	5:39:42 PM	5:39:53 PM	11
1	338	5:40:13 PM	5:40:37 PM	24
1	330	5:40:13 PM	5:40:40 PM	22
	339	5.40.10 PM	5:40:40 F M	24
	340	5.40.19 PN	5.40.43 PM	24
1	341	5:40:20 PIVI	5.40.47 PM	21
1	342	5:40:22 PM	5:40:55 PM	33
1	343	5:40:26 PM	5:40:58 PM	32
1	344	5:40:26 PM	5:41:01 PM	35
1	345	5:40:32 PM	5:41:09 PM	37
1	346	5:40:32 PM	5:41:10 PM	38
1	347	5:40:50 PM	5:41:11 PM	21
1	348	5:41:41 PM	5:41:43 PM	2
1	349	5:41:44 PM	5:41:57 PM	13
1	350	5:41:45 PM	5:42:05 PM	20
1	351	5:41:47 PM	5:42:07 PM	20
1	352	5.41.51 PM	5:42:19 PM	28
1	353	5:41:53 PM	5:42:35 PM	42
1	354	5:41:54 DM	5:42:38 PM	44
4	255	5.41.50 DM	5.42.301 M	44
	355	5.41.59 PW	5.42.47 F WI	40
4	350	5:42:00 PIVI	5.42.40 PW	40
1	357	5:42:54 PM	5:42:57 PW	3
1	358	5:42:58 PM	5:43:01 PW	<u> </u>
1	359	5:42:59 PM	5:43:04 PM	5
1	360	5:43:00 PM	5:43:06 PM	6
1	361	5:43:09 PM	5:43:11 PM	2
1	362	5:43:11 PM	5:43:13 PM	2
1	363	5:43:12 PM	5:43:17 PM	5
1	364	5:43:15 PM	5:43:25 PM	10
1	365	5:43:25 PM	5:43:40 PM	15
1	366	5:44:04 PM	5:44:09 PM	5
1	367	5:44:09 PM	5:44:13 PM	4
1	368	5:44:11 PM	5:44:18 PM	7
1	369	5:44:15 PM	5:44:23 PM	8
1	370	5:44:24 PM	5:44:27 PM	3
4	371	5.11.25 DM	5:44:36 PM	11
4	270	5.44.20 PIVI	5.44.30 FW	11
H	1	0.44.20 FIN	J.44.35 F WI	14
Z	1	4.40.07 PW	4.40.31 PW	15
2	2	4:49:23 PM	4:49:38 PM	110
2	3	4:50:19 PM	4:50:25 PM	10
2	4	4:52:12 PM	4:52:17 PM	5
2	5	4:54:33 PM	4:54:43 PM	10
2	6	4:56:23 PM	4:56:45 PM	22

Marlborough, MA

N: Summer Street E/W: Hartford Ave Medway, MA

File Name : 790 summer street at hartford ave pm Site Code : 08030002 Start Date : 1/6/2015 Page No : 7

L	No.	Joined Queue	Released From	Delay
п.			Queue	
2	7	4:58:17 PM	4:58:45 PM	28
2	8	5:00:35 PM	5:00:45 PM	10
2	9	5:04:02 PM	5:04:18 PM	16
2	10	5:04:54 PM	5:04:58 PM	4
2	11	5:05:38 PM	5:05:56 PM	18
2	12	5:09:37 PM	5:10:14 PM	37
2	13	5:10:32 PM	5:10:40 PM	8
2	14	5:11:27 PM	5:11:35 PM	8
2	15	5:12:37 PM	5:12:45 PM	8
2	16	5:13:32 PM	5:13:35 PM	3
2	17	5:17:49 PM	5:18:46 PM	57
2	18	5:17:55 PM	5:19:02 PM	67
2	19	5:18:27 PM	5:19:05 PM	38
2	20	5:21:45 PM	5:21:57 PM	12
2	21	5:21:58 PM	5:22:09 PM	11
2	22	5:24:33 PM	5:24:45 PM	12
2	23	5:24:42 PM	5:25:08 PM	26
2	24	5:24:59 PM	5:25:22 PM	23
2	25	5:25:00 PM	5:25:27 PM	27
2	26	5:25:24 PM	5:25:51 PM	27
2	27	5:28:04 PM	5:28:14 PM	10
2	28	5:31:04 PM	5:31:11 PM	7
2	29	5:32:10 PM	5:32:30 PM	20
2	30	5:32:16 PM	5:32:33 PM	17
2	31	5:35:20 PM	5:35:35 PM	15
2	32	5:38:35 PM	5:38:45 PM	10
2	33	5:41:54 PM	5:42:37 PM	43

Summary Information:

4:44:00 PM - 5:45:00 PM	Right Turns	Left Turns
Total Vehicle Count:	372	33
Delayed Vehicle Count:	372	33
Through Vehicle Count:	0	0
Average Stopped Time:	14.84	20.121
Maximum Stopped Time:	48	67
Min. Secs. for Delay:	0	0
Average Queue:	1.52	0.196
Queue Density:	2.70	1.260
Maximum Queue:	10	3
Delay in Vehicle Hour:	1.52	0.20
Total Delay:	5519	664

MEMORANDUM

PRINCIPALS Robert J. Michaud, P.E. Ronald D. Desrosiers, P.E., PTOE Daniel J. Mills, P.E., PTOE

- DATE: October 16, 2015 (Updated February 3, 2016)
- TO: Dale Raczynski, P.E. Epsilon Associates, Inc. 3 Clock Tower Place, Suite 250 Maynard, MA 01754
- **FROM:** Robert J. Michaud, P.E. Managing Principal Daniel A. Dumais, P.E. Senior Transportation Engineer
- RE:Exelon Power Facility Revised Construction Hours9 Summer Street, Medway, Massachusetts

MDM Transportation Consultants, Inc. (MDM) has prepared a supplemental construction period transportation evaluation for the expansion of the Exelon Power Facility. The Site in relation to the regional transportation system is shown in **Figure 1**. Specifically, this evaluation compares the impact of the revised construction arrival (5:00 am to 6:00 am) and departure (6:00 pm to 7:00 pm) periods to the original assumed construction arrival (6:00 am to 7:00 am and departure (3:00 pm to 4:00 pm) periods, as documented in the Draft Environmental Impact Report (DEIR)¹

CONSTRUCTION PERIOD CONDITIONS

The construction period will generate construction traffic, which will include truck and employee traffic. The following is a summary of the expected impacts of construction traffic and measures to be used to reduce and potential negative impacts during the construction period.

During construction, the parking area for workers will be in an existing material lay-down-lot in the southern portion of the Site along West Street as shown in **Figure 2**. This preferred parking area which is primarily grass will be re-enforced with gravel, stone, or similar material during the construction period to facilitate construction employee parking. Upon completion of the construction, the material lay-down-lot will be restored with loam and seed. No additional improvements are needed for any of the construction entrances. This is the preferred parking access area compared to the Summer Street entrance, for the following reasons:

¹ DEIR, West Medway II (EEA #15363), prepared by Epsilon Associates, Inc., dated September 30, 2015.

Medway, Massachusetts



Site Location

Traffic Impact Assessment Medway, Massachusetts



MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers Figure 2

Preferred Construction Parking Area

- □ The traffic volumes along this section of West Street are less than 75 vehicles per hour (vph) during the arrival and departure periods, in contrast the traffic volumes along Summer Street which range from 225 to 528 vph during the construction worker arrival and departure periods.
- □ The construction driveway will be located along a straight section of West Street approximately half way between Route 126 and Beech Street. The sight lines are adequate and the traffic volumes on this section of West Street during the construction arrival and departure times are nominal (less than 75 vehicles per hour).
- □ Trips to/from I-495 would travel fewer miles to the West Street entrance than to the Summer Street entrance.
- □ It is anticipated that the entrances into the property would be required to be manned during construction independent of construction parking location.
- □ As outlined in this supplemental evaluation, incremental traffic increases at the study intersections during the construction period will be adequately accommodated below-capacity with LOS C or better operations expected. This evaluation conservatively assumes 200 vehicles for 200 workers for a single shift with an arrival period between 5:00 6:00 am, and a departure period between 6:00 7:00 pm.

The peak construction activity is approximately 200 workers; therefore, onsite parking along West Street will satisfy the peak construction worker demand. The preferred parking area is also proximate to an on-Site pedestrian walkway connection to the proposed construction areas. The West Street parking area currently includes primarily grass areas with access/egress directly onto West Street via the existing gated entranceway which is located approximately 300 feet east of Beech Street.

Exelon has met with the Town of Medway for preliminary discussions on a detailed Construction Traffic Management Plan which will address parking during construction. It is expected that the construction workers would utilize the West Street parking areas while construction deliveries would use the Summer Street entrance. No improvements are needed for the Summer Street entrance or West Street construction entrances. Beyond measures in a Construction Management Plan, no project related traffic mitigation is warranted for the day care center driveways along Summer Street due to the Project. Exelon will also actively manage construction deliveries and oil deliveries in accordance with the Construction Traffic Management Plan. Construction will primarily be limited to on-site activity with limited activity on adjacent roadways. The existing West Medway driveway onto Summer Street is proposed to be utilized by the Facility and thus construction activity on Summer Street is anticipated to be limited. Activity on Summer Street may include the construction near the site driveway and necessary utility work. It is anticipated that traffic patterns on Summer Street will be maintained during construction and that no roadway closures or detours will be required during the construction period. Exelon will establish waiting and staging areas on-site for all material deliveries and the management of truck traffic. An analysis of construction period impacts on area roadways is provided below.

BASELINE CONDITIONS

An overview of baseline traffic volumes, speed data, and a review of sight line criteria is provided below.

Baseline Traffic Data – Construction Periods

Study locations which are likely to sustain a measurable impact from the Facility during construction periods include the following study intersections:

- □ Route 109 at Route 126 (Signalized);
- □ Route 126 at Exelon Power Site Driveway (Unsignalized);
- □ Route 126 at Main Street (Unsignalized).
- □ Route 126 at West Street (Unsignalized);
- □ Route 109 at West Street (Unsignalized); and
- □ West Street at Proposed Construction Driveway (Unsignalized).

Traffic volume data were collected at the study area intersections during the weekday morning peak period (5:00 AM - 6:00 AM) and the weekday evening peak period (6:00 PM - 7:00 PM) periods to coincide with peak traffic activity of the construction periods. Traffic data used in this evaluation were collected in September 2015, which represents above average traffic conditions based on review of MassDOT permanent count station data for the area. In order to provide a conservative analysis, no seasonal adjustment (reduction) of the data was made to the September traffic volume counts. Traffic count data and MassDOT permanent count station data are provided in the **Attachments**. The weekday morning and evening peak hour traffic volumes for the study intersections are shown in **Figure 3** and **Figure 4**.

Daily Traffic Volumes

Daily traffic volumes were collected on Summer Street and West Street in the site vicinity using automatic traffic recorders ("ATR's") in September 2014 and September 2015 and are summarized in **Table 1**.

MDM



Planners & Engineers

Figure 3

2015 Baseline Conditions Weekday Morning Construction Peak Hour (Construction Period 5am-6am)



2015 Baseline Conditions Weekday Evening Construction Peak Hour (Construction Period 6pm-7pm)

Planners & Engineers

TABLE 1 BASELINE TRAFFIC VOLUME SUMMARY

Time Period	Daily Volume (vpd) ¹	Percent Daily Traffic ²	Peak Hour Volume (vph)³	Peak Flow Direction ⁴	Peak Hour Directional Volume (vph)	
Summer Street north of Main Street						
Weekday AM Arrival (5-6 am)	7,885	3%	225	82% NB	184	
Weekday PM Departure (6-7 pm)	7,885	7%	528	62% SB	325	
West Street between Route 126 and Beech Street						
Weekday AM Arrival (5-6 am)	880	1%	13	62% WB	8	
Weekday PM Departure (6-7 pm)	880	8%	74	51% EB	38	

¹Two-way daily traffic expressed in vehicles per day without seasonal adjustment.

²The percent of daily traffic that occurs during the peak hour.

³Two-way peak-hour volume expressed in vehicles per hour.

⁴NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound

As summarized in Table 1:

- □ *Summer Street* in the immediate study area carries approximately 7,885 vehicles per day ("vpd") with approximately 225 vehicles and 528 vehicles during the morning and evening construction arrival and departure periods, respectively. The traffic volumes represent approximately 3 to 7% of the daily traffic volumes.
- □ *West Street* in the immediate study area carries approximately 880 vehicles per day ("vpd") with approximately 13 vehicles and 74 vehicles the morning and evening construction arrival and departure periods, respectively. The peak hour traffic volumes represent approximately 1 to 8% of the daily traffic volumes.

Measured Travel Speeds

Vehicle speeds were obtained for West Street adjacent to the site using a radar recorder device. These measured travel speeds provide a basis for determining sight line requirements at the proposed Construction driveway along West Street.

TABLE 2 SPEED STUDY RESULTS – WEST STREET

	Regulatory	Travel Speed	
Travel Direction Speed Limit ¹		Mean ²	85 th Percentile ³
Eastbound	25	33	38
Westbound	25	32	35

¹Regulatory (Posted) Speed limit in miles per hour (mph)

³The speed at or below which 85 % of the vehicles are traveling

²Arithmetic mean
As summarized in Table 2, the mean (average) travel speed on West Street was observed to be 33 mph for the eastbound direction and 32 mph in the westbound direction; the 85th percentile travel speed was observed to be 38 mph in the eastbound direction and 35 mph in the southbound direction. Measured travels speeds are considerable higher than the regulatory speed limits along West Street in the site vicinity.

Sight Line Evaluation

An evaluation of sight lines was conducted at the proposed construction site driveway along West Street to ensure that minimum recommended sight lines are available to safely exit onto West Street. The evaluation documented existing sight lines for vehicles as they relate to West Street with comparison to recommended guidelines for the regulatory speed limit and observed travel speeds.

The AASHTO standards² reference two types of sight distance which are relevant at the proposed site driveway intersection on Summer Street and the proposed construction driveway along West Street: stopping sight distance ("SSD") and intersection sight distance ("ISD"). Sight lines for critical vehicle movements at the proposed construction site driveway along West Street were compared to minimum SSD and ISD for the regulatory and observed travel speeds in the Site vicinity.

Stopping Sight Distance

Sight distance is the length of roadway visible to the motorist to a fixed object. The minimum sight distance available on a roadway should be sufficiently long enough to enable a below-average operator, traveling at or near a regulatory speed limit, to stop safely before reaching a stationary object in its path, in this case, a vehicle exiting the site driveways onto Summer Street. The SSD criteria are defined by AASHTO based on design and operating speeds, anticipated driver behavior and vehicle performance, as well as physical roadway conditions. SSD includes the length of roadway traveled during the perception and reaction time of a driver to an object, and the distance traveled during brake application on wet level pavement. Adjustment factors are applied to account for roadway grades where applicable.

SSD was estimated in the field using AASHTO standards for driver's eye (3.5 feet) and object height equivalent to the taillight height of a passenger car (2.0 feet) for the approaches to the intersection. **Table 3** presents a summary of the available SSD for the roadway segment approaches to the proposed construction driveway and AASHTO's recommended SSD for the regulatory and observed travel speeds.

² A policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO), 2011.

TABLE 3 STOPPING SIGHT DISTANCE SUMMARY

		1	AASHTO Recommende	d^1
Approach/ Travel Direction	Available Stopping Sight Distance	Regulatory Speed ²	Average Travel Speed ³	85t ^h Percentile Travel Speed⁴
West Street Appro	aches to Proposed Const	ruction Driveway		
Eastbound Westbound	430± Feet 530± Feet	155 Feet² 155 Feet	230 Feet 220 Feet	280 Feet 250 Feet

¹Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on driver height of eye of 3.5 feet to object height of 2.0 feet and adjustments for roadway grade were applicable.

²Posted speed along West Street is 25 mph.

³ Average Speed is 33 mph EB and 32 mph WB on West Street

⁴85th Percentile travel speed is 38 mph EB and 35 mph WB on West Street.

As summarized in **Table 3**, analysis results indicate that the existing available sight lines exceed AASHTO's recommended SSD criteria for both travel directions along West Street based on the regulatory speed limit and observed travel speeds.

Intersection Sight Distance

Clear sight lines provide sufficient sight distance for a stopped driver on a minor-road approach to depart from the intersection and enter or cross the major road. As stated under AASHTO's Intersection Sight Distance (ISD) considerations, "...If the available sight distance for an entering ...vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to avoid collisions...To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road." AASHTO's ISD criteria are defined into several "cases". In this case the intersections are proposed to be under STOP signal control and the ISD in question relates to the ability turn left or turn right from the proposed driveways.

Available ISD was estimated in the field using AASHTO standards for driver's eye (3.5 feet), object height (3.5 feet) and decision point (between 8 and 14.5 feet from the edge of travel way) for the eastbound and westbound directions along West Street. **Table 4** presents a summary of the available ISD for the departure from the construction site driveway and AASHTO's recommended ISD for the regulatory speed limit and observed travel speeds.

TABLE 4INTERSECTION SIGHT DISTANCE SUMMARY

		AASHT	O Minimum ¹	AASHTO Ideal ¹
Approach/ Travel	Available	Regulatory	85 th Percentile	Regulatory
Direction	ISD	Speed²	Observed Speed ³	Speed ²
West Street Approaches to P	Proposed Constructi	on Driveway		
Looking East	430± Feet	155 Feet	250 Feet	240 Feet
Looking West	530± Feet	155 Feet	280 Feet	280 Feet

¹Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on driver height of eye of 3.5 feet and an object height of 3.5 feet and adjustments for roadway grade if required. Minimum value as noted represents SSD per AASHTO guidance.

²Posted speed along West Street is 25 mph.

³ Average Speed is 33 mph EB and 32 mph WB on West Street

⁴85th Percentile travel speed is 38 mph EB and 35 mph WB on West Street.

The results of the ISD analysis presented in **Table 4** indicate that the available sight lines looking east and west onto West Street exceed the recommended minimum and ideal sight line requirements from AASHTO for the regulatory speed limit and observed travel speeds. MDM recommends that the sight line continue to be maintained and that any new plantings (shrubs, bushes) or physical landscape features to be located within the driveway sight lines should also be maintained at a height of 2 feet or less above the adjacent existing roadway grade to ensure unobstructed lines of sight.

PROJECTED FUTURE YEAR TRAFFIC VOLUMES

A seven-year planning horizon (year 2022) was selected consistent with industry standard guidelines and to be consistent with future year conditions analysis presented in the DEIR³ filed for the project on September 30, 2015. Although construction activity will occur prior to the selected 2022 design condition, this horizon year is used in the analysis to present a conservatively higher traffic condition. Likewise, the analysis is based on the highest level of construction activity with 200 workers, though actual worker levels will fall below this threshold for much of the construction period. The construction period also conservatively assumed a vehicle occupancy rate of 1.0 and was estimated under the peak construction period with 200 workers. Fewer workers and the use of a 2016/2017 period would result in conditions with improved operations compared to the analysis shown.

2022 No-Build Traffic Volume Networks

To account for future traffic growth in the study area future No-Build traffic volumes are developed by increasing the baseline (2015) volumes by approximately 3.6 percent (0.5 percent compounded annually over 7 years). The resulting 2021 No-Build traffic volumes are displayed in **Figure 5** and **Figure 6**.

Trip Generation – Peak Construction

Anticipated construction activity at the site will generate a peak of approximately 200 workers with significantly lower activity during the beginning and end of the construction period. The amount of crews and workers will vary based on the specific construction work activities, but will range up to approximately 20 to 25 crews working on site with approximately 8 to 10 workers per crew. To present a conservative (worst case) scenario, trip generation for the Facility's construction impact is estimated based on a peak construction scenario and a vehicle occupancy rate of 1.0.

Table 5 summarizes the empirically derived trip estimates for the power generation facility under a peak construction scenario of 200 workers. Results indicate that under a peak construction activity scenario, the Facility is conservatively estimated to generate approximately 200 entering vehicle-trips during the weekday morning period (5:00 am to 6:00 am) and 200 exiting vehicle-trips during the weekday evening period (6:00 pm to 7:00 pm). These trips levels do not account for carpooling which may reduce actual vehicle demands at peak construction.

8

³ Ibid 1



2022 No-Build Conditions Weekday Morning Peak Hour Traffic Volumes (Construction Period 5am-6am)



Planners & Engineers

Figure 6

2022 No-Build Conditions Weekday Evening Peak Hour Traffic Volumes (Construction Period 6pm-7pm)

Study Period/Direction	Peak Construction Vehicle-trips ¹
Morning Study Period (5:00 to 6:00 am):	
Entering	200
Exiting	<u>Negl.</u>
Total	200
Evening Study Period (6:00 to 7:00 pm):	
Entering	Negl.
Exiting	200
Total	200
Based on 200 construction workers with vehicle occupancy of 1.0	workers per vehicle Analysis

TABLE 5 **Trip Generation Summary – Peak Construction Operations**

conservatively assumes that all workers arrive between 5:00 and 6:00 am and depart between 6:00 and 7:00 pm.

Trip Distribution – Construction Periods

Primary routes to/from the site associated with construction employee related trips are will use I-495, Route 109, and Route 126. The distribution for projected traffic for the construction employees is based on Journey to Work Census data. The resulting trip distribution pattern is shown in **Figure 7**. It is estimated that approximately 65% of the construction worker trips will use Route I-495. An aerial view of the construction employee routes from Route I-495 are summarized in Figure 8.

Development-related trips for the proposed Site are assigned to the roadway network using the ITE trip-generation estimates shown in Table 5 and the distribution pattern for the construction employees. Development-related trips at each intersection approach for the weekday morning, and weekday evening construction periods are quantified in the Figure 9 and Figure 10.

2022 Build Traffic Volume Networks - Construction Periods

2022 Build condition traffic volumes are derived by adding the incremental traffic increases for the Site's construction activity to the 2022 No-Build conditions. The 2022 Build condition traffic-volume networks for the weekday morning and weekday evening construction periods are provided in Figure 11 and Figure 12.



Figure 7

Trip Distribution

Date: October 2015 Dwg No. 790 TIAS Construction (10-15-2015).dwg Copyright © by MDM Transportation Consultants, Inc. All rights reserved.

TRANSPORTATION CONSULTANTS, INC. Planners & Engineers



MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers



I-495 Construction Employee Routes



Site Generated Trips Weekday Morning Peak Hour Traffic Volumes (Construction Period 5am-6am)



Site Generated Trips Weekday Evening Peak Hour Traffic Volumes (Construction Period 6pm-7pm)



2022 Build Conditions Weekday Morning Peak Hour Traffic Volumes (Construction Period 5am-6am)



2022 Build Conditions Weekday Evening Peak Hour Traffic Volumes (Construction Period 6pm-7pm)

CAPACITY ANALYSIS – CONSTRUCTINO PERIODS

This section provides an overview of operational analysis methodology, an assessment of intersection operations under Baseline and projected future No-Build and Build conditions for the construction periods.

Analysis Methodology

Intersection capacity analyses are presented in this section for the No-Build, and Build trafficvolume conditions for the construction arrival and departure periods. Capacity analyses, conducted in accordance with EEA/MassDOT guidelines, provide an index of how well the roadway facilities serve the traffic demands placed upon them. The operational results provide the basis for recommended access and roadway improvements in the following section.

Capacity analysis of intersections is developed using the Synchro® computer software, which implements the methods of the 2010 Highway Capacity Manual (HCM). The resulting analysis presents a LOS designation for individual intersection movements. The LOS is a letter designation that provides a qualitative measure of operating conditions based on several factors including roadway geometry, speeds, ambient traffic volumes, traffic controls, and driver characteristics. Since the LOS of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of LOS, depending on the time of day, day of week, or period of year. A range of six levels of service are defined on the basis of average delay, ranging from LOS A (the least delay) to LOS F (delays greater than 50 seconds for unsignalized movements and delays greater than 80 seconds for signalized movements).

Analysis Results - Construction Periods

LOS analyses were conducted for the No-Build, and Build (5-6 am arrival and 6-7 pm departure periods) conditions for the study intersections. The new construction periods are compared to the original construction periods of 6-7 am and 3-4 pm as outlined in the DEIR; results of the intersection capacity for the construction period are summarized below in **Tables 6** and **Table 7**. The capacity analysis provided for the construction period has been calibrated based on observed vehicle delay characteristics for the unsignalized study intersections as outlined in the DEIR.

TABLE 6 INTERSECTION CAPACITY ANALYSIS RESULTS – CONSTRUCTION PERIOD WEEKDAY MORNING PEAK HOUR

		2022 N	o-Build (5-	6 AM) 1	2022	Build (5-6	AM) ²	2021 Build (6-7 AM) ³		
Period	Approach	v/c ⁴	Delay⁵	LOS ⁶	v/c	Delay	LOS	v/c	Delay	LOS
Summer Street at	Eastbound	0.14	7	А	0.14	7	А	0.36	9	А
Milford Street	Westbound	0.24	10	А	0.24	10	Α	0.73	27	С
	Northbound	0.27	11	В	0.27	11	В	0.68	30	С
	Southbound	<u>0.14</u>	<u>8</u>	A	<u>0.18</u>	<u>9</u>	<u>A</u>	<u>0.73</u>	<u>30</u>	<u>C</u>
	Overall	0.27	9	Α	0.27	9	А	0.73	24	C
Summer Street at	Northbound	0.00	<5	А	0.00	<5	А	0.01	<5	А
Exelon Power Dwy	EB L/R Exit	0.00	<5	Α	0.00	<5	А	0.00	<5	А
Main Street at	Eastbound	0.17	<5	А	0.17	8	А	0.27	<5	А
Summer Street	SB L Exit	0.01	9	Α	0.01	9	А	0.03	11	В
	SB R Exit	0.03	8	А	0.05	8	А	0.13	8	А
Route 126 at	Eastbound	0.00	<5	А	0.00	8	А	0.00	<5	А
West Street	SB L/R Exit	0.02	11	В	0.02	12	В	0.06	16	С
Route 109 at	Westbound	0.00	<5	А	0.00	<5	А	0.00	<5	Α
West Street	NB L Exit	0.07	10	В	0.07	10	В	0.22	15	В
	NB R Exit	0.01	9	А	0.01	9	А	0.03	10	Α
West Street at	Eastbound	n/a	n/a	n/a	0.09	7	Α	0.09	7	A
Proposed Construction Driveway	SB L/R Exit	n/a	n/a	n/a	0.00	<5	A	0.00	<5	А

¹No-Build Conditions based on 5-6 AM (September 2015 Baseline Volumes adjusted to 2022)

²Build Conditions based on 5-6 AM (September 2015 Baseline Volumes adjusted to 2022)

³Build Conditions based on 6-7 AM (September 2014 Baseline Volumes adjusted to 2021 per DEIR) ⁴Volume-to-capacity ratio

⁵Average control delay per vehicle (in seconds)

⁶Level of service

TABLE 7 INTERSECTION CAPACITY ANALYSIS RESULTS – CONSTRUCTION PERIOD WEEKDAY EVENING PEAK HOUR

		2022 N	o-Build (6-2	7 PM)1	2022	Build (6-7	PM) ²	2021 Build (3-4 PM) ³		
Period	Approach	v/c ⁴	Delay⁵	LOS ⁶	v/c	Delay	LOS	v/c	Delay	LOS
Summer Street at	Eastbound	0.41	12	В	0.41	12	В	0.53	14	В
Milford Street	Westbound	0.69	27	С	0.69	27	С	0.70	28	С
	Northbound	0.38	21	С	0.42	21	С	0.36	20	С
	Southbound	<u>0.75</u>	<u>29</u>	<u>C</u>	<u>0.76</u>	<u>30</u>	<u>C</u>	<u>0.75</u>	<u>29</u>	<u>C</u>
	Overall	0.75	23	С	0.76	23	С	0.75	22	С
Summer Street at	Northbound	0.00	<5	А	0.00	<5	А	0.00	<5	А
Exelon Power Dwy	EB L/R Exit	0.00	<5	А	0.00	<5	А	0.01	13	В
Main Street at	Eastbound	0.19	9	А	0.22	9	А	0.25	<5	А
Summer Street	SB L Exit	0.10	18	С	0.12	20	С	0.16	22	С
	SB R Exit	0.40	12	В	0.40	12	В	0.48	13	В
Route 126 at	Eastbound	0.00	<5	А	0.00	<5	А	0.01	<5	А
West Street	SB L/R Exit	0.13	19	С	0.38	24	С	0.43	29	D
Route 109 at	Westbound	0.02	9	А	0.04	12	В	0.01	<5	А
West Street	NB L Exit	0.22	16	С	0.47	22	С	0.32	17	С
	NB R Exit	0.01	11	В	0.01	11	В	0.01	10	А
West Street at	Eastbound	n/a	n/a	n/a	0.00	<5	А	0.00	<5	A
Proposed Construction Driveway	SB L/R Exit	n/a	n/a	n/a	0.22	10	A	0.22	10	A

¹No-Build Conditions based on 6-7 PM (September 2015 Baseline Volumes adjusted to 2022)

²Build Conditions based on 6-7 PM (September 2015 Baseline Volumes adjusted to 2022)

³Build Conditions based on 3-4 PM (September 2014 Baseline Volumes adjusted to 2021 per DEIR) ⁴Volume-to-capacity ratio

⁵Average control delay per vehicle (in seconds)

⁶Level of service



As summarized in **Table 6** and **Table 7**:

- □ *Summer Street at Milford Street*. The signalized Summer Street at Milford Street intersection will continue to operate below capacity at overall LOS C or better operations the peak construction period.
- Summer Street at Exelon Power Driveway. Under peak construction conditions, the Exelon Power Driveway approach to Summer Street will operate at LOS A or better operations. Mainline operations Summer Street are expected to continue to operate well below capacity at LOS A operations with minimal delay.
- □ *Unsignalized approaches to Routes 126 and 109.* Under peak construction conditions, left turns from unsignalized side streets onto Route 126 and Route 109 will operate at will continue to operate at LOS C or better operations.
- □ *West Street at Proposed Construction Driveway.* The proposed Construction driveway along West Street will operate well below capacity with nominal delay during the peak construction periods.

In summary, incremental traffic increases at the study intersections during the construction period will be adequately accommodated below-capacity with LOS C or better operations expected. The new construction periods of 5-6 am and 6-7 pm will result in equal or improved LOS compared to the original construction periods of 6-7 am and 3-4 pm.

MITIGATION

The DEIR recommended a construction traffic management plan that supports the proposed operational needs of the Facility under peak construction conditions while minimizing impact to adjacent roadways. Based on the traffic analysis presented in this evaluation, the conclusions and recommendation outlined in the DEIR remain valid and no additional mitigation is required.

A traffic-construction management plan should be implemented in cooperation with the Town of Medway and the Project's EPC Contractor to accommodate the specific needs of the site and to provide coordination with the Town officials throughout the construction period. Exelon will also coordinate with the Town of Medway with regard to the length of the construction period and any construction permits which may be required. The construction traffic management plan should include but not be limited to the following:

- Designated parking areas should be provided for construction employees. This area is preferred to be in an existing material laydown lot in the southern portion of the site along West Street which will be reinforced during the construction phase of the site and returned to grass upon completion of the project.
- □ Construction periods (i.e., worker arrival/departure times) and material deliveries should be designated to coincide with off-peak travel periods of the area roadway. The current arrival/ departure periods are 5:00 6:00 am and 6:00 7:00 pm which have been shown to be off peak travel periods.
- □ Exelon should establish waiting and staging areas on-site for all material deliveries and the management of truck traffic.
- Dust suppression methods should be implemented at unpaved construction areas as needed (e.g., use of water trucks to wet the ground surface, stabilization of soils, creation of wind breaks, and/or use of stabilized construction and exit points).

Appendix

- □ Traffic Volume Data
- Seasonal and Background Growth
- \square Speed Data
- □ Sight Line Analysis
- □ Capacity Analyses

□ Traffic Volume Data

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Mariborough, MA 01752 508-303-0370

N/S: Summer Street (Route 126) Just North of Site Driveway Medway, MA

www.mdmtrans.com

Site Code: 79000001 Station ID: Latitude: 0' 0.0000 Undefined

790 Summer Street (Route 126) Volume

Start	17-Sep-14	South	bound	Hour Totals		Nort	hbound	Hour	Totals	Combin	ed Totals
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		14	45			3	52	-			NALLES ST 15 14 19 19
12:15	승규는 것을 많은 것을 했다.	6	40	가격물 소소하	n sa ang sang Basaran dan sa	1864 Saci	41		방송방송송 다음감 말	HERSEN WER	an a chuir ann ann a' gun a' gun ann ann ann ann ann ann ann ann ann a
12:30		2	53			1	41	nera se			
12:45		5	38	27	176	3	<u>. 60 - 40 - 40 - 40 - 40 - 40 - 40 - 40 -</u>	8	1/4	35	-350
01:00	neen alb (1993) and a' fa	1	44	PALLA SIZUM MUSA	i ve sererar restêr	2 • * * * * * * * *	41 50	WHEN DESCRIPTION	esterna na cari	THE LONGER	TEATISTEAR
01:15			00	0.40.40.40.40.414	is German die ber	eine Linei. •	37	<u>- Alexandria a serie</u>	di bia na katalas Pr		<u>, The Friday and Inte</u>
01.30	a dar stelland of th	U Vietovic v ie	944 1000000050	338- 9- 16 3				5 6 A 6	194	200 - 2 2 1	387
01.45	MAN SERIES	5 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1	56	ale vech di Ali V e	1999 - HEARDER I 99 7	330 - 11 - 12 - 13 3	50	n na anna an taoinn Mult	1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	anter di Fradici	142/2014 - 2 2 7-1
02:15	u tita sett	ō	46	e de singe	903.909÷	<u>i de la com</u> o	54	399875634		<u>tenne</u> r	
02:30	3 · . · · · · · · · · · · · · · · · · ·	1	62			1	55				
02:45		5	86	8	250	4	69	8	228	16	478
03:00		3	69			3	56	ng an groot a naraana		an an an an an an Anna	- Frankrik de Martin 1993
03:15	<u>a persitar</u>	<u> </u>	74	1910-1909)	N. HALL BENER	19851100.4	55	RANK AND		ang panang	
03:30	ward and the second	2 10000-000-00	106		ана арал	4 	UC . NN PROFESSION	THE THE ALL PROV	0000		566
03:45	1992 2391 251 2121	9	110	(Herdelage (4)	- Index and the second s	11 (11) (12) (12) (12)	-44 60		20 0	1995-1997-1997-1 47 -1-1 1	
04.00	eas a sportset	S S	ાટલ્સિંગ્સ	na a su su su s	14445-14655	8000011	52	STRATER.	A SARAGAN	u de la composition d	Yerreserve
04:30	Annul Antone Sector Report	5 s	113	anutru eta gor este	101 N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19	47	ander and the strength of the			
04:45		6	121	17	457	17	51	58	210	75	667
05:00	ne on a segue canadé servenene	7	117			17	72				
05:15		7	120			27	61				
05:30		14	118			65	55				
05:45	4.7.6.6.6.6.6.6	13	96	41	451	/5		184	260	∠∠ 2	
06:00	ANGER SCHOLD S	33 20	97 71	189496 (SEACHER)	Literation (1996)		5 54 5 70	GREAT STATE	ara santa	CTREADENDE	449,560,00,53
06.10	ka menyesistekiyesiste	23 36	95	d bring: elements	RPA for the other states a	86	i 49	2019/07/02/02/02/02/02/02/02/02/02/02/02/02/02/	see to di Goldini, qui	n an	t dela gladetta indiana esta del consegui
06:45		43	59	141	325	96	30	346	203	487	528
07:00	0.015 5 5 5 6 0.000 <u>0.028</u> 0.294	38	61	and the second		85	i 46				
07:15		53	44			110	26		1949-9999 1944-9999	ACCENE CLEAN	
07:30		60	56			108	39		enar monarcia com propaga		ene gemeen voor af als af o
07:45		71 _	41	222	202	102	2 31	405	142	627	344
08:00	waaanaa coree	62 20	34 36	NATE TO AN A STREET	ene sone stare:	100) 	an a	une restruct	NAMERICA	CLASSESSES
08:15	sessible result		60 (1997) 57	n a chreataige	CERENISATEU	1010-00-00 101	7 2 7	n de versen de de section de la	n an an an Angel an A Angel an Angel an Ang	per sanga	er verse her iste iste avteret.
08.30		50 17	ر 41	203	168	8	23	426	117	629	285
00:00	FLAGHERAR SULTIN	42	30	alla la blaca 🛪 🏹	1996-1997 - 197 7	6	22		ana ang ang sinang ang sinang sina Sinang sinang s		en antisen and an
09:15	9.79.200 Bitter	41	28			5	1 27		40086484		
09:30		36	14			5) 42			ing partners and a single	n zna stra ta transmit e 🛌 🗤 🗤
09:45		26	18	145	90	4	5 13	211	104	356	194
10:00	TRANKS IN CALL PROPERTY AND	42	20	e 114 martin andra San	er de la companya de	31	5 12 ∤≣≣ana ang ang ang ang ang ang ang ang ang	100400000000	na na sana an	n en en en anter	
10:15	etter næmelse	34	20	n na san san di k	eest GEGNU	14000036 4 A	+ 11/2 S 15		ernetildeleid.	n aragai shirki kark	zerenzen er
10:30		40 20	20 10	155	70		3	171	54	326	124
11.40	-213167362324 <u>8</u> 493				ilinia a collibia d	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3 3	n san 1970 s fol dialamin'	1957 ISLAND ANNUM D	a ann it is indir a d aorta .	an a
11:15		30	13			5	3	+ HERE SAL		1506420	
11:30	ogane Wolfdat Manddallad I	50	6	a a statut dibitadiki di	anan di di se antis ta di salis di s	4	2 2				
11:45	(HEREALING	43	18	160	48	5	в 4	196	21	356	69
Total		1147	2791			203	4 1912			3181	4703
Percent		29.1%	70.9%			51.5%	6 48.5%			40.3%	59.7%

Page 1

MDM TRANSPORTATION CONSULTANTS, INC. 28 Lord Road, Suite 280 Mariborough, MA www.mdmtrans.com

West Street West of Driveway Medway, MA

Site Code: 790

Start	22-Sep-15	Westb	ound	Hour	Totals	Eas	tbound	Hour	Totals	Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Atternoon	Morning	Atternoon
12:00	and strategy of the	2 1	6 •	er margaret d	tan offenseliede		3 1439-144-16	472-Maderianae		0	
12:10		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	iy geraalaalaa	9833,20,45993,447	0	8	A FATHER CHILD IN FOR	- <u>1.1.1.9</u> pro. 1.1.1907-1.000,1023		
12:45			5	4	17	0	3	0	20	4	37
01:00		0	4 5	1.148.1688.728			4				
01:30	940333444.8346.	0.44. 0	9	angendi (ping 1934)	gant sugt 1, more energy	0	8		andres internet a provincial de la compara de la compa		
01:45		<u>1</u> .0	4	1	22		9.		27	1444 - 1 4	49
02:00		0 0	10 8.	5364G1/563	uncanda) 	STOLEN F	SOPPOIS	99492-99U	
02:30	n and an and a second	0	13	10.55 TO 10.000.0	111111111111111111	C Later Addre) 9 vata intervention - 2 :	Bestellett n	(1997) 1997) 1997)	0	61
02:45	n selve ne se s		/ 10	un en el com u	0 0 -30) 8	inter entre data 🖌	나는가 가나는 수요?	and selected the	and fillen in the set of the
03:15		0	7) 4				
03:30		0	8	0	33) 12 10	0	34	0	67
04:00	in en receberador.	0	10	. 36 2129 / 12 268 03 467 4	Anna 2015 (2018) 1. 7. 7	() 9	2			over a strategy data si
04:15		ussants	10	101124212			10 1 7	, Pilitika de Lit	generatiet.	-latestere	1999년 - 1997년 - 1997년 1997년 - 1997년 - 1997년 1997년 - 1997년
04:30	1990 - A.A.	O (state o (9	as estated	34		2 6	્લ ંસ 3	32	4	66
05:00	ratis manataratis;	1	14 CTR		a por esta de la compañía de la comp	NUCLESS V) 16 5 14				
05:30		<u>2</u>	0 11	iki i 2. shinisin	9-40-20.90500) 16	a di mini di tata di sense	a ministra da construir da cana a A construir e seren en construir da const		
05:45	rada seria da	2	7	B	38	CERCICE.	3 14	5		13	98
06:00	snæssen	ר אפינארינארי	10 8				5 11		590-543-53	hean an	
06:30	(A she built de statue de l'ant	4 	8			u grav avta est filitar	3 8		20	28	
06:45	84991123333	6 2	910 (10) 9	12	36	. <u>3603</u> Mariatan	8 6			10.9%%0002 6 0	araanaan taalaa ta rat a
07:00		5.	11				8 7				
07:30	TER PROVEN DE	12 10	3	29	28		2 2 0 6	48	21	77	49
08:00	19802 tenderak barb	15	4	Spinstonen – C		1	1 4		n and the second of additional test	anar stol towi 47.4	anna 1975 - Marian Guiss
08:15		8	9				8 8 3		P41713089603		
08:30	Febreatie	9 6	4	38	23	6,26336355	4	31	17	69	40
09:00) Kardes etteret Moraelia	3	5	TATATA	MCTRUCTURACE)		6 0 2				
09:15	<u>, APARATINA (</u>	6 6	2 2		<u>in Professione</u>	, 11 - Literin Alffrid Deloris	3 C				
09:45	A CAREAGE STATES	1	5	17	12		4	<u>9 2002/2015</u>	745 F F F F F F F F F F F F F F F F F F F	- 34	
10:0L) 5.04.00.02.04.04.0	3 4	9 1				3		64363442Q	i da da se	
10:30	uren en en en en anderen en Build) Legen en er bener en anne meren er	2	5	- Suppose the triangle	z.(16. (9.173*2*2 /	- Printer and the	2 1 5 1	rg all act offension 7			201
10:45	5,000 FC-500 FC-500 1	3-11-3-4-8 5	Cast Cast C O	257283023U	or de casta de la casta de Casta de la casta de la cast	2.41556624766	2 ())	nave eres de rais.	a national second	e nagionalizza de Constantina de Constantina de Constantina de Constantina de Constantina de Constantina de Cons
11:1:	5	2	0				6				
11:30) 5 JEAN TAIL	4 A	1	teessaa.	7	2 2 2 2 2 2 2	7 7	5 2	2 2	2 39)4
Tota	e ugen and sig Huddows al	144	301	A CONTRACTOR OF A CONTRACTOR OF A		1:	53 28	1		297	7 582
Percen	it	32.4%	67.6%	1		35.3	% 64.7%	0		33.8%	66.2%
Combine	d	4	445				434				879

Total

Page 6

Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

		Milford Street	(Route 109)		West	Street			Milford Stree	et (Route 109))	
		From	East			From	1 South			From	n West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to	05:45 AM - Pe	ak 1 of 1										
Peak Hour for Entire Inter-	section Begin	s at 05:00 AM											
05:00 AM	25	0	0	25	0	8	0	. 8	0	10	0	10	43
05:15 AM	23	0	0	23	0	7	0	7	0	21	0	21	51
05:30 AM	56	0	0	56	1	11	0	12	0	35	0	35	103
05:45 AM	65	0	0	65	4	13	0	17	3	48	0	51	133
Total Volume	169	0	0	169	5	39	0	44	3	114	0	117	330
% App. Total	100	0	0		11.4	88.6	0		2.6	97.4	0		
PHF	.650	.000	.000	.650	.313	.750	.000	.647	.250	.594	.000	.574	.620
Cars & Peds	162	0	0	162	5	39	0	44	3	110	0	113	319
% Cars & Peds	95.9	0	0	95.9	100	100	0	100	100	96.5	0	96.6	96.7
Trucks & Buses	7	0	0	7	0	0	0	0	0	4	0	4	11
% Trucks & Buses	4.1	0	0	4.1	0	0	0	0	0	3.5	0	3.4	3.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0



S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

		_		Groups Printed- Bikes by Direction							
	Milfo	rd Street (Route 1	09)		West Street		Milfo	rd Street (Route 1	(09)		
		From East			From South			From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total	
05:00 AM	0	0	0	0	0	0	0	0	0	0	
05:15 AM	0	0	0	0	0	0	0	0	0	0	
05:30 AM	0	0	0	0	0	0	0	0	0	0	
05:45 AM	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	
Apprch % Total %	0	0	0	0	0	0	0	0	0		

		Milfard Conner	(Danta 100))	West Street				Milford Street (Route 109)				
	1	Millord Street	(Route 109)		west	Succi			wintoru Suee	i (Roule 109)		
		From	East			From	South			From	West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to	05:45 AM - Pe	eak I of I										
Peak Hour for Entire Inter	section Begin	s at 05:00 AM											
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

		Groups Printed- Trucks & Buses											
	Milfo	rd Street (Route	109)		West Street		Milfo	rd Street (Route 1	09)				
		From East	-		From South			From West					
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total			
05:00 AM	0	0	0	0	0	0	0	0	0	0			
05:15 AM	0	0	0	0	0	0	0	0	0	0			
05:30 AM	6	0	0	0	0	0	0	0	0	6			
05:45 AM	1	0	0	0	0	0	0	4	0	5			
Total	7	0	0	0	0	0	0	4	0	11			
Grand Total	7	0	0	0	0	0	0	4	0	11			
Apprch %	100	0	0	0	0	0	0	100	0				
Total %	63.6	0	0	0	0	0	. 0	36.4	0				

		Milford Street	(Route 109)		West	Street		Milford Street (Route 109)				
		From	East			From	South			From	West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to	05:45 AM - Pe	eak 1 of 1										
Peak Hour for Entire Inter-	section Begins	s at 05:00 AM											
05:00 AM	Ō	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	6	0	0	6	0	0	0	0	0	0	0	0	6
05:45 AM	1	0	0	1	0	0	0	0	0	4	0	4	5
Total Volume	7	0	0	7	0	0	0	0	0	4	0	4	11
% App. Total	100	0	0		0	0	0		0	100	0		
PHF	.292	.000	.000	.292	.000	.000	.000	.000	.000	.250	.000	.250	.458

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printe	ed- Cars & Peds					
	Milfor	d Street (Route 109)		West Street		Milfo	rd Street (Route 1	09)	
		From East			From South			From West		
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
05:00 AM	25	0	0	0	8	0	0	10	0	43
05:15 AM	23	0	0	0	7	0	0	21	0	51
05:30 AM	50	0	0	1	11	0	0	35	0	97
05:45 AM	64	0	0	4	13	0	3	44	0	128
Total	162	0	0	5	39	0	3	110	0	319
Grand Total	162	0	0	5	39	0	3	110	0	319
Apprch %	100	0	0	11.4	88.6	0	2.7	97.3	0	
Total %	50.8	. 0	0	1.6	12.2	0	0.9	34.5	0	

	Ν	Ailford Street	(Route 109)		West	Street		Г	Milford Stre	et (Route 109))	1
		From	East			From	South			Fron	n West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 0	5:45 AM - Pe	ak 1 of 1										
Peak Hour for Entire Inter-	section Begins	at 05:00 AM											
05:00 AM	25	0	0	25	0	8	0	8	0	10	0	10	43
05:15 AM	23	0	0	23	0	7	0	7	0	21	0	21	51
05:30 AM	50	0	0	50	1	11	0	12	0	35	0	35	97
05:45 AM	64	0	0	64	4	13	0	17	3	44	0	47	128
Total Volume	162	0	0	162	5	39	0	44	3	110	0	113	319
% App. Total	100	0	0		11.4	88.6	0		2.7	97.3	0		
PHF	.633	.000	.000	.633	.313	.750	.000	.647	.250	.625	.000	.601	.623

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

				kes by Direction	ucks & Buses - Bi	Cars & Peds - Tr	Groups Printed-			
	109)	rd Street (Route	Milfo		West Street		109)	rd Street (Route	Milfo	
		From West			From South			From East		
'eds Int. Total	Peds	Thru	Right	Peds	Left	Right	Peds	Left	Thru	Start Time
0 43	0	10	0	0	8	0	0	0	25	05:00 AM
0 51	0	21	0	0	7	0	0	0	23	05:15 AM
0 103	0	35	0	0	11	1	0	0	56	05:30 AM
0 133	0	48	3	0	13	4	0	0	65	05:45 AM
0 330	0	114	3	0	39	. 5	0	0	169	Total
								-	105	10141
0 330	0	114	3	0	39	5	0	0	169	Grand Total
0	0	97.4	2.6	0	88.6	11.4	0	0	100	Appreh %
0	0	34.5	0.9	0	11.8	1.5	0	0	51.2	Total %
0 319	0	110	3	0	39	5	0	0	162	Cars & Peds
0 96.7	0	96.5	100	0	100	100	0	0	95.9	% Cars & Peds
0 11	0	4	0	0	0	0	0	0	7	Trucks & Buses
0 3.3	0	3.5	0	0	0	0	0	Ō	41	% Trucks & Buses
0 0	0	0	0	0	0	0	0	0	0	Bikes by Direction
0 0	0	0	0	0	0	0	0	0	0	% Bikes by Direction

		Milford Street	(Route 109)			West S	treet		N	lilford Street	(Route 109)		
1		From 1	East			From S	South			From V	Nest		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to	05:45 AM - Pe	ak l of l										
Peak Hour for Entire Inter-	section Begins	s at 05:00 AM							1 -				42
05:00 AM	25	0	0	25	0	8	0	8	0	10	0	10	43
05:15 AM	23	0	0	23	0	7	0	7	0	21	0	21	51
05:30 AM	56	0	0	56	1	11	0	12	0	35	0	35	103
05:45 AM	65	0	0	65	4	13	0	17	3	48	0	51	133
Total Volume	169	0	0	169	5	39	0	44	3	114	0	117	330
% App. Total	100	0	0		11.4	88.6	0		2.6	97.4	0		
PHF	.650	.000	.000	.650	.313	.750	.000	.647	.250	.594	.000	.574	.620
Cars & Peds	162	0	0	162	5	39	0	44	3	110	0	113	319
% Cars & Peds	95.9	0	0	95.9	100	100	0	100	100	96.5	0	96.6	96.7
Trucks & Buses	7	0	0	7	0	0	0	0	0	4	0	4	11
% Trucks & Buses	41	0	0	4.1	0	0	0	0	0	3.5	0	3.4	3.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	ů	0	0	0	0	0	0	0	0	0	0	0

Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

 File Name
 : 04616B

 Site Code
 : 790

 Start Date
 : 9/22/2015

 Page No
 : 1

	S	ummer S	treet (Ro	oute 126))	1	Milford S	Street (Ro	oute 109)	S	ummer S	treet (Ro	ute 126))	l	Milford S	treet (Ro	ute 109)	
		F	rom Nor	th			F	From Eas	t			Fi	rom Sout	h			F	rom Wes	t		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Շհոս	Left	Peds	App. Total	Int. Total
Peak Hour Analys	sis From (5:00 AM	10 05:45	5 AM - P	eak 1 of 1																
Peak Hour for En	tire Inters	ection Be	gins at 0	5:00 AM																	
05:00 AM	8	11	1	0	20	7	18	0	0	25	0	20	3	0	23	1	10	1	0	12	80
05:15 AM	4	5	2	0	11	8	20	0	0	28	0	36	1	0	37	0	19	3	0	22	98
05:30 AM	19	7	8	0	34	12	33	0	0	45	0	89	3	0	92	1	28	7	0	36	207
05:45 AM	16	17	11	0	44	15	40	0	0	55	1	64	6	0	71	1	39	8	0	48	218
Total Volume	47	40	22	0	109	42	111	0	0	153	1	209	13	0	223	3	96	19	0	118	603
% App. Total	43.1	36.7	20.2	0		27.5	72.5	0	0		0.4	93.7	5.8	0		2.5	81.4	16.1	0		
PHF	.618	.588	.500	.000	.619	.700	.694	.000	.000	.695	.250	.587	.542	.000	.606	.750	.615	.594	.000	.615	.692
Cars & Peds	45	37	22	0	104	41	107	0	0	148	I	202	13	0	216	3	92	19	0	114	582
% Cars & Peds	95.7	92.5	100	0	95.4	97.6	96.4	0	0	96.7	100	96.7	100	0	96.9	100	95.8	100	0	96.6	96.5
Trucks & Buses	2	3	0	0	5	1	4	0	0	5	0	7	0	0	7	0	4	0	0	4	21
% Trucks & Buses	4.3	7.5	0	0	4.6	2.4	3.6	0	0	3.3	0	3.3	0	0	3.1	0 ·	4.2	0	0	3.4	3.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

							Gr	oups Print	ed-Bikes	by Directio	n							
		Summ	er Street (R	oute 126)		Milfo	ord Street (F	Loute 109)		Summ	ner Street (I	Route 126)		Milfo	ord Street (Route 109)		
			From No	orth			From Ea	st			From Sc	outh			From W	/est		
Start	t Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
05:0	00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:1	15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:3	30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:4	45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAMES OF COMPANY	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand	l Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Арр Т	orch % Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	S	ummer S	treet (Ro	ute 126]	Milford S	Street (Ro	oute 109)	S	ummer S	treet (Ro	ute 126))]	Milford S	Street (Ro	oute 109)	
		F	rom Nor	th			I	From Eas	t			F	rom Sou	h			F	From Wes	st		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analys	sis From (05:00 AM	to 05:45	AM - P	eak 1 of 1																
Peak Hour for En	tire Inters	ection Be	gins at 03	5:00 AM																	
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	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
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

						C	Groups Prir	nted- Truc	ks & Buses								
	Summ	er Street (R	Loute 126)		Milfo	rd Street (I	Route 109)		Summ	er Street (I	Route 126)		Milf	ord Street (I	Loute 109)		
		From No	orth			From E	ast			From Sc	outh			From W	est		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
05:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
05:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
05:30 AM	1	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	6
05:45 AM	1	2	0	0	0	0	0	0	0	5	0	0	0	3	0	0	11
Total	2	3	0	0	1	4	0	0	0	7	0	0	0	4	0	0	21
Grand Total	2	3	0	0	1	4	0	0	0	7	0	0	0	4	0	0	21
Apprch %	40	60	0	0	20	80	0	0	0	100	0	0	0	100	0	0	
Total %	9.5	14.3	0	0	4.8	19	0	0	0	33.3	0	0	0	19	0	0	

	S	ummer S	treet (Rc	ute 126)]	Milford S	Street (Rc	ute 109)	S	ummer S	treet (Ro	ute 126)		Milford S	Street (Ro	oute 109)	
		F	rom Nor	th			F	From Eas	t			F	rom Sout	h			F	From We	st		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analys	sis From (05:00 AM	to 05:45	AM - P	eak 1 of 1																
Peak Hour for En	tire Inters	ection Be	gins at 0:	5:00 AM																	
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
05:15 AM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
05:30 AM	1	0	0	0	1	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	6
05:45 AM	1	2	0	0	3	0	0	0	0	0	0	5	0	0	5	0	3	0	0	3	11
Total Volume	2	3	0	0	5	1	4	0	0	5	0	7	0	0	7	0	4	0	0	4	21
% App. Total	40	60	0	0		20	80	0	0		0	100	0	0		0	100	0	0		
PHF	.500	.375	.000	.000	.417	.250	.250	.000	.000	.313	.000	.350	.000	.000	.350	.000	.333	.000	.000	.333	.477

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

							Groups Pr	inted- Ca	rs & Peds								
	Summ	er Street (R	oute 126)		Milfo	ord Street (Route 109)		Sumn	ner Street (I	Route 126)		Milfo	ord Street (Route 109))	
		From No	rth			From E	ast			From Sc	outh			From V	Vest		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
05:00 AM	8	11	1	0	7	18	0	0	0	19	3	0	1	9	1	0	78
05:15 AM	4	4	2	0	7	20	0	0	0	36	1	0	0	19	3	0	96
05:30 AM	18	7	8	0	12	29	0	0	0	88	3	0	1	28	7	0	201
05:45 AM	15	15	11	0	15	40	0	0	1	59	6	0	1	36	8	0	207
Total	45	37	22	0	41	107	0	0	1	202	13	0	3	92	19	0	582
0.17.1	1 15					107	0			202	12		2	02	10	0	600
Grand Total	45	37	22	0	41	107	0	0	1	202	13	0	3	92	19	0	582
Apprch %	43.3	35.6	21.2	0	27.7	72.3	0	0	0.5	93.5	6	0	2.6	80.7	16.7	0	
Total %	7.7	6.4	3.8	0	7	18.4	0	0	0.2	34.7	2.2	0	0.5	15.8	3.3	0	

	S	ummer S	treet (Ro	ute 126)]	Milford S	Street (Ro	oute 109)	S	ummer S	treet (Ro	ute 126))	1	Milford S	Street (Ro	oute 109)	
		F	rom Nor	th			I	From Eas	st			F	rom Sout	h			F	rom Wes	st		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Pcds	App. Total	Int. Total
Peak Hour Analys	sis From (5:00 AM	l to 05:45	AM - P	eak 1 of 1																
Peak Hour for En	tire Inters	ection Bc	gins at 0.	5:00 AM	L .																
05:00 AM	8	11	1	0	20	7	18	0	0	25	0	19	3	0	22	1	9	1	0	11	78
05:15 AM	4	4	2	0	10	7	20	0	0	27	0	36	1	0	37	0	19	3	0	22	96
05:30 AM	18	7	8	0	33	12	29	0	0	41	0	88	3	0	91	1	28	7	0	36	201
05:45 AM	15	15	11	0	41	15	40	0	0	55	1	59	6	0	66	1	36	8	0	45	20 7
Total Volume	45	37	22	0	104	41	107	0	0	148	1	202	13	0	216	3	92	19	0	114	582
% App. Total	43.3	35.6	21.2	0		27.7	72.3	0	0		0.5	93.5	6	0		2.6	80.7	16.7	0		
PHF	.625	.617	.500	.000	.634	.683	.669	.000	.000	.673	.250	.574	.542	.000	.593	.750	.639	.594	.000	.633	.703

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

					Groups F	rinted- Car	rs & Peds -	Trucks &	Buses - Bi	kes by Dire	ction						
	Summ	er Street (I	Route 126)		Milfo	ord Street (Route 109)		Sum	ner Street (Route 126)		Milf	ord Street (Route 109)		
		From N	orth			From E	ast			From Se	outh			From W	/est		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
05:00 AM	8	11	1	0	7	18	0	0	0	20	3	0	1	10	1	0	80
05:15 AM	4	5	2	0	8	20	0	0	0	36	1	0	0	19	3	0	98
05:30 AM	19	7	8	0	12	33	0	0	0	89	3	0	1	28	7	0	207
05:45 AM	16	17	11	0	15	40	0	0	1	64	6	0	1	39		0	218
Total	47	40	22	0	42	111	0	0	I	209	13	0	3	96	19	0	603
Grand Total	47	40	22	0	42	111	0	0	1	209	13	0	3	96	19	0	603
Apprch %	43.1	36.7	20.2	0	27.5	72.5	0	0	0.4	93.7	5.8	0	2.5	81.4	16.1	0	
Total %	7.8	6.6	3.6	0	7	18.4	0	0	0.2	34.7	2.2	0	0.5	15.9	3.2	0	
Cars & Peds	45	37	22	0	41	107	0	0	1	202	13	0	3	92	19	0	582
% Cars & Peds	95.7	92.5	100	0	97.6	96.4	0	0	100	96.7	100	0	100	95.8	100	0	96.5
Trucks & Buses	2	3	0	0	1	4	0	0	0	7	0	0	0	4	0	0	21
% Trucks & Buses	4.3	7.5	0	0	2.4	3.6	0	0	0	3.3	0	0	0	4.2	0	0	3.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[Summer Street (Route 126)					Milford Street (Route 109)				Summer Street (Route 126)				Milford Street (Route 109)							
	From North					From East				From South				From West							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 AM to 05:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 AM																					
05:00 AM	8	11	1	0	20	7	18	0	0	25	0	20	3	0	23	1	10	1	0	12	80
05:15 AM	4	5	2	0	11	8	20	0	0	28	0	36	1	0	37	0	19	3	0	22	98
05:30 AM	19	7	8	0	34	12	33	0	0	45	0	89	3	0	92	1	28	7	0	36	207
05:45 AM	16	17	11	0	44	15	40	0	0	55	1	64	6	0	71	1	39	8	0	48	218
Total Volume	47	40	22	0	109	42	111	0	0	153	1	209	13	0	223	3	96	19	0	118	603
% App. Total	43.1	36.7	20.2	0		27.5	72.5	0	0		0.4	93.7	5.8	0		2.5	81.4	16.1	0		
PHF	.618	.588	.500	.000	.619	.700	.694	.000	.000	.695	.250	.587	.542	.000	.606	.750	.615	.594	.000	.615	.692
Cars & Peds	45	37	22	0	104	41	107	0	0	148	1	202	13	0	216	3	92	19	0	114	582
% Cars & Peds	95.7	92.5	100	0	95.4	97.6	96.4	0	0	96.7	100	96.7	100	0	96.9	100	95.8	100	0	96.6	96.5
Trucks & Buses	2	3	0	0	5	1	4	0	0	5	0	7	0	0	7	0	4	0	0	4	21
% Trucks & Buses	4.3	7.5	0	0	4.6	2.4	3.6	0	0	3.3	0	3.3	0	0	3.1	0	4.2	0	0	3.4	3.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

	Sur	nmer Street (R	Loute 126)		Sun	nmer Street (I	Route 126)		Excel				
Start Time	Diale	From No	orth Roda	App. Total	Theu	From So	Dede	App Total	Right	From V	Peds	Ann Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	·45 AM - Peal	clofl	App. Totai	Imu	Len	1 cus	App. Total	Right	Len	T cus [<u> </u>	int. rotar
Peak Hour for Entire Inters	section Begins a	t 05:00 AM											
05:00 AM	ō	10	0	10	25	0	0	25	0	0	0	0	35
05:15 AM	0	6	0	6	42	0	0	42	0	0	0	0	48
05:30 AM	0	7	0	7	94	0	0	94	0	0	0	0	101
05:45 AM	0	15	0	15	68	0	0	220	0	0	0	0	267
Total Volume	0	38	0	56	100	0	0	229	0	0	0	Ŭ.	207
% App. Total PHF	000	633	000	633	609	.000	.000	.609	.000	.000	.000	.000	.661
Cars & Peds	0	36	0	36	221	0	0	221	0	0	0	0	257
% Cars & Peds	0	94.7	0	94.7	96.5	0	0	96.5	0	0	0	0	96.3
Trucks & Buses	0	2	0	2	8	0	0	8	0	0	0	0	10
% Trucks & Buses	0	5.3	0	5.3	3.5	0	0	3.5	0	0	0	0	3.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	U	0	0 [0
	Excelon Power Facility Driveway			Peds Right Left	Out 221 80 229 Rig ↓ Peak Hour Cars & Pe Trucks & E Bikes by D	In 36 2 0 38 0 38 0 2 0 0 38 1 1 1 1 1 1 1 1 1 1 1 1 1	Total 257 10 0 267 0 0 0 0 0 0 0 0 0 0 0 0 0	a					
						eft Thru 0 221 0 8 0 0 0 229 221 2 221 8 0 229 1 8 0 229 1 8 0 229 1 8 0 9 221 8 0 0 221 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	Peds 0 0 0 0 257 10 267 Total Route 126						

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

Groups Printed- Bikes by Direction													
	Summer S	Street (Route 126)		Summer	Street (Route 126)		Excelon Pov						
	F	From North			From South]						
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total			
05:00 AM	0	0	0	0	0	0	0	0	0	0			
05:15 AM	0	0	0	0	0	0	0	0	0	0			
05:30 AM	0	0	0	0	0	0	0	0	0	0			
05:45 AM	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0			
Grand Total Apprch % Total %	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0			

	Sur	nmer Street (Route 126)		Su	mmer Street	(Route 126)		Exc				
		From N	Vorth			From	South						
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pe	ak I of I										
Peak Hour for Entire Inters	section Begins a	t 05:00 AM										1	
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed	- Trucks & Buses					
	Summer	Street (Route 12	6)	Summ	er Street (Route 1)	26)	Excelon I	Power Facility Dri	iveway	
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
05:00 AM	0	0	0	1	0	0	0	0	0	1
05:15 AM	0	0	0	1	0	0	0	0	0	1
05:30 AM	0	0	0	2	0	0	0	0	0	2
05:45 AM	0	2	0	4	0	0	0	0	0	6
Total	0	2	0	8	0	0	0	0	0	10
Grand Total	0	2	0	8	0	0	0	0	0	10
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	20	0	80	0	0	0	0	0	1

	Si	ummer Street	(Route 126))	S	ummer Street	t (Route 126)		Exc	elon Power I	acility Drive	way	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 0	5:45 AM - Pe	ak l of l										
Peak Hour for Entire Inter-	section Begins	at 05:00 AM											
05:00 AM	Ō	0	0	0	1	0	0	1	0	0	0	0	1
05:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
05:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
05:45 AM	0	2	0	2	4	0	0	4	0	0	0	0	6
Total Volume	0	2	0	2	8	0	0	8	0	0	0	0	10
% App. Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.417

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

				Groups Printe	d- Cars & Peds					
	Summe	er Street (Route	126)	Summe	er Street (Route 1)	26)	Excelon I	Power Facility Dri	iveway	
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
05:00 AM	0	10	0	24	0	0	0	0	0	34
05:15 AM	0	6	0	41	0	0	0	0	0	47
05:30 AM	0	7	0	92	0	0	0	0	0	99
05:45 AM	0	13	0	64	0	0	0	0	0	77
Total	0	36	0	221	0	0	0	0	0	257
				I.			I.			1
Grand Total	0	36	0	221	0	0	0	0	0	257
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	14	0	86	0	0	0	0	0	

	S	Summer Street	(Route 126)	5	Summer Stree	t (Route 126)	Exc	elon Power F	acility Drive	way	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to	05:45 AM - Pe	eak l of l										
Peak Hour for Entire Inter	section Begins	s at 05:00 AM											
05:00 AM	0	10	0	10	24	0	0	24	0	0	0	0	34
05:15 AM	0	6	0	6	41	0	0	41	0	0	0	0	47
05:30 AM	0	7	0	7	92	0	0	92	0	0	0	0	99
05:45 AM	0	13	0	13	64	0	0	64	0	0	0	0	77
Total Volume	0	36	0	36	221	0	0	221	0	0	0	0	257
% App. Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.692	.000	.692	.601	.000	.000	.601	.000	.000	.000	.000	.649

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

		(Groups Printed- (Cars & Peds - Tri	icks & Buses - Bil	kes by Direction				
	Summe	r Street (Route 12	.6)	Summ	er Street (Route 12	26)	Excelon P	ower Facility Dri	veway	
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
05:00 AM	0	10	0	25	0	0	0	0	0	35
05:15 AM	0	6	0	42	0	0	0	0	0	48
05:30 AM	0	7	0	94	0	0	0	0	0	101
05:45 AM	0	15	0	68	0	0	0	0	0	
Total	0	38	0	229	0	0	0	0	0	267
Grand Total	0	38	0	229	0	0	0	0	0	267
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	14.2	0	85.8	0	0	0	0	0	
Cars & Peds	0	36	0	221	0	0	0	0	0	257
% Cars & Peds	0	94.7	0	96.5	0	0	0	0	0	96.3
Trucks & Buses	0	2	0	8	0	0	0	0	0	10
% Trucks & Buses	0	5.3	0	3.5	0	0	0	0	0	3.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0

	Sur	nmer Street	(Route 126)			Summer Stree	t (Route 126)	•	Exce	lon Power Fa	cility Drive	way	
		From 1	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pe	ak 1 of 1										
Peak Hour for Entire Inter-	section Begins a	tt 05:00 AM							I.			- 1	
05:00 AM	0	10	0	10	25	0	0	25	0	0	0	0	35
05:15 AM	0	6	0	6	42	0	0	42	0	0	0	0	48
05:30 AM	0	7	0	7	94	0	0	94	0	0	0	0	101
05:45 AM	Ő	15	0	15	68	0	0	68	0	0	0	0	83
Total Volume	0	38	0	38	229	0	0	229	0	0	0	0	267
% Ann Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.633	.000	.633	.609	.000	.000	.609	.000	.000	.000	.000	.661
Cars & Peds	0	36	0	36	221	0	0	221	0	0	0	0	257
% Cars & Peds	ň	94 7	0	94.7	96.5	0	0	96.5	0	0	0	0	96.3
Trucks & Pusse	0	27	õ	2	8	0	0	8	0	0	0	0	10
M Trucks & Buses		52	0	53	35	0	0	3.5	0	0	0	0	3.7
% IFUCKS & Buses	0	5.5	0	5.5	5.5	ő	Ň	0	0	0	0	0	0
Bikes by Direction	0	0	0	0		0	0	0	0	0	0	ů	0
% Bikes by Direction	0	0	0	0	[U	U	0	0	0	0	0	U	0

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

	Sı	ummer Street (R	oute 126)			Main St	treet		N	lain Street (F	Loute 126)		
Start Time	Pight	Left	Peds	Ann Total	Right	Thru	Peds	Ann. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 0	5:45 AM - Peal	1 of 1	npp. rotar	Tugin								
Peak Hour for Entire Inter	section Begins	at 05:00 AM		,				1				1	
05:00 AM	10	0	0	10	2	12	0	14	22	25	0	47	71
05:15 AM	4	2	0	6	1	11	0	12	29	42	0	122	89
05:30 AM	6	1	0	15	1	14	0	15	40 81	93 67	0	133	135
U5:45 AM	14	1	0	38	5	54	0	59	172	227	0	399	496
% App Total	89.5	10.5	0	50	8.5	91.5	0		43.1	56.9	0		
PHF	.607	.500	.000	.633	.625	.794	.000	.819	.531	.610	.000	.674	.685
Cars & Peds	32	4	0	36	5	54	0	59	166	219	0	385	480
% Cars & Peds	94.1	100	0	94.7	100	100	0	100	96.5	96.5	0	96.5	96.8
Trucks & Buses	2	0	0	2	0	0	0	0	6	25	0	14	16
% Trucks & Buses	5.9	0	0	5.3	0	0	0	0	3.5	3.5	0	3.5	5.2
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	1 0	U	U	0	U	0	0	01	0	0	0	01	0
	Main Street (Route 126)	Out In Total 86 385 471 14 14 16 0 0 14 88 339 487	0 166 219		Summ Out 224 8 0 232 Fig Peak Hour Cars & Pec Trucks & B Bikes by D	ier Street (F In 36 2 0 38 32 4 2 0 0 0 34 4 t Left Ant Left Begins at C is uses irection	Route 126) Total 260 10 0 270 Peds r Data		Right Thru Peds		Out Main Street Out 59 701 170 229		

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

		Groups Printed- Bikes by Direction											
	Summe	r Street (Route 12	26)		Main Street		Mair	n Street (Route 12	6)				
		From North			From East			From West					
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total			
05:00 AM	0	0	0	0	0	0	0	0	0	0			
05:15 AM	0	0	0	0	0	0	0	0	0	0			
05:30 AM	0	0	0	0	0	0	0	0	0	0			
05:45 AM	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0			
Grand Total	0	0	0	0	0	0	0	0	0	0			
Apprch % Total %	0	0	0	0	0	0	0	0	0				

	Sur	nmar Street (Route 126)			Main	Street			Main Street	Route 126)		
		Errow N				Erom	Fact			From	West		
		From P	NOTUI			FIOII	East			11011	TTCal		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pea	ak I of l										
Peak Hour for Entire Inter	section Begins a	t 05:00 AM											
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

					Groups Printed	l- Trucks & Buses	5				
		Summe	r Street (Route 1)	26)		Main Street		Mair	n Street (Route 120	5)	
			From North	-		From East			From West		
	Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
Ì	05:00 AM	0	0	0	0	0	0	1	1	0	2
	05:15 AM	0	0	0	0	0	0	2	1	0	3
	05:30 AM	0	0	0	0	0	0	1	2	0	3
	05:45 AM	2	0	0	0	0	0	2	4	0	8
	Total	2	0	0	0	0	0	6	8	0	16
	Grand Total	2	0	0	0	0	0	6	8	0	16
	Apprch %	100	0	0	0	0	0	42.9	57.1	0	
	Total %	12.5	0	0	0	0	0	37.5	50	0	

	Su	immer Street ((Route 126)			Main	Street			Main Street	(Route 126)		
		From N	North			Fron	n East			From	West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 0	5:45 AM - Pea	ak 1 of 1										
Peak Hour for Entire Inter	section Begins	at 05:00 AM											
05:00 AM	0	0	0	0	0	0	0	0	1	1	0	2	2
05:15 AM	0	0	0	0	0	0	0	0	2	1	0	3	3
05:30 AM	0	0	0	0	0	0	0	0	1	2	0	3	3
05:45 AM	2	0	0	2	0	0	0	0	2	4	0	6	8
Total Volume	2	0	0	2	0	0	0	0	6	8	0	14	16
% App. Total	100	0	0		0	0	0		42.9	57.1	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.750	.500	.000	.583	.500

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Print	ed- Cars & Peds					
	Summ	er Street (Route 1	26)		Main Street		Main	n Street (Route 12	.6)	
		From North			From East			From West	····	
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
05:00 AM	10	0	0	2	12	0	21	24	0	69
05:15 AM	4	2	0	1	11	0	27	41	0	86
05:30 AM	. 6	1	0	1	14	0	39	91	0	152
05:45 AM	12	1	0	1	17	0	79	63	0	173
Total	32	4	0	5	54	0	166	219	0	480
Grand Total	32	4	0	5	54	0	166	219	0	480
Apprch %	88.9	11.1	0	8.5	91.5	0	43.1	56.9	0	
Total %	6.7	0.8	0	1	11.2	0	34.6	45.6	0	

	Sui	mmer Street (Route 126)			Main	Street			Main Street	(Route 126)		
		From N	lorth			From	n East			From	West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pe	aklofl										
Peak Hour for Entire Inter-	section Begins a	t 05:00 AM											
05:00 AM	10	0	0	10	2	12	0	14	21	24	0	45	69
05:15 AM	4	2	0	6	1	11	0	12	27	41	0	68	86
05:30 AM	6	1	0	7	1	14	0	15	39	91	0	130	152
05:45 AM	12	1	0	13	1	17	0	18	79	63	0	142	173
Total Volume	32	4	0	36	5	54	0	59	166	219	0	385	480
% App. Total	88.9	11.1	0		8.5	91.5	0		43.1	56.9	0		
PHF	.667	.500	.000	.692	.625	.794	.000	.819	.525	.602	.000	.678	.694

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

			Groups Printed-	Cars & Peds - Tri	icks & Buses - Bi	kes by Direction				
	Summe	er Street (Route 1	26)		Main Street		Main	n Street (Route 12	6)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
05:00 AM	10	0	0	2	12	0	22	25	0	71
05:15 AM	4	2	0	1	11	0	29	42	0	89
05:30 AM	6	1	0	1	14	0	40	93	0	155
05:45 AM	14	1	0	1	17	0	81	67	0	181
Total	34	4	0	5	54	0	172	227	0	496
Grand Total	34	4	0	5	54	0	172	227	0	496
Apprch %	89.5	10.5	0	8.5	91.5	0	43.1	56.9	0	
Total %	6.9	0.8	0	1	10.9	0	34.7	45.8	0	
Cars & Peds	32	4	0	5	54	0	166	219	0	480
% Cars & Peds	94.1	100	0	100	100	0	96.5	96.5	0	96.8
Trucks & Buses	2	0	0	0	0	0	6	8	0	16
% Trucks & Buses	5.9	0	0	0	0	0	3.5	3.5	0	3.2
Bikes by Direction	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0

	Su	mmer Street (Route 126)			Main S	Street		М	Aain Street (F	Route 126)		
		From N	North			From	East			From V	Vest		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	5:45 AM - Pe	ak I of I										
Peak Hour for Entire Inters	section Begins a	at 05:00 AM											
05:00 AM	10	0	0	10	2	12	0	14	22	25	0	47	71
05:15 AM	4	2	0	6	1	11	0	12	29	42	0	71	89
05:30 AM	6	1	0	7	1	14	0	15	40	93	0	133	155
05:45 AM	14	1	0	15	1	17	0	18	81	67	0	148	181
Total Volume	34	4	0	38	5	54	0	59	172	227	0	399	496
% App. Total	89.5	10.5	0		8.5	91.5	0		43.1	56.9	0		
PHF	.607	.500	.000	.633	.625	.794	.000	.819	.531	.610	.000	.674	.685
Cars & Peds	32	4	0	36	5	54	0	59	166	219	0	385	480
% Cars & Peds	94.1	100	0	94.7	100	100	0	100	96.5	96.5	0	96.5	96.8
Trucks & Buses	2	0	0	2	0	0	0	0	6	8	0	14	16
% Trucks & Buses	5.9	0	0	5.3	0	0	0	0	3.5	3.5	0	3.5	3.2
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

		West Str	eet		M	1ain Street (R	oute 126)		Ν	Main Street (R	loute 126)		
		From No	rth	4 77 1 1	Dista	From E	Bada	App. Total	They	From V	Pede	App. Total	Int Total
Start Time	Right 05:00 AM to	Left	Peds	App. I otal	Right	1 nru	reus	App. rotar	Ind j	Lui	1005	App. Total	Int. Total
Peak Hour for Entire Inter	section Begin	s at 05:00 AM	1011									,	
05:00 AM	0	0	0	0	I	21	0	22	47	0	0	47	69
05:15 AM	1	2	0	3	3	13	0	16	69	1	0	70	89
05:30 AM	0	0	0	0	2	16	0	18	134	0	0	134	152
05:45 AM	0	5	0	5	0	<u></u> 91	0	87	394	1	0	395	490
lotal Volume	125	875	0	0	69	93.1	0	07	99.7	0.3	Ő		
	250	350	.000	.400	.500	.653	.000	.702	.684	.250	.000	.686	.681
Cars & Peds	0	6	0	6	6	79	0	85	382	0	0	382	473
% Cars & Peds	0	85.7	0	75.0	100	97.5	0	97.7	97.0	0	0	96.7	96.5
Trucks & Buses	1	1	0	2	0	2	0	2	12	100	0	13	17
% Trucks & Buses	100	14.3	0	25.0	0	2.5	0	2.3	3.0	100	0	3.3	5.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	Ő
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	U I	Ū
	Main Street (Route 126)	79 79 79 70 382 461 13 15 82 355 477	0 382 0		Peak Hour Cars & Pe Trucks & E Bikes by D	West Stree In 6 2 0 6 2 0 0 1 1 0 0 1 7 ght Left K HOU ↑ North r Begins at C Suses Direction	r Data	• •	6 79 0 0 2 0 Right Thru Peds		Main Street (Route 126) Out In Total 388 951 473		

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed-	Bikes by Directi	on				
		West Street		Main	n Street (Route 12	26)	Main	Street (Route 12	:6)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
05:00 AM	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch % Total %	0	0	0	0	0	0	0	0	0	

		West St	treet]	Main Street (Route 126)			Main Street (Route 126)		
		From N	lorth			From	East			From	west		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pea	ak 1 of 1										
Peak Hour for Entire Inters	section Begins a	t 05:00 AM							r			- 1	
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	000	000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed	- Trucks & Buses	5				
		West Street		Main	Street (Route 12	26)	Main	n Street (Route 12)	6)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
05:00 AM	0	0	0	0	0	0	2	0	0	2
05:15 AM	1	1	0	0	0	0	2	1	0	5
05:30 AM	0	0	0	0	0	0	2	0	0	2
05:45 AM	0	0	0	0	2	0	6	0	0	8
Total	1	1	0	0	2	0	12	1	0	17
Grand Total	I	1	0	0	2	0	12	1	0	17
Apprch %	50	50	0	0	100	0	92.3	7.7	0	
Total %	5.9	5.9	0	0	11.8	0	70.6	5.9	0	l

		West S	treet			Main Street	(Route 126)			Main Street	(Route 126)		
		From N	lorth			Fron	n East			From	west		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pe	ak l of l										
Peak Hour for Entire Inter-	section Begins a	t 05:00 AM											
05:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
05:15 AM	1	1	0	2	0	0	0	0	2	1	0	3	5
05:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
05:45 AM	0	0	0	0	0	2	0	2	6	0	0	6	8
Total Volume	1	1	0	2	0	2	0	2	12	1	0	13	17
% App. Total	50	50	0		0	100	0		92.3	7.7	0		
PHF	.250	.250	.000	.250	.000	.250	.000	.250	.500	.250	.000	.542	.531

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Print	ed- Cars & Peds					
		West Street		Mai	n Street (Route 12	26)	Main	n Street (Route 12	6)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
05:00 AM	0	0	0	1	21	0	45	0	0	67
05:15 AM	0	1	0	3	13	0	67	0	0	84
05:30 AM	0	0	0	2	16	0	132	0	0	150
05:45 AM	0	5	0	0	29	0	138	0	0	172
Total	0	6	0	6	79	0	382	0	0	473
Grand Total	0	6	0	6	79	0	382	0	0	473
Apprch %	0	100	0	7.1	92.9	0	100	0	0	
Total %	0	1.3	0	1.3	16.7	0	80.8	0	0	

		West S	treet			Main Street (Route 126) Fast			Main Street ()	Route 126) West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pe	ak l of l										
Peak Hour for Entire Inter-	section Begins a	t 05:00 AM											
05:00 AM	Ő	0	0	0	1	21	0	22	45	0	0	45	67
05:15 AM	0	1	0	1	3	13	0	16	67	0	0	67	84
05:30 AM	0	0	0	0	2	16	0	18	132	0	0	132	150
05:45 AM	0	5	0	5	0	29	0	29	138	0	0	138	172
Total Volume	0	6	0	6	6	79	0	85	382	0	0	382	473
% App. Total	0	100	0		7.1	92.9	0		100	0	0		
PHF	.000	.300	.000	.300	.500	.681	.000	.733	.692	.000	.000	.692	.688

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

			Groups Printed- (Cars & Peds - Tri	ucks & Buses - Bi	kes by Direction				
		West Street		Main	n Street (Route 12	6)	Main	n Street (Route 12	6)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
05:00 AM	0	0	0	1	21	0	47	0	0	69
05:15 AM	1	2	0	3	13	0	69	1	0	89
05:30 AM	0	0	0	2	16	0	134	0	0	152
05:45 AM	0	5	0	0	31	0	144	0	0	180
Total	1	7	0	6	81	0	394	1	0	490
Grand Total	1	7	0	6	81	0	394	1	0	490
Apprch %	12.5	87.5	0	6.9	93.1	0	99.7	0.3	0	
Total %	0.2	1.4	0	1.2	16.5	0	80.4	0.2	0	
Cars & Peds	0	6	0	6	79	0	382	0	0	473
% Cars & Peds	0	85.7	0	100	97.5	0	97	0	0	96.5
Trucks & Buses	1	1	0	0	2	0	12	1	0	17
% Trucks & Buses	100	14.3	0	0	2.5	0	3	100	0	3.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0

		West St	reet			Main Street (Route 126)			Main Street (I	Route 126)		
		From N	orth			From	East		r	11011	VCSL		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	05:00 AM to 05	:45 AM - Pea	ak l of l										
Peak Hour for Entire Inter-	section Begins a	t 05:00 AM											
05:00 AM	0	0	0	0	1	21	0	22	47	0	0	47	69
05:15 AM	1	2	0	3	3	13	0	16	69	1	0	70	89
05:30 AM	0	0	0	0	2	16	0	18	134	0	0	134	152
05:45 AM	0	5	0	5	0	31	0	31	144	0	0	144	180
Total Volume	1	7	0	8	6	81	0	87	394	1	0	395	490
% App. Total	12.5	87.5	0		6.9	93.1	0		99.7	0.3	0		
PHF	.250	.350	.000	.400	.500	.653	.000	.702	.684	.250	.000	.686	.681
Cars & Peds	0	6	0	6	6	79	0	85	382	0	0	382	473
% Cars & Peds	0	85.7	0	75.0	100	97.5	0	97.7	97.0	0	0	96.7	96.5
Trucks & Buses	1	1	0	2	0	2	0	2	12	1	0	13	17
% Trucks & Buses	100	14.3	0	25.0	0	2.5	0	2.3	3.0	100	0	3.3	3.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0

Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

	N	Ailford Street	(Route 109)		West S	Street		N	Ailford Stree	t (Route 109)	1	
		From 1	East			From S	South			From	West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	5:45 PM - Pea	k l of l										
Peak Hour for Entire Inters	section Begins	at 06:00 PM											
06:00 PM	147	6	0	153	0	17	0	17	48	131	0	179	349
06:15 PM	125	4	0	129	1	15	0	16	32	114	0	146	291
06:30 PM	131	3	0	134	3	20	0	23	25	105	0	130	287
06:45 PM	101	1	0	102	1	27	0	28	24	110	0	134	264
Total Volume	504	14	0	518	5	79	0	84	129	460	0	589	1191
% App. Total	97.3	2.7	0		6	94	0		21.9	78.1	0		
PHF	.857	.583	.000	.846	.417	.731	.000	.750	.672	.878	.000	.823	.853
Cars & Peds	500	14	0	514	5	79	0	84	129	460	0	589	1187
% Cars & Peds	99.2	100	0	99.2	100	100	0	100	100	100	0	100	99.7
Trucks & Buses	4	0	0	4	0	0	0	0	0	0	0	0	4
% Trucks & Buses	0.8	0	0	0.8	0	0	0	0	0	0	0	0	0.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	Ő	0	0	0	0	0	0	0	0	0	0	0	0



S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed-	Bikes by Direction	on				
	Milfor	d Street (Route 10	9)		West Street		Milfor	rd Street (Route 1	09)	
		From East			From South	-		From West		
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total Apprch % Total %	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0

	M	lilford Street	(Route 109)			West	Street		l	Milford Stree	t (Route 109)		
		From I	East			From	South			From	West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	:45 PM - Pea	k 1 of 1										
Peak Hour for Entire Inter	section Begins a	at 06:00 PM										I	
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	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
% App Total	0	0	0		0	0	0		0	0	0		
PHF	000	000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

					Groups Printed	I- Trucks & Buses	5				
Γ		Milfo	rd Street (Route	109)		West Street		Milfo	rd Street (Route 1	109)	
			From East			From South			From West		
	Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
_	06:00 PM	3	0	0	0	0	0	0	0	0	3
	06:15 PM	1	0	0	0	0	0	0	0	0	1
	06:30 PM	0	0	0	0	0	0	0	0	0	0
	06:45 PM	0	0	0	0	0	0	0	0	0	0
	Total	4	0	0	0	0	0	0	0	0	4
	Grand Total	4	0	0	0	0	0	0	0	0	4
	Apprch %	100	0	0	0	0	0	0	0	0	
	Total %	100	0	0	0	0	0	0	0	0	

	M	Milford Street	(Route 109))		West S	Street		Ν	Ailford Street	(Route 109)		
		From	East			From	South			Prom	west		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App, Total	Int. Total
Peak Hour Analysis From	06:00 PM to 0	6:45 PM - Pea	k 1 of 1										
Peak Hour for Entire Inter-	section Begins	at 06:00 PM										,	
06:00 PM	3	0	0	3	0	0	0	0	0	0	0	0	3
06:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	4	0	0	4	0	0	0	0	0	0	0	0	4
% App. Total	100	0	0		0	0	0		0	0	0		
PHF	.333	.000	.000	.333	.000	.000	.000	.000	.000	.000	.000	.000	.333

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

					Groups Print	ed- Cars & Peds					_
Γ		Milfor	d Street (Route 1)	09)		West Street		Milfo	ord Street (Route 1	09)	
			From East			From South			From West		
	Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
	06:00 PM	144	6	0	0	17	0	48	131	0	346
	06:15 PM	124	4	0	1	15	0	32	114	0	290
	06:30 PM	131	3	0	3	20	0	25	105	0	287
	06:45 PM	101	1	0	1	27	0	24	110	0	264
	Total	500	14	0	5	79	0	129	460	0	1187
	Grand Total	500	14	0	5	79	0	129	460	0	1187
	Apprch %	97.3	2.7	0	6	94	0	21.9	78.1	0	
	Total %	42.1	1.2	0	0.4	6.7	0	10.9	38.8	0	

		Milford Stree	t (Route 109)		West S	Street]	Milford Stree	t (Route 109)		
		From	n East			From	South			From	West		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to	06:45 PM - Pe	eak l of l										
Peak Hour for Entire Inter-	section Begin	s at 06:00 PM											
06:00 PM	144	6	0	150	0	17	0	17	48	131	0	179	346
06:15 PM	124	4	0	128	1	15	0	16	32	114	0	146	290
06:30 PM	131	3	0	134	3	20	0	23	25	105	0	130	287
06:45 PM	101	1	0	102	1	2 7	0	28	24	110	0	134	264
Total Volume	500	14	0	514	5	79	0	84	129	460	0	589	1187
% App. Total	97.3	2.7	0		6	94	0		21.9	78.1	0		
PHF	.868	.583	.000	.857	.417	.731	.000	.750	.672	.878	.000	.823	.858

S: West Street E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

		Gro	ups Printed- C	ars & Peds - Tru	cks & Buses - Bil	es by Direction				
	Milford	Street (Route 109)	-		West Street		Milfor	d Street (Route 10	9)	
		From East			From South			From West		
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
06:00 PM	147	6	0	0	17	0	48	131	0	349
06:15 PM	125	4	0	1	15	0	32	114	0	291
06:30 PM	131	3	0	3	20	0	25	105	0	287
06:45 PM	101	1	0	1	27	0	24	110	0	264
Total	504	14	0	5	79	0	129	460	0	1191
Grand Total	504	14	0	5	79	0	129	460	0	1191
Apprch %	97.3	2.7	0	6	94	0	21.9	78.1	0	
Total %	42.3	1.2	0	0.4	6.6	0	10.8	38.6	0	
Cars & Peds	500	14	0	5	79	0	129	460	0	1187
% Cars & Peds	99.2	100	0	100	100	0	100	100	0	99.7
Trucks & Buses	4	0	0	0	0	0	0	0	0	4
% Trucks & Buses	0.8	0	0	0	00	0	0	0	0	0.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0

		Milford Street	(Route 109)			West S	Street		Ν	Ailford Street	(Route 109)		
		From	East			From	South			riom	TY CSL		
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to (06:45 PM - Pea	k l of l										
Peak Hour for Entire Inter-	section Begins	s at 06:00 PM		1									2.40
06:00 PM	147	6	0	153	0	17	0	17	48	131	0	179	349
06:15 PM	125	4	0	129	1	15	0	16	32	114	0	146	291
06:30 PM	131	3	0	134	3	20	0	23	25	105	0	130	287
06:45 PM	101	1	0	102	1	27	0	28	24	110	0	134	264
Total Volume	504	14	0	518	5	79	0	84	129	460	0	589	1191
% App. Total	97.3	2.7	0		6	94	0		21.9	78.1	0		
PHF	.857	.583	.000	.846	.417	.731	.000	.750	.672	.878	.000	.823	.853
Cars & Peds	500	14	0	514	5	79	0	84	129	460	0	589	1187
% Cars & Peds	99.2	100	0	99.2	100	100	0	100	100	100	0	100	99.7
Trucks & Buses	4	0	0	4	0	0	0	0	0	0	0	0	4
% Trucks & Buses	0.8	0	0	0.8	0	0	0	0	0	0	0	0	0.3
Bikes by Direction	0.0	õ	Ő	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	ő	0	0	0	0	0	0	0	0	0	0

Transportation Data Corporation

Mario Perone, mperonel@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

	S	ummer S	treet (Ro	ute 126)		٦	Milford Street (Route 109) From East						treet (Ro	ute 126)		1	Milford S	treet (Ro	oute 109)	
		F	rom Nor	th			F	rom Eas	t	<i>'</i>		Fr	om Sout	h			F	rom Wes	st		
Start Time	Right	Thru	Left	Peds	App, Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analy	sis From	06:00 PM	to 06:45	PM - Pea	k l of l																
Peak Hour for En	tire Inters	ection Be	gins at 0	6:00 PM																	
06:00 PM	38	93	9	0	140	10	110	1	0	121	4	42	10	0	56	8	94	32	0	134	451
06:15 PM	21	86	13	0	120	9	103	2	1	115	1	42	7	1	51	11	78	24	0	113	399
06:30 PM	23	73	8	0	104	9	120	1	0	130	4	51	10	0	65	3	82	28	0	113	412
06:45 PM	26	70	12	0	108	5	77	0	0	82	2	36	10	0	48	6	89	20	0	115	353
Total Volume	108	322	42	0	472	33	410	4	1	448	11	171	37	1	220	28	343	104	0	475	1615
% App. Total	22.9	68.2	8.9	0		7.4	91.5	0.9	0.2		5	77.7	16.8	0.5		5.9	72.2	21.9	0		
PHF	.711	.866	.808	.000	.843	.825	.854	.500	.250	.862	.688	.838	.925	.250	.846	.636	.912	.813	.000	.886	.895
Cars & Peds	108	318	40	0	466	32	407	4	1	444	11	167	37	1	216	28	343	104	0	475	1601
% Cars & Peds	100	98.8	95.2	0	98.7	97.0	99.3	100	100	99.1	100	97.7	100	100	98.2	100	100	100	0	100	99.1
Trucks & Buses	0	4	2	0	6	1	3	0	0	4	0	4	0	0	4	0	0	0	0	0	14
% Trucks & Buses	0	1.2	4.8	0	1.3	3.0	0.7	0	0	0.9	0	2.3	0	0	1.8	0	0	0	0	0	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	Ő	õ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

						Gr	oups Print	ed- Bikes	by Directio	n							
	Summ	er Street (R	Route 126)		Milfe	ord Street (I	Coute 109)		Sumr	ner Street (l	Route 126)		Mil	ford Street (Route 109))	
		From No	orth			From Ea	ist			From Sc	outh			From W	/est		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	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
Grand Total Apprch % Total %	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 0	0 0	0

	S	ummer S	treet (Rc	ute 126)		1	Milford S	Street (Ro	oute 109)	S	ummer S	treet (Ro	ute 126))]]	Milford S	Street (Ro	oute 109)	
		F	rom Nor	th]	From Eas	ŧ			Fi	rom Sout	h			F	rom We	st		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Lefi	Peds	App. Total	Right	Thru	Left	Pcds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analys	sis From C	6:00 PM	to 06:45	PM - Pe	ak 1 of 1																
Peak Hour for En	tire Inters	ection Be	gins at 0	6:00 PM																	
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 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
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

		Groups Printed- Trucks & Buses															
	Summ	er Street (R	Loute 126)		Milfe	ord Street (I	Route 109)		Sumn	1er Street (F	Route 126)		Milf	ord Street (I	Route 109)	r i	
		From No	orth			From Ea	ast			From So	uth			From W	est		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
06:00 PM	0	2	0	0	0	3	0	0	0	1	0	0	0	0	0	0	6
06:15 PM	0	1	0	0	1	0	0	0	0	2	0	0	0	0	0	0	4
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	4
Total	0	4	2	0	1	3	0	0	0	4	0	0	0	0	0	0	14
Grand Total Apprch % Total %	0 0 0	4 66.7 28.6	2 33.3 14.3	0 0 0	1 25 7.1	3 75 21.4	0 0 0	0 0 0	0 0 0	4 100 28.6	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	14

	Si	ummer S	treet (Ro	ute 126)		1	Milford S	Street (Ro	oute 109)	S	ummer S	treet (Ro	ute 126		1	Milford S	treet (Ro	ute 109)	
		F	rom Nor	th			F	From Eas	t			F	rom Sout	h			F	rom Wes	t		1
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analys	is From 0	6:00 PM	to 06:45	PM - Pe	ak 1 of 1																
Peak Hour for Ent	ire Interse	ection Be	gins at 0	5:00 PM																	
06:00 PM	0	2	0	0	2	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	6
06:15 PM	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	4
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total Volume	0	4	2	0	6	1	3	0	0	4	0	4	0	0	4	0	0	0	0	0	14
% App. Total	0	66.7	33.3	0		25	75	0	0		0	100	0	0		0	0	0	0		
PHF	.000	.500	.250	.000	.500	.250	.250	.000	.000	.333	.000	.500	.000	.000	.500	.000	.000	.000	.000	.000	.583

N/S: Summer Street (Route 126) E/W: Milford Street (Route 109) City, State: Medway, MA Client: MDM/M. Houle

								Groups Pr	inted- Car	's & Peds								
		Summ	er Street (R	oute 126)		Milfo	ord Street (1	Route 109)		Summ	ner Street (I	Route 126)		Milfo	ord Street (Route 109))	
			From No	rth			From E	ast			From So	outh			From V	Vest		
	Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
L	06:00 PM	38	91	9	0	10	107	1	0	4	41	10	0	8	94	32	0	445
	06:15 PM	21	85	13	0	8	103	2	1	I	40	7	1	11	78	24	0	395
	06:30 PM	23	73	8	0	9	120	1	0	4	51	10	0	3	82	28	0	412
	06:45 PM	26	69	10	0	5	77	0	0	2	35	10	0	6	89	20	0	349
	Total	108	318	40	0	32	407	4	1	11	167	37	1	28	343	104	0	1601
	Grand Total	108	318	40	0	32	407	4	1	11	167	37	1	28	343	104	0	1601
	Apprch %	23.2	68.2	8.6	0	7.2	91.7	0.9	0.2	5.1	77.3	17.1	0.5	5.9	72.2	21.9	0	
	Total %	6.7	19.9	2.5	0	2	25.4	0.2	0.1	0.7	10.4	2.3	0.1	1.7	21.4	6.5	0	

	S	ummer S	treet (Ro	ute 126)		1	Milford S	Street (Ro	ute 109)	S	ummer S	treet (Ro	ute 126)]]	Milford S	Street (Ro	oute 109)	
		F	rom Nor	th			F	rom Eas	t			F	rom Sou	h			F	from Wes	st		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analys	sis From (6:00 PM	to 06:45	PM - Pe	ak 1 of 1																
Peak Hour for En	tire Inters	ection Be	gins at 06	5:00 PM																	
06:00 PM	38	91	- 9	0	138	10	107	1	0	118	4	41	10	0	55	8	94	32	0	134	445
06:15 PM	21	85	13	0	119	8	103	2	1	114	1	40	7	1	49	11	78	24	0	113	395
06:30 PM	23	73	8	0	104	9	120	1	0	130	4	51	10	0	65	3	82	28	0	113	412
06:45 PM	26	69	10	0	105	5	77	0	0	82	2	35	10	0	47	6	89	20	0	115	349
Total Volume	108	318	40	0	466	32	407	4	1	444	11	167	37	1	216	28	343	104	0	475	1601
% App. Total	23.2	68.2	8.6	0		7.2	91.7	0.9	0.2		5.1	77.3	17.1	0.5		5.9	72.2	21.9	0		
PHF	.711	.874	.769	.000	.844	.800	.848	.500	.250	.854	.688	.819	.925	.250	.831	.636	.912	.813	.000	.886	.899

N/S: Summer Street (Route 126) E/W: Milford Street (Route 120) City, State: Medway, MA Client: MDM/M. Houle

					Groups P	rinted- Ca	rs & Peds -	Trucks &	Buses - Bil	es by Dire	ction						
	Summ	er Street (R	oute 126)		Milfo	ord Street (Route 109)		Sumn	ner Street (1	Route 126)		Milf	ord Street	(Route 109)		
		From No	orth			From E	ast			From So	outh			From V	Vest		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
06:00 PM	38	93	9	0	10	110	1	0	4	42	10	0	8	94	32	0	451
06:15 PM	21	86	13	0	9	103	2	1	1	42	7	1	11	78	24	0	399
06:30 PM	23	73	8	0	9	120	1	0	4	51	10	0	3	82	28	0	412
06:45 PM	26	70	12	0	5	77	0	0	2	36	10	0	6	89	20	0	353
Total	108	322	42	0	33	410	4	1	11	171	37	1	28	343	104	0	1615
Grand Total	108	322	42	0	33	410	4	1	11	171	37	1	28	343	104	0	1615
Apprch %	22.9	68.2	8.9	0	7.4	91.5	0.9	0.2	5	77.7	16.8	0.5	5.9	72.2	21.9	0	
Total %	6.7	19.9	2.6	0	2	25.4	0.2	0.1	0.7	10.6	2.3	0.1	1.7	21.2	6.4	0	
Cars & Peds	108	318	40	0	32	407	4	1	11	167	37	1	28	343	104	0	1601
% Cars & Peds	100	98.8	95.2	0	97	99.3	100	100	100	97.7	100	100	100	100	100	0	99.1
Trucks & Buses	0	4	2	0	1	3	0	0	0	4	0	0	0	0	0	0	14
% Trucks & Buses	0	1.2	4.8	0	3	0.7	0	0	0	2.3	0	0	0	0	0	0	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	S	ummer S	treet (Ro	ute 126)			Milford S	treet (Ro	ute 109)		S	ummer S	trect (Ro	ute 126)]	Milford S	itreet (Ro	ute 109)		
		F	rom Nort	h			Ŧ	From East	t			F	rom Sout	h			F	rom Wes	t		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analys	sis From (06:00 PM	to 06:45	PM - Pe	ak 1 of 1																
Peak Hour for En	tire Inters	ection Be	gins at 06	5:00 PM																	
06:00 PM	38	93	9	0	140	10	110	1	0	121	4	42	10	0	56	8	94	32	0	134	451
06:15 PM	21	86	13	0	120	9	103	2	1	115	1	42	7	1	51	11	78	24	0	113	399
06·30 PM	23	73	8	0	104	9	120	1	0	130	4	51	10	0	65	3	82	28	0	113	412
06·45 PM	26	70	12	0	108	5	77	0	0	82	2	36	10	0	48	6	89	20	0	115	353
Total Volume	108	322	42	0	472	33	410	4	1	448	11	171	37	1	220	28	343	104	0	475	1615
% Ann. Total	22.9	68.2	8.9	0		7.4	91.5	0.9	0.2		5	77.7	16.8	0.5		5.9	72.2	21.9	0		
PHF	711	866	808	000	.843	.825	.854	.500	.250	.862	.688	.838	.925	.250	.846	.636	.912	.813	.000	.886	.895
Cars & Peds	108	318	40	0	466	32	407	4	1	444	11	167	37	1	216	28	343	104	0	475	1601
% Care & Pade	100	98.8	95.2	0	98.7	97.0	99.3	100	100	99.1	100	97.7	100	100	98.2	100	100	100	0	100	99.1
Trucks & Bucar	100	4	20.2	ō	6	1	3	0	0	4	0	4	0	0	4	0	0	0	0	0	14
THUCKS & DUSCS	0	17	18	0	13	30	07	0	0	0.9	0	2.3	0	0	1.8	0	0	0	0	0	0.9
% Trucks & Buses		1.2	4.0	0	1.5	0.0	0.7	ň	Ő	0	Ő	0	0	0	0	0	0	0	0	0	0
Bikes by Direction		0	0	0	0	0	0	0	0	0	ň	0	Ň	Ő	õ	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	1 0	0	U	0	U	0	0	0	0	0	U	v	v	v	0	

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

		a (b	100		C	The st (T	auto 176)		Excel	n Power Fa	cility Drives	vav	
	Sur	nmer Street (R	oute 126)		Sum	From So	with		Excer	From V	Vest	,	
Ctart Time	Dight	Thru	Pede	Ann Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06.00 PM to 06:	45 PM - Peak	lofl	ripp. rotar									
Peak Hour for Entire Inters	section Begins a	t 06:00 PM											
06:00 PM	0	87	0	87	47	0	0	47	0	0	0	0	134
06:15 PM	0	88	0	88	46	0	0	46	0	0	0	0	134
06:30 PM	0	80	0	80	59	0	0	59	0	0	0	0	139
06:45 PM	0	74	0	74	47	0	0	47	0	0	0	0	121
Total Volume	0	329	0	329	199	0	0	199	0	0	0	0	528
% App. Total	0	100	0		100	0	0		0	0	0	000	050
PHF	.000	.935	.000	.935	.843	.000	.000	.843	.000	.000	.000	.000	.930
Cars & Peds	0	325	0	325	194	0	0	194	0	0	0	0	983
% Cars & Peds	0	98.8	0	98.8	97.5	0	0	91.5	0	0	0	0	9
Trucks & Buses	0	4	0	1 2	25	0	0	25	0	0	0	0	1.7
% Trucks & Buses	0	1.2	0	1.2	2.5	0	0	2.5	õ	0	0	0	0
Bikes by Direction	0	0	0	0	0	0	0	0	Ő	Ő	0	0	0
% Bikes by Direction	0	0	0	U	0	0	0	0	Ŭ	0	°,	- 1	
	Excelon Power Facility Driveway				Peak Hour Cars & Pea Bikes by D	0 325 4 0 329 0 325 0 4 0 0 329 ht Thru ↓ K HOUI A North Begins at 0 ds buses irrection	519 9 0 528 0 0 0 Peds						
						↑ 0 194 0 5 0 0 0 199 199 5 194 5 194 5 194 9 199 10 199	Peds 0 0 0 519 9 0 528 Total Route 126)						

Transportation Data Corporation Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed-	Bikes by Direction	n				
	Summer	Street (Route 12	6)	Summ	er Street (Route 1	26)	Excelon I	Power Facility Dri	veway	
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	00	0	0
Total	0	0	0	0	0	0	0	0	0	0
							t.			
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	
Total %										

	Su	mmer Street	(Route 126)		Si	ummer Street	(Route 126)		Exc	elon Power F	acility Drive	way	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	5:45 PM - Pe	ak l of l										
Peak Hour for Entire Inter	section Begins	at 06:00 PM							I.			- 1	
06:00 PM	Ō	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

		Groups Printed- Trucks & Buses												
	Summ	er Street (Route	26)	Summ	er Street (Route 1	26)	Excelon 1	Power Facility Dr	iveway					
		From North			From South			From West						
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total				
06:00 PM	0	2	0	1	0	0	0	0	0	3				
06:15 PM	0	1	0	3	0	0	0	0	0	4				
06:30 PM	0	0	0	0	0	0	0	0	0	0				
06:45 PM	0	1	0	1	0	0	0	0	0	2				
Total	0	4	0	5	0	0	0	0	0	9				
Grand Total	0	4	0	5	0	0	0	0	0	9				
Apprch %	0	100	0	100	0	0	0	0	0					
Total %	0	44.4	0	55.6	0	0	0	0	0					

	S	Summer Street	(Route 126)	-	Summer Stree	t (Route 126)	Exc	celon Power F	acility Drive	way	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 0	06:45 PM - Pe	ak 1 of 1										
Peak Hour for Entire Inter-	section Begins	s at 06:00 PM											
06:00 PM	Ō	2	0	2	1	0	0	1	0	0	0	0	3
06:15 PM	0	1	0	1	3	0	0	3	0	0	0	0	4
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total Volume	0	4	0	4	5	0	0	5	0	0	0	0	9
% App. Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.500	.000	.500	.417	.000	.000	.417	.000	.000	.000	.000	.563

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

				Groups Printe	ed- Cars & Peds					
	Summe	r Street (Route 12	26)	Summ	er Street (Route 1)	26)	Excelon H	Power Facility Dri	iveway	
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
06:00 PM	0	85	0	46	0	0	0	0	0	131
06:15 PM	0	87	0	43	0	0	0	0	0	130
06:30 PM	0	80	0	59	0	0	0	0	0	139
06:45 PM	0	73	0	46	0	0	0	0	0	119
Total	0	325	0	194	0	0	0	0	0	519
Cross d Total	0	205	0	104	0	0	0	0	0	510
Grand I otal	U	325	0	194	0	0	0	0	0	519
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	62.6	0	37.4	0	0	0	0	0	

	S	Summer Street (Route 126)				Summer Street	(Route 126)		Exce	elon Power F	acility Drive	way	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to ()6:45 PM - Pe	eak 1 of 1										
Peak Hour for Entire Inter-	Hour for Entire Intersection Begins at 06:00 PM												
06:00 PM	Ō	85	0	85	46	0	0	46	0	0	0	0	131
06:15 PM	0	87	0	87	43	0	0	43	. 0	0	0	0	130
06:30 PM	0	80	0	80	59	0	0	59	0	0	0	0	139
06:45 PM	0	73	0	73	46	0	0	46	0	0	0	0	119
Total Volume	0	325	0	325	194	0	0	194	0	0	0	0	519
% App. Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.934	.000	.934	.822	.000	.000	.822	.000	.000	.000	.000	.933

N/S: Summer Street (Route 126) W: Excelon Power Facility Driveway City, State: Medway, MA Client: MDM/M. Houle

			Groups Printed-	Cars & Peds - Tr	icks & Buses - Bi	kes by Direction				
	Summe	er Street (Route 12	26)	Summ	er Street (Route 1	26)	Excelon I	Power Facility Dri	iveway	
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
06:00 PM	0	87	0	47	0	0	0	0	0	134
06:15 PM	0	88	0	46	0	0	0	0	0	134
06:30 PM	0	80	0	59	0	0	0	0	0	139
06:45 PM	0	74	0	47	0	0	0	0	0	121
Total	0	329	0	199	0	0	0	0	0	528
Grand Total	0	329	0	199	0	0	0	0	0	528
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	62.3	0	37.7	0	0	0	0	0	
Cars & Peds	0	325	0	194	0	0	0	0	0	519
% Cars & Peds	0	98.8	0	97.5	0	0	0	0	0	98.3
Trucks & Buses	0	4	0	5	0	0	0	0	0	9
% Trucks & Buses	0	1.2	0	2.5	0	0	0	0	0	1.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0

	Sur	Summer Street (Route 126)				Summer Street	(Route 126)		Exce	lon Power Fa	cility Drive	way	
		From 1	North			From	South			From V	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	45 PM - Pea	k 1 of 1										
Peak Hour for Entire Inters	section Begins a	t 06:00 PM											
06:00 PM	0	87	0	87	47	0	0	47	0	0	0	0	134
06:15 PM	0	88	0	88	46	0	0	46	0	0	0	0	134
06:30 PM	0	80	0	80	59	0	0	59	0	0	0	0	139
06:45 PM	0	74	0	74	47	0	0	47	0	0	0	0	121
Total Volume	0	329	0	329	199	0	0	199	0	0	0	0	528
% App. Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.935	.000	.935	.843	.000	.000	.843	.000	.000	.000	.000	.950
Cars & Peds	0	325	0	325	194	0	0	194	0	0	0	0	519
% Cars & Peds	0	98.8	0	98.8	97.5	0	0	97.5	0	0	0	0	98.3
Trucks & Buses	0	4	0	4	5	0	0	5	0	0	0	0	9
% Trucks & Buses	0	1.2	0	1.2	2.5	0	0	2.5	0	0	0	0	1.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0

Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle



N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

			G	roups Printed- Bik	ces by Direction					
	Summer St	reet (Route 126)		N	Aain Street		Main S	Street (Route 126)		
	Fr	om North		I	From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0
06:30 PM	0 0 0			0	0	0	0	0	0	0
06:45 PM				0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total Apprch %	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0
Total %						1				

	Su	Summer Street (Route 126)				Main	Street			Main Street	(Route 126)		
		From N	lorth			From	n East			From	West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	5:45 PM - Pea	k l of l										
Peak Hour for Entire Inter-	section Begins a	at 06:00 PM											
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	000	000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed	d- Trucks & Buse	S				
	Summe	er Street (Route 1	26)		Main Street		Main	Street (Route 126	5)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
06:00 PM	2	0	0	0	0	0	0	1	0	3
06:15 PM	1	0	0	0	0	0	0	2	0	3
06:30 PM	0	0	0	0	0	0	0	0	0	0
06:45 PM				0	1	0	0	1	0	3
Total	4	0	0	0	1	0	0	4	0	9
Grand Total Apprch % Total %	4 100 44.4	0 0 0	0 0 0	0 0 0	1 100 11.1	0 0 0	0 0 0	4 100 44.4	0 0 0	9

	Sui	nmer Street (Route 126)			Main S	Street			Main Street (Route 126)		
1		From N	lorth			From	East			From	West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	:45 PM - Pea	klof1										
Peak Hour for Entire Inter-	section Begins a	t 06:00 PM										. 1	-
06:00 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
06:15 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	1	0	0	1	0	1	0	1	0	11	0	1	3
Total Volume	4	0	0	4	0	1	0	1	0	4	0	4	9
% App. Total	100	0	0		0	100	0		0	100	0		
PHF	.500	.000	.000	.500	.000	.250	.000	.250	.000	.500	.000	.500	.750

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

		Groups Printed- Cars & Peds												
	Summe	Street (Route 12)	5)		Main Street		Mair	12 Street (Route	6)					
		From North	<i>,</i>		From East			From West						
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total				
06:00 PM	73	10	0	3	133	0	86	43	0	348				
06:15 PM	81	6	0	7	136	0	68	38	0	336				
06:30 PM	70	7	0	6	114	0	91	49	0	337				
06:45 PM	68	6	0	5	99	0	87	41	0	306				
Total	292	29	0	21	482	0	332	171	0	1327				
Grand Total	292	29	0	21	482	0	332	171	0	1327				
Apprch %	91	9	0	4.2	93.0	0	25	17.0	0					
Total %	22	2.2	0	1.6	20.2	0	1 25	12.9	0	1				

	Sur	Summer Street (Route 126) From North				Main	Street			Main Street (Route 126) West		
		From	North		Dista	The	Deda	Ann Total	They	Left	Pede	Ann Total	Int Total
Start Time	Right	Left	Peds	App. I otal	Right	Inru	Peds	App. 10tal	Tillu	Len	Tcus	App. Iotal	Int. Total
Peak Hour Analysis From	06:00 PM to 06:	:45 PM - Pea	klofl										
Peak Hour for Entire Inter-	section Begins a	t 06:00 PM									_		
06:00 PM	73	10	0	83	3	133	0	136	86	43	0	129	348
06:15 PM	81	6	0	87	7	136	0	143	68	38	0	106	336
06:30 PM	70	7	0	77	6	114	0	120	91	49	0	140	337
06:45 PM	68	6	0	74	5	99	0	104	87	41	0	128	306
Total Volume	292	29	0	321	21	482	0	503	332	171	0	503	1327
% App. Total	91	9	0		4.2	95.8	0		66	34	0		
PHF	.901	.725	.000	.922	.750	.886	.000	.879	.912	.872	.000	.898	.953

N: Summer Street (Route 126) E/W: Main Street/(Route 126) City, State: Medway, MA Client: MDM/M. Houle

		Gr	oups Printed- (Cars & Peds - Tru	cks & Buses - Bik	es by Direction				
	Summe	r Street (Route 126))		Main Street		Main	Street (Route 12)	6)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
06:00 PM	75	10	0	3	133	0	86	44	0	351
06:15 PM	82	6	0	7	136	0	68	40	0	339
06:30 PM	70	7	0	6	114	0	91	49	0	337
06:45 PM	69	6	0	5	100	0	87	42	0	309
Total	296	29	0	21	483	0	332	175	0	1336
,										
Grand Total	296	29	0	21	483	0	332	175	0	1336
Appreh %	91.1	8.9	0	4.2	95.8	0	65.5	34.5	0	
Total %	22.2	2.2	0	1.6	36.2	0	24.9	13.1	0	
Cars & Peds	292	29	0	21	482	0	332	171	0	1327
% Cars & Peds	98.6	100	0	100	99.8	0	100	97.7	0	99.3
Trucks & Buses	4	0	0	0	1	0	0	4	0	9
% Trucks & Buses	1.4	0	0	0	0.2	0	0	2.3	0	0.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0

	Su	Summer Street (Route 126)				Main S	Street]	Main Street (F	Route 126)		
		From	North			From	East			From V	West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	6:45 PM - Pea	ık I of I										
Peak Hour for Entire Inters	section Begins	at 06:00 PM											
06:00 PM	75	10	0	85	3	133	0	136	86	44	0	130	351
06:15 PM	82	6	0	88	7	136	0	143	68	40	0	108	339
06:30 PM	70	7	0	77	6	114	0	120	91	49	0	140	337
06:45 PM	69	6	0	75	5	100	0	105	87	42	0	129	309
Total Volume	296	29	0	325	21	483	0	504	332	175	0	507	1336
10tal Volume	01.1	80	Õ		4.2	95.8	0		65.5	34.5	0		
76 App. 10tal	91.1	725	000	923	750	.888	.000	.881	.912	.893	.000	.905	.952
	.902	.725	.000	321	21	482	0	503	332	171	0	503	1327
Cars & Peds	292	29	0	000	100	00.8	Ő	00.8	100	97 7	0	99.2	99.3
% Cars & Peds	98.6	100	0	90.0	100	33.0	0)).0	100	1	Ő	4	9
Trucks & Buses	4	0	0	4	0	1	0	1	0		0	~ ~	07
% Trucks & Buses	1.4	0	0	1.2	0	0.2	0	0.2	0	2.3	0	0.8	0.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0

Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle



N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed-	Bikes by Directi	on				
-		West Street		Mai	n Street (Route 12	26)	Mair	Street (Route 126	5)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
06:00 PM	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0
06:30 PM	0 0 0			0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch % Total %	0	0	0	0	0	0	0	0	0	

		West S	treet		Main Street (Route 126) From East				Main Street (Route 126) From West				
		From 1	North										
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Entire Inter-	section Begins a	t 06:00 PM									_	- 1	
06:00 PM	Ō	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	ō	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	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
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

				Groups Printed	 Trucks & Buses 					
		West Street		Main	Street (Route 12	6)	Mair			
		From North			From East					
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
06:00 PM	0	0	0	0	2	0	1	0	0	3
06:15 PM	0	0	0	0	1	0	2	0	0	3
06:30 PM	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	2	0	1	0	0	3
Total	0	0	0	0	5	0	4	0	0	9
							1			
Grand Total	0	0	0	0	5	0	4	0	0	9
Apprch %	0	0	0	0	100	0	100	0	0	
Total %	0	0	0	0	55.6	0	44.4	0	0	

		West S	treet		Main Street (Route 126) From East				Main Street (Route 126) From West				
		From N	North										
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Entire Inters	section Begins a	t 06:00 PM											_
06:00 PM	ō	0	0	0	0	2	0	2	1	0	0	I	3
06:15 PM	0	0	0	0	0	1	0	1	2	0	0	2	3
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	2	0	2	1	0	0	1	3
Total Volume	0	0	0	0	0	5	0	5	4	0	0	4	9
% App. Total	0	0	0		0	100	0		100	0	0		
PHF	000	000	.000	.000	.000	.625	.000	.625	.500	.000	.000	.500	.750
Transportation Data Corporation Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle File Name : 04616EE Site Code : 790 Start Date : 9/22/2015 Page No : 1

Int. Total
334
325
319
301
1279
1279
-

	[West S	treet			Main Street	(Route 126)			Main Street (Route 126)		
		From 1	North			From	n East			From	West		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	:45 PM - Pea	uk l of l										
Peak Hour for Entire Inter	section Begins a	at 06:00 PM											
06:00 PM	0	13	0	13	9	195	0	204	117	0	0	117	334
06:15 PM	Ő	6	0	6	5	212	0	217	102	0	0	102	325
06:30 PM	0	11	0	11	11	169	0	180	128	0	0	128	319
06:45 PM	0	6	õ	6	8	163	0	171	124	0	0	124	301
Total Volume	0	36	0	36	33	739	0	772	471	0	0	471	1279
% App Total	0	100	Ő		43	95.7	0		100	0	0		
	000	692	000	.692	.750	.871	.000	.889	.920	.000	.000	.920	.957

Transportation Data Corporation Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N: West Street E/W: Main Street (Route 126) City, State: Medway, MA Client: MDM/M. Houle

File Name : 04616EE Site Code : 790 Start Date : 9/22/2015 Page No : 1

		G	Groups Printed- (Cars & Peds - Tru	cks & Buses - Bi	kes by Direction				
		West Street		Main	Street (Route 12	6)	Main	Street (Route 126	5)	
		From North			From East			From West		
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
06:00 PM	0	13	0	9	197	0	118	0	0	337
06:15 PM	0	6	0	5	213	0	104	0	0	328
06:30 PM	õ	11	0	11	169	0	128	0	0	319
06:45 PM	Ő	6	0	8	165	0	125	0	0	304
Total	0	36	0	33	744	0	475	0	0	1288
10141	0	50	-							
Grand Total	0	36	0	33	744	0	475	0	0	1288
Approch %	0	100	0	4.2	95.8	0	100	0	0	
Total %	0	2.8	0	2.6	57.8	0	36.9	0	0	
Core & Pade	0	36	0	33	739	0	471	0	0	1279
Cars & Feus	0	100	Õ	100	99.3	0	99.2	0	0	99.3
Trucks & Peus	0	100	0	0	5	0	4	0	0	9
Trucks & Buses	0	0	ů	0	07	0	0.8	0	0	0.7
% I fucks & Buses	0	0	0	0	0.7	0	0	0	0	0
Bikes by Direction	0	0	0		0	0	l õ	õ	Õ	l o
% Bikes by Direction	0	0	0	0	0	0	0	0	Ū	, v

		West S	Street			Main Street	(Route 126)		1	Main Street (I	Route 126)		
		From	North			From	ı East			From V	Nest		
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From	06:00 PM to 06	:45 PM - Pe	ak 1 of 1										
Peak Hour for Entire Inters	section Begins a	at 06:00 PM											
06:00 PM	õ	13	0	13	9	197	0	206	118	0	0	118	337
06:15 PM	0	6	0	6	5	213	0	218	104	0	0	104	328
06:30 PM	Ő	11	0	11	11	169	0	180	128	0	0	128	319
06:45 PM	ů	6	0	6	8	165	0	173	125	0	0	125	304
Total Valume	0	36	0	36	33	744	0	777	475	0	0	475	1288
	0	100	0		4 2	95.8	0		100	0	0		
% App. Total	0	100	000	607	750	873	000	891	928	000	.000	.928	.955
PHF	.000	.692	.000	.092	.750	.875	.000	.071	471	0	0000	471	1279
Cars & Peds	0	36	0	36	33	/39	0	112	4/1	0	0	00.2	00.3
% Cars & Peds	0	100	0	100	100	99.3	0	99.4	99.2	0	0	99.2	<u>,,,</u>
Trucks & Buses	0	0	0	0	0	5	0	5	4	0	0	4	9
% Trucks & Buses	0	0	0	0	0	0.7	0	0.6	0.8	0	0	0.8	0.7
Bikes by Direction	0	ŏ	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0

Seasonal and Background Growth

														Average																	1	Average
September	Adjustment to Year		1.01		0.99		1.00		0.99		1.00			1.00			0.97		0.95		0.96		0.98		0.92		0.95		0.94		0.96	0.95
		YEAR	49,732	-3%	48,245	-1%	47,626	1%	48,231	1%	48,791	%0	48,562	-0.65%		YEAR	80,301	%0	79,930	%0	79,989	-4%	77,002	%0	76,915	3%	79,010	%0	78,986	1%	79,967	-0.04%
		DEC	47,007	-1%	46,696	2%	47,564	2%	49,888	-5%	47,600	2%	48,441			DEC	75,126	2%	76,386	-5%	72,362	-2%	70,747	3%	73,169	3%	75,273	2%	76,729	-2%	74,989	
		NOV	49,662	-4%	47,490	%0	47,379	2%	49,151	2%	50,015	-1%	49,651			NOV	78,746	1%	79,468	-2%	77,941	-5%	73,861	2%	75,486	3%	77,516	2%	78,698	1%	79,543	
		OCT	50,571	-3%	49,009	-1%	48,663	1%	49,198	2%	50,056	%0	50,021			OCT	79,428	1%	80,518	2%	82,221	-3%	79,645	%0	79,419	4%	82,244	-2%	80,223	3%	82,647	
		SEP	49,031	-1%	48,531	-2%	47,762	1%	48,825	%0	48,882	2%	49,935			SEP	83.189	1%	83.740	-1%	83,309	-5%	78,778	6%	83,273	%0	83,483	1%	84,288	-1%	83,100	
		AUG	52,322	-7%	48,759	-3%	47,056	1%	48,234	4%	49,941	-1%	49,223			AUG	91.494	-2%	89,595	2%	91,080	-5%	86,189	1%	86,829	4%	90,295	-4%	87,108	4%	90,589	
		JUL	53,000	-8%	48,629	-2%	47,638	-1%	46,812	3%	48,380	3%	49,797			JUL	88.165	-4%	84.957	4%	88,401	-4%	84,701	-1%	84,000	4%	87,728	-1%	86,859	-1%	85,909	
	DUGH T.L.	NUL	52,000	-4%	49,936	%0	49,934	1%	50,525	-1%	49,961	%6-	45,623			NUL	90.062	-5%	85.728	3%	88,000	-8%	81,166	-1%	80,700	%2	86,167	1%	87,344	%0	87,015	
	NORTHBOR	MAY	50,000	1%	50,518	-2%	49,474	%0	49,781	1%	50,126	1%	50,657		11	MAY	84,600	-5%	80.480	6%	85,024	-7%	79,352	-1%	78,876	-1%	77,940	3%	80,458	2%	81,707	
	9 - EAST OF I	APR	49,136	1%	49,816	-2%	49,049	%0	48,943	-1%	48,662	1%	49,359		AT MEDWAY	APR	79.123	-1%	78.305	-2%	76,751	-1%	75,934	1%	76,913	1%	77,906	-1%	77,115	1%	78,117	
	NUGH - RTE.5	MAR	49,268	-3%	47,829	-3%	46,455	2%	48,016	1%	48,608	-2%	47,421		RTF 1-495 - 4	MAR	74,150	3%	76.347	-4%	73,596	3%	76,000	-8%	69,739	5%	73,544	1%	73,992	1%	74,372	
	WESTBORG	FEB	47,283	-2%	46,112	1%	46,434	%0	46.150	2%	46,883	-1%	46,220		- MII FORD -	ETB.	71 945	-1%	71.145	-1%	70,432	-3%	68,456	1%	69,136	-1%	68,595	2%	69,804	2%	71,280	
	TATION 307 -	NAL	47,505	-4%	45,614	-3%	44,103	-1%	43.244	2%	46,381	%0	46,393		TATION 3180	IAN	67 586	22212	72 492	-2%	70,749	-2%	69,200	-5%	65,444	3%	67,428	-3%	65,217	8%	70,333	
	0.	Ч	07		08		60		11		12		13		0	ц Ч	22)	06		07		08		60		10		11		12	

Average Yearly Growth Calculated Yearly Growth Factor Used

-0.35% **0.5**%

0.98

Average Adjusment Factors

ITALICS = ESTIMATED DATA MADT

SECTION I - CONTINUOUS COUNTING STATION MONTHLY AVERAGE DAILY TRAFFIC

Page 1 of 1

 \Box Speed Data

Transportation Consultants, Inc.	28 Lord Road, Suite 280	Marlborough, MA 01752
MDM		

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	Total		c c	√ ~	- c	- c) c	υć] ⊆ 2	200	o v v	0 7	t (2 - C	7	<u></u>	25	4 4	000	9.9 9.0	32	28	6	12	2	ا	411
70	0/0	000	,	-) c	o c	-		- c	n O	- c	D	-	D C	D 4) (D	о (0 0	0	0	0	0	0	0 0	0	0	0
74	/ 75		0 0	⊃ c	- c	⊃ c	- c	⊃ ¢	0	> 0	O O	> c	D C	0	⊃ ¢	D 0	o i	0	0	0	0	0	0	0	0	0	0
	0 0				- -			- -	ر د		~		.				`		0	0	0	C	0	0	0	<u> </u>	
č					-	, ,))		-)						<u> </u>	<u> </u>		Ŭ))		
č	0 I 0	00		o c	⊃ ¢	⊃ ¢	> c	⊃ ¢	о ^с	о (0 0	0 0	o i	00) S	0 0	С	0	0	0	0	0	0	0	0	0	0
C L	00 00	00	- 0	>	- 0	0 0	- 0	0 0	0	0 O	0	0 0	c	0 0	c	0 ú	С	0	0	0	0	0	0	0	0	0	0
l	51 7	c C C	-	0 0	o c	0 0	D C	o v	0	0 0	0	0 0	c	0 0	c	0	0	0	0	0	0	0	0	0	0	0	0
0	46	na	о (0	o o	0	o o	o i	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	- ι	0	0	0	0	0 0	0		-	_	0		0	0	0	0	0	0	-	-	0	0	0	0	0	0	9
	4 .	4																									
	36	40	0	0 0	0	0	0	-	2	ດ	7	4	4	7	9	e	4	9	വ	2	ო	4	2	2	0	Ļ	67
	о 1 т	35		0	0	0	0	-	2	2	23	Ζ	4	7	თ	2	12		13	20	12	15	-	6	9	0	191
	26 26	30	0	2	-	0	0	0	2	6	9	4	ъ	7	ŋ	٢	ω	9	0	4	12	9	9		-	2	113
	21	25	0	0	0	0	0	0	0	с	0	2	÷	2	~	0	7	4	2	Ţ	с С	2	0	0	0	0	30 30
	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	–	Ļ	0	0	0	0	0	0	0	0	2
										_	_	_	_		_		_	(((
	<u> </u>	15	5	C	0	C	0	5	0	c	0	С	0	0	0	0	J	C	J		J		0	0	J	0	
Westbound	Start	Time	09/17/15	01:00	02:00	03:00	04:00	05:00	00:90	07:00	08:00	00:60	10:00	11:00	12 PM	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752

West Street West of Driveway Medway, Ma WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	$\begin{array}{c} 32 \\ 32 \\ 32 \\ 32 \\ 32 \\ 32 \\ 32 \\ 32 $
	$\begin{bmatrix} 16 \\ 16 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 \\$
	$\begin{bmatrix} 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 $
5 0 0 0 4 0 4 0 4 0 4 0 4 0 4 0	

Consultants, Inc.	Suite 280	MA 01752
M Transportation	28 Lord Road,	Marlborough, N
MD		

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	Total	001	4 C		,	- c) כ	11	,	÷.	ົ	ς Γ	77	1/	18		13	4	20	22	74 74	15	12	4 (9 Q		237
97	0,00		>	- -	о с	>	> c	⊃ o	> (0 0	-	- 0	⊃ (0 0	C	0	0	0 0	50	о (э ^с	0	0	0 0	0	0 0	0
11	75		0	> c	o c	> <	> (D C	o c	00	0	⊃ o	ъ	0	o	o i	o	0	0	D,	o	0	0	o	0	0	0
, L	00		o c) C	o c	р с	ъ	о с	o -	0	Э	D C	Э	0	S	0	0	0 (0	Ō	o	0	0	0	0	0	0
5	- ע ט	5	0 0		,	o 0	ъ	0 Ú	Э	0 ü	о о	0 0	S	0 0	o	0	0	0	0	Ō	0	0	0	0	0	0	0
C	00 90	8	- -		o 0	D O	0	õ	С	0	o	0 0	C	0	0	0	0	0	0	Ô	0	0	0	0	0	0	0
Ľ	с 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0) (-	,	o i	0	õ	0	0	0	õ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	40 0 4	00	о -	- (> (Ō	0	0	0	0	0	Õ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	4 7 7		Э (o 0) (O '	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	36	50	0	0 0	۰ م	0	0	.	~	0	~	~	ო	3	ო	ъ	~	5	4	2	ო	0	ო	0	-	0	34
	31 21	cr G	2	- (o		0	5	0	Ļ	ო	8	12	8	8	Q	10	7	-	12	13	8	7	4	7	0	125
	26	20	0	0 0	S	0	0	0	5	0	~	4	4	4	7	e	~	N	4	10	ъ	7	2	0	ო	0	59
	21	Q 7	0	0 (Э	0	0	0	2	0	0	0	2	2	0	0	~	0	0	4	2	0	0	0	0	0	13
	16	.50	0	Ō	O	0	0	0	7	0	0	0	0	0	0	0	0	0	↽	0	~	0	0	Ó	0	0	4
	- i	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westbound	Start	lime	09/20/15	01:00	02:00	03:00	04:00	05:00	00:00	02:00	08:00	00:00	10:00	11:00	12 PM	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752

West Street West of Driveway Medway, Ma WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

-	lotal	10	0	N C	ъc	7 C	43	20	1 7 7 7	у С И	200	2 7	<u>+</u> α	2 2	н и С	35) u t t	200	v t	7 v 4 u	<u>0</u>	2	10	101	401
9	200	00	00	- c			o c	o c	о с	o c	> c	o c	о с			> c	> <	- c) - C))	-	0 0	с С		5
	25																								
71	9/	00	00	⊃ ¢	> c	-	o c	> c	>	> c	o c	> c	o c	> c	> c	> c	> c	> c	- 0	o د	> (0 0	<u></u> с	⊃lo	5
9		00	0) 0	0 0	- c		> c) c		> 0	> c		,	> c	⊃ (- 	0.0	0	C	0 0	0		o
91	2																								
61	65	00	00	<u></u> о с	с с	- -	э с	- c	- c	- c	-	- c	- C	- c	-	> 0	<u></u> о с	<u>ہ</u> د	ъ	о (D	0	0	0	Э
0		n n	0	ີ ວ	- -						- -				.	⊃ (0			0		0	00	0	0
26	90		<u> </u>))																			-
51	55	o 0	0	0 (с С	0 0	о с	-	- c	⊃ c	- 0) (، د	- o	с (n o	ъ	о i	0	0	0	0	0 (o	0
			~	0	<u> </u>		_			ر د	-		ر ا		<u>ر</u>	- ·				0		C	0	0	~
46	20		J)	<u> </u>)				_)		•				_))		
41	45	00	0	0	0	0 0	0,		-	-) (00	о () (o ,	- 4	0	0	- 1	0	0	0	0	0	~	ഹ
					((~	<u> </u>	۲ د ا	ĺ.	~ `		`	~	3	6	+	0	•+	+		(~1	~	~
36	4		. U						~												·)			2
31	35	۰ C	0	0	0	3	ოც	53	11	- L L	12	10	9	0	19	16	20	13	12	12	ω	10	ო	4	207
					_										•	~	•		~			i	(-	_
26	ЭС		,0	J	J	UN .					1		1		0,		÷	-	J	J			J		<i>б</i>
21	25	0 0	0	Ţ	0	0	0	0	-	~	2	-	-	4	2	0	ო	2	2	2	0	0	-	0	23
						((_				((((-)	_)			-)	
16	20	0		0	0	J	0	J	J	J	-		0	J	J	J	0	J	0	C		0	0	J	
-	15	00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	С
pu							_								_										
estboui	Time	9/21/15	02:00	03:00	04:00	05:00	00:90	07:00	08:00	00:60	10:00	11:00	12 PM	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total
3		0																							

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

loto F	10141	4 ۲	- c	00		8	12	29	38	17	∠ Karata ana a	17		1 80	33	34	. 80 . 80	36	28	23	14 4	16	445		2307		
76	888		> c	o 0) C) O	0	0	0	00	с с	о с	O O	• c	0) C) 0	0	0	0	0	0			0		
71	<u>c/</u>	0	o c	o c) C) C) C	0	0	00	o	o c	-	> <	o c	• C) 0	o	0	0	0	0			0		
99 1	0	00		o c	⊳ ⊂	b C	o c	0	0	0	0	0	o o		o c	⊳ ⊂	o C) C) 0	0	0	0			0		
61	69	00	- - -	0	⊳ ⊂	o V	o c	0	0	Õ	0	0	0		D C	, ,) C) C	0	0	0	0	0		0		
56	60	0	0 0	o O		o c	> c	0	0	0	0	0	o) c	- -		D C		0	0	0	0	00		0		
51	55	0	D (o c	-			0	0	0	0	0 (00	⊃ ¢	0			o ⊂	o 0	0	0	0			0		
46	50	0	0 0	o c) (0	0	0	0	0	0	- C	- C	> <			0	0	0	0			e E		
41	45	0	0 0	0				> -	0		0	0 1	е С	0	⊃ с	× ~		- C	0	0			10	4	33		
36	40	- 5	00	0				- C	, ci	9	0	7	ő		7 - E	. o	4 C		2		0	6		_	365		
31	35)	0		_		- u			10	7	9	~	1.	1	1	ά Γ	7,F			•	1 21-		1 1128	6 МРН 1 МРН 8 МРН 8 МРН	2 MPH 5 MPH 1749 75.8% 1533
26	30)	0							N				1		1.) 			- 0	1.11		7 62	 	He e d
21) 25	0	1 C) C) (с С	, ,			C) Č	0		7		· · ·)) 	ŕ t	4 12	th Percentil th Percentil th Percentil th Percentil	ed(Average Pace Spee nber in Pac cent in Pac s 20 MPI
16	5 20		L'AND AND C	с С) .	0	с С				.0)	0	, ,	, ,) C)							2 2,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Mean Spe 10 MPH Nur Per r of Vehicle
pu	с. С		υ υ	ں ر	۱ ۱) L	۔ ۲	ں ())	с С) (- -)) ()		7 -		s Numbe
Westboul	Time	09/22/15	01:00	02:00	03:00	04:00	05:00	00:00	nn:/n	00:60	10:00	11:00	12 PM	13:00	14:00	15:00	16:00	17:00	18:00	10:00	20:00	22:00	23:00	l ota	Granc Tota		Statistics

Eastbound Start

Site Code: 790 WEST STREET WEST OF DRIVEWAY_SPEED

Total	4	0	0	0 (7	9	22	
76 999	0	0	0	0	0	0	0	С
71 75	0	0	0	0	0	0	0	C
66 70	0	0	0	0	0	0	0	C
61 65	0	0	0	0	0	0	0	C
56 60	0	0	0	0	0	0	0	C
51 55	0	0	0	0	0	0	0	C
46 50	0	0	0	0	0	0	0	C
41 45	0	0	0	0	0	0	7	¢
36 40	-	0	0	0	0	~	ი	c
31 35	-	0	0	0	2	4	10	
26 30	2	0	0	0	0	7	4	د ۲

ŀ	101a1	4 0 0	000	5 6 0	28 38 28	19		25 25 37	388	44 44	- 0 t	<u>6</u>	404	404
76	666	- o u	o o c	000	> o c	0 0	, o c	ooc				> o c		С
71	4/		000	000	000	> o c		00						D
99	0/	0	000	000	000	00	> o <	, o c				> o c		D
61	65	0 0	000	000	000		000	> 0 c	000	>oc	000	> 0 <		D
56	60	0	000	000	00			000	000	> o c	000	000		Э
51	55	0	000	000	000		00	000		000	000			C
46	20	0	000	- o c	000	000	000					000		0
41	45	0	000	о с (N O 0	o - c	⊃ - (ν , - -	- 7 -	- 4 0	> . .	- 0		<u>8</u>
36	40	t	000	о , с	ຕິດ	o S S S S S S S S S S S S S S S S S S S	з 4	ہ <u>ر</u> ہ	ין מ	<u>⊃</u> ∞ (0 0 0	v . c	7 T	94
31	35	۰ 0	000	2 4 9	10 1 1	9 1 1 9	ပ္ ပ	τ ο ,	<u>5</u> 7 5	512	<u>0</u> 0	<u>, 33 0</u>	- 1	179
26	30	0 2	000	o	16 16	იი	• 5 7	0 0	000	ہ م	י 4 מ	, 2 2	10	95
21	25	0	00	0 0	ю С (- - -	- 0	° 2 -	0 0	, 7 0	1 0	00	00	15
16	20	00	00	00	00	1	0	00	0 0	000	0	00	00	ന
-	15	00	0 0	0	0	0	00	00	00	00	00	0 °	00	C
Start	Time	09/17/15 01:00	02:00 03:00	04:00 05:00	06:00 07:00	08:00 09:00	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00	Total

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752

> West Street West of Driveway Medway, Ma

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	Total		ЪС	5	9 ç	- 4 23 23	17 21	29 14	22 26	2 C C	2 8 6 2 8 6	ן ל ל 4 ת	2 4 €	415
76	666	ō	0 0	0	Ő	- o c	> o c		000	0	000	0	0	00
71	75	00	0 0	0	Ő	000	> O C) O C	000	- o c	0	000	000
66	20 2	0	00) O	0	- o c	000	000	000	000	- o c	000	000	
61	65	0	0) C	õ	000	000	000	000	0	0	000		
56	60	0	00	o c	00	000	000	000		000	- - -	000		000
51	55	0	00	o c	0	000	000	000	000	o c	000	0	000	000
46	50	00	0	o c	0	000	000			-0	000	2	- 0	004
41	45	0 0	00	- c) -	4 - - 1	_			00	τ, τ- υ	- 7 0	o 0	0 24 24
36	40	0	00		0	1 0 7	4	4 7 ,	4 v ¢	o n i	10,10,10,10,10,10,10,10,10,10,10,10,10,1	4 C r	с 4	2 0 <u>90</u>
31	35		00) c	14	, 15 ⁸	-11 9	10 13	5 Ç	<u>ນ</u> ຕ	1 14 14	ō 4 I	ž /	6 188 188
26	30	0	0	- c	0	4 10	3	4	0 0 י	۹ ۲۲	10 9	с 4	2 4	0 0 83
21	25	0 0	00	о с)	· 2 0		52	00,	2 -1	← ← (0	2 20 20
16	20	0 0	00	-	0	00	0 0	00	00	3 0	00	0 0	00	200
÷	15	0 0	0	00	00	0 0	0 0	0 0	0	0	00	0	0 0	0
Eastbound	Time	09/18/15 01:00	02:00	03:00	04:00 05:00	06:00 07:00	08:00	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

Consultants, Inc.	Suite 280	MA 01752
MDM Transportation	28 Lord Road,	Marlborough, N

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	Total	- (7 5	- 0	0	2	9 C	2 4	26	28 28		7 t	28	26	27	, i	17 20	20	ກແ	σ	വ	359
76	. 666	0	0 0	0	0	Õ	0) C	0	0 0	ò	o c) C	0	00	Ų	0 0	D C	0 0	C	0	0
71	75	0	o c	0	0	0	00		0	0 0	o c	o c	, ⊂	0	0		0) (D C	o ⊂) O	0
99	70	0	00	0	0	0	00	o ⊂	0	o c) (o c) ⊂	0	0	n	00) (o c	• ⊂	0	0
61	65	0	0 0	о О	0	0	0) c	0	00) (D O) C	0	0	n	0	-	D O	о с	00	0
56	60	0	00	o c	00	0	00	> c	0	00) (n U	• c	`	00	O	00	о (0	o c	00	0
51	55	0	00	o c	0	0	00	> c	0 0	00) (o c	> c	0	00	D	۲ () (0 0	> c	00	-
46	50	0	0	o 0	, o	Ō	00	> c	0 0	- ر	, c	- 1	1 C	v 0	~ (o	00	۰ م	0 0	>	00	7
41	45	0	0	o U	0	0	- c	7	- 2	~ ~	t (Э			5	o	7		-	- c	00	26
36	40	0) C	0	- c	ວ ເ	7 7	10 7	-	ი ქ	<u>1</u> 0	7 0	2	α	-	4	7	- c	τ -	76
31	35	-	00	o c	o c)	20	0 0	14	ωç	i ر	, 10 7	<u>,</u>	11	13	מ	10	D	4 4	२ ९	ი ი	153
26	30 20	0		o c) C)	~ ~	- L	د د	ω υ	ο.	4 1	۰ د	t 	9	4	2	c	7	- c	ი L	79
21	25	0	Ö	0	> c	0	0	- (0 . L	- 0	U	-	- c	° 0	0	0	1	D	00	~ ~		11
46	20	0	Õ	0	> c	0	00	`	- 0	0	7	00	D (00	0	-	0	O	00	o 0	0	4
-	- 15	0	Ō	00	>	0	00	0 0	0 0	- 0	D	00	D (⊃ ,	0	0	0	O	00) (- c	20
Eastbound	Time	09/19/15	01:00	02:00	03.00	05:00	06:00	07:00	00:80 00:60	10:00	11:00	12 PM	13:00	14:00 15:00	16:00	17:00	18:00	19:00	20:00	Z1:UU	23:00	Total

MDM Transportation Consultants, Inc. 28 Lord Road, Suite 280 Marlborough, MA 01752

West Street West of Driveway Medway, Ma WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

Total	- a o	- - - c) – 4	- 13 -	20 24	38	16 16	19	12 26 26	10 7	0	3 266
76 999	000	0 0	, o c	0 c) O C) O C	> o c) 0 0	000	o	000	00
71 75	000	000	000	0 C	000	> O <) O C	, o c	, o c	000) O C	000
66 70	0	0	000	000	00	0	, 0 c	, o c) O C	000	oc	000
61 65	000	000	000	000	0	0	000	00) O C	, o c	0 O C	00
56 60	000	00	000	000	000	000	000	000	000	000	000	000
51 55	000	000	0	000	000	00	000	000	000	000	000	
46 50	00	00	000	00,	- 0 ,	0 -	000	o o c	- 0 -	-00	000	0 0 m
41 45	0	0	00	0 0 č	o o			- 1 ,		000	000	1100
36 40	1	00	0	- 0	9	၁ ဥ	· م ∞	4 Q	י טי פ	ν Γ α	0 v	ئ 79
31 35	1	1 0	0	0	3 10	1 3 8	∞ ∞	ပပ	- 1 2 0 2 0 2	10 9	о Э	3 105
26 30	0.	00	0	2 1	4	4 8	3 2	2	տու	် ရာ	- 0	2000
21 25	200	0 0	00	1 0	0	0	3	0	1	1	1	0 0 8
16 20	0-1-0	0 0	00	0	0	0	0	0	1 0	0 0	0 0	500
ר ע ד	<u>-</u> -0	0 0	00	00	00	0	0 0	00	0 0	- 0	0	000
Eastbound Start	09/20/15 01:00	02:00 03:00 03:00	04:00 05:00	00:00 07:00	08:00 09:00	10:00 11:00	12 PM 13:00	14:00 15:00	16:00 17:00	18:00 19:00	20:00 21:00	22:00 23:00 Total

M Transportation Consultants, Inc.	28 Lord Road, Suite 280	Mariborough, MA 01752
MDM		

Site Code: 790 WEST STREET WEST OF DRIVEWAY_SPEED

Total	00	о с	o c	<i>،</i> د	1 LC	ο α	07	βrα	2 Q	<u>י</u> ב	- č	 	<u>+</u> (19	- 1 V V	£9 ₹	4 - 4 -	5 C	o ç	<u>,</u>	2	0 °	ר מ		40-
76 999	0	o c	ہ o	o c	ہ ر	> ⊂	о с	o c	. .	, ,	о с	о с	.	0 0	о (0 0	~		, ,	-	с С	DC	-	- c	S
Ω →	0	00	0		o c	> c	o c	> c) (0 0	0 0	D (c	0 0	0	00	0 O	⊃ ¢	، د	∩ ¢	ہ د د	0 0	о с		0
2																									
66 70	0	00		> <	о с	> c	o c	- c	с	о (с (о i	C	0	0	00) (⊃ ¢	.) (∩ °	0 0	> c		D
61 65	0	00	> c	- c) C	- c	> c	- c	> (0 0	Э (0	c	0	0	0 (00	<u>ہ</u> د) (o ()	0 0	о с	⊃ o	Э
56 60	0	00	~	- c	- c	- c	o c	⊃ ¢	- -	0	0	0	0	0	0	0	00	o م	о с	0 0	D	0 0	о с	- -	Э
													_) 		() 		
51 55			с С	50	ی د	<i>,</i> ,	ى د) (0	C	0	<u>с</u>	J	J		_ (J (5	0	<u>ل</u>		ر ا
46 50	0	00	с с	D d	с с	о т	- c	⊃ ¢	Э	0	0	0	0	0	0	0	-	0 .	1	0	0	0	0	o v	Ω.
41 45	20	0 0	0 0	D	с с	-	э,	-	Э	0	0	.		2	0	9	e	N	7	4	0		0		24
36	20	0 0	0	о ,	1	4.	ب		9	e	ო	2	2	2	9	10	æ	24	9	e	4	3	7	~	03
																									÷
31 31	0	õ	0 č	0	1	0	7. 7	22	13	6	12	9	ω	7	12	6	19	17	12	2	9	လ	-	e	172
26 20	20	0	0	0	0	~	7	10	7	2	2	6	2	4	ო	10	თ	9	9	0	~	0	0	-	80
21 25	0	0	0	0	0	0	-	З	2	0	0	З	~	Ļ	0	0	~	0	~	Ļ	.	0	0	0	15
90		0	0	0	0	0	0	2	0	0	0	0	0	Ō	0	0	0	0	0	0	0	0	0	0	2
- c	V																								
	<u>6</u> 0	0	0	0	0	0	0	0	0	2	0	0	C	0	0	0	0	0	0	0	0	0	0	0	0
tart	1115 21/15	01:00	02:00	03:00	04:00	05:00	06:00	00:20	08:00	00:60	10:00	11:00	2 PM	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total
East S	110	5	-		-								~								-				

WEST STREET WEST OF DRIVEWAY_SPEED

Site Code: 790

	- H	otal	0	C) C) (γL	ດ ເ	16	4 8	31 31 31	 -	= 6	77	27 27	53	34	32	09	80	21 ; 21	17	- (ء م ا	7	434	2279		
76		999	0	C	C)	, c	- c	n ú	0	0	0	0 0	0		0 0	0	0	0	0	0	0 0	0	0 0	D C	٥	0	0		
74	- 1	75	0	U) C) C	> <	,	0 O	0	0	0	00	o O	o c	о с	00	0	0	0	0	0	0	0 (0	D I	0	ο		
22		70	0	Ŭ) c	, C	- c	о с	, O	0	0	0	00	o c) c	`	> 0	Ō	0	0	0	0	0	0	0 0	⊃ i	0	0		
14		65	0	- U) C	о с	-	о (0	0	0	0	0	0 0	0 0	o c	o c	0	0	0	0	0	0	0 0	0 0		0	ο		
EC.	00	60	0) c	o c	,	o i	0	0	0	0	0 0	0	0) C	0	0	0	0	0	0	0	0 0	D I	0	ο		
× L	- 0	55	C	, c) c) c	-	o i	0	0	0	0	0 0	0	0 0	о с) c	0	0	0	0	0	~	0	0	O	-	2		
	o	00	C	0		> c	-	0	0	0	0	0	0 0	0	-	0 0	ЪС	, o	0	3	0	0	0	0	0 0	S	4	21		
	-	ы Ч	0	,		,	⊃ o	o	~	ო	2	-	0,		0 0		ے د		-	7	0	0	0	0	0,	_	0	ŝ		
	ν Ω	•	C	0			, V	-	0	~	2	6	3	3	4.	4 C	ح ح	5 -	7	5	7	9	с С		с С	0	5	7 12		
	- 	5		0		0		0	1	8	- О	ۍ ۲	o.	4	ى ك	N *	- 4	0		5	с С	0	7	0	0,	1	2 10	9 54		
		ñ						-	~1		1	-	-9	~		-		l l		9 2	2	-	10	(9 18	6 61	7 MPH 2 MPH 8 MPH 1 MPH	3 MPH) MPH 1526 67.0% 1672 73.4%
	26	ЭС ЭС						U		7	•	,						5	•	0	w			0			36	492)
	21	25			⊃ ¢) (0	0	0	0	e			0	0	D	7 ~	- 2	0			0	0	0	0	0	4	83	n Percentile n Percentile n Percentile n Percentile	ed(Average bace Speec ber in Pace tent in Pace > 30 MPH
	16	20			, ,		0	0		0	0		2	0	0	0,	- c		0	0	0	0	-	0	0	0	9	22	15tl 50tl 85tl 95tl	Mean Spee 10 MPH F Num Perc of Vehicles of Vehicles
	~	15			0 0	D	0	0	0	0	0	0	0	0		0	⊃ <i>~</i>	-	• 0	0	0	0	0	0	0	0	S	10		Number Percent
Eastbound	Start	Time		C1/77/R0	01:00	07:20	03:00	04:00	05:00	00:00	02:00	08:00	00:60	10:00	11:00	12 PM	13:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	Grand Total		Statistics

Sight Line Analysis

Intersection Sight Distance Calculations

Source: A Policy on Geometric Design of Highways and Street, 6th Edition; AASHTO; 2011.

ISD = 1.47 * V * t

V = speed t = time gap

t = 7.5 s for a passenger car for Left Turn from a Stop t = 6.5 s for a passenger car for Right Turn from a Stop

Posted (Regulatory) Speed Limit

Proposed Site Driveway ISD = 1.47 * 25 * 7.5 = 276 ft SAY 280 ft (left-turn from a stop)

Proposed Site Driveway ISD = 1.47 * 25 * 6.5 = 239 ft SAY 240 ft (right-turn from a stop)

Stopping Sight Distance - Posted

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	25	91.875	59.9	151.8
				•	
Direction 2	EB	25	91.875	59.9	151.8

Direction 1	Direction 2
EB	EB
25	25
0	0
2.5	2.5
11.2	11.2
	<u>Direction 1</u> EB 25 0 2.5 11.2

Stopping Sight Distance (SSD) - Source: AASHTO	
SSD = Reaction Distance + Brake Distance	
Reaction Distance = 1.47 x t x V	
Brake Distance = V^2 / (30 x ((a/32.2)+G))	
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)	

Stopping Sight Distance - Average

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	33	121.275	104.4	225.6
Direction 2	WB	32	117.6	98.1	215.7

INPUTS	Direction 1	Direction 2
Travel Direction	EB	WB
Speed	33	32
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO
SSD = Reaction Distance + Brake Distance
Reaction Distance = 1.47 x t x V
Brake Distance = V^2 / (30 x ((a/32.2)+G))
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)

Stopping Sight Distance - 85th Percentile

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	38	139.65	138.4	278.0
Direction 2	EB	35	128.625	117.4	246.0

INPUTS	Direction 1	Direction 2
Travel Direction	EB	EB
Speed	38	35
Grade	0	0
t	2.5	2.5
а	11.2	11.2

Stopping Sight Distance (SSD) - Source: AASHTO
SSD = Reaction Distance + Brake Distance
Reaction Distance = $1.47 \times t \times V$
Brake Distance = V^2 / (30 x ((a/32.2)+G))
Where: t = reaction time (sec) V = travel speed (mph) G= roadway grade a - deceleration rate (ft/sec^2)

Capacity Analyses

Lanes, Volumes, T	imings					
1: Summer Street (Route '	126) &	Milford	Street (Route	109)

	۶	-	\mathbf{i}	*	-	۰.	1	Ť	1	\$	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٢	¢Î			4			\$			4	
Volume (vph)	20	99	3	0	115	44	13	217	1	23	41	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.963			0.999			0.941	
Flt Protected	0.950							0.997			0.990	
Satd. Flow (prot)	1770	2023	0	0	2042	0	0	2042	0	0	1929	0
Flt Permitted	0.406							0.982			0.907	
Satd. Flow (perm)	756	2023	0	0	2042	0	0	2012	0	0	1767	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			25						43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	21	102	3	0	119	45	13	224	1	24	42	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	105	0	0	164	0	0	238	0	0	117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA			NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\September 2015 (5-6 6-7)\790 NB AM.syn MDM Transportation Consultants, Inc.

Lanes, Volumes, T	imings				
1: Summer Street (Route 126) & Milford	Street (Route	109)

2022 No-Build Conditions Weekday Morning Peak Hour

	۶	→	~	4	-	₹	1	Î	1	6	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	11.3	12.2			10.6			14.3			14.3	
Actuated g/C Ratio	0.35	0.38			0.33			0.44			0.44	
v/c Ratio	0.04	0.14			0.24			0.27			0.14	
Control Delay	6.7	7.0			9.9			10.6			7.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	6.7	7.0			9.9			10.6			7.5	
LOS	А	А			А			В			А	
Approach Delay		7.0			9.9			10.6			7.5	
Approach LOS		А			А			В			А	
90th %ile Green (s)	6.9	23.3		11.4	11.4		13.5	13.5		13.5	13.5	
90th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
70th %ile Green (s)	0.0	10.0		10.0	10.0		11.2	11.2		11.2	11.2	
70th %ile Term Code	Skip	Min		Min	Min		Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	10.0		10.0	10.0		8.5	8.5		8.5	8.5	
50th %ile Term Code	Skip	Min		Min	Min		Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	10.0		10.0	10.0		7.8	7.8		7.8	7.8	
30th %ile Term Code	Skip	Hold		Min	Min		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	0.0		0.0	0.0		21.8	21.8		21.8	21.8	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)	2	9			13			26			8	
Queue Length 95th (ft)	10	31			69			99			44	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	615	2023			1983			1852			1630	
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	0.03	0.05			0.08			0.13			0.07	
Intersection Summary	Other											
Area Type:	Other											
Actuated Cycle Length: 32	.2											

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\September 2015 (5-6 6-7)\790 NB AM.syn MDM Transportation Consultants, Inc.

Natural Cycle: 40 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.27 Intersection Signal Delay: 9.2 Intersection Capacity Utilization 38.9% Analysis Period (min) 15 90th %ile Actuated Cycle: 46.8 70th %ile Actuated Cycle: 31.2 50th %ile Actuated Cycle: 28.5 30th %ile Actuated Cycle: 27.8 10th %ile Actuated Cycle: 26.8

Intersection LOS: A ICU Level of Service A

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

1 ø2	 ▶ @4	
35 s	60 s	
₽ ø6	▶ ø7 ₹ø8	
35 s	15 s 45 s	

Intersection							
Int Delay, s/veh	0						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol. veh/h	0	0	0	237	39	0	
Conflicting Peds. #/hr	0	0	0	0	0	0	
Sian Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	_	-	_	
Veh in Median Storage. #	Ő	-	-	0	0	_	
Grade. %	0	-	-	0	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	0	0	0	247	41	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	288	41	41	0	 -	0	
Stage 1	41	-	-	-	-	-	
Stage 2	247	-	-	-	-	-	
Critical Hdwv	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	707	809	1390	-	-	-	
Stage 1	987	-	-	-	-	-	
Stage 2	799	-	-	-	-	-	
Platoon blocked. %				-	-	-	
Mov Cap-1 Maneuver	707	809	1390	-	-	-	
Mov Cap-2 Maneuver	707	-	-	-	-	-	
Stage 1	987	-	-	-	-	-	
Stage 2	799	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	0		0		 0		
HCM LOS	A						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	1390						
HCM Lane V/C Ratio	-						
HCM Control Delay (s)	0	- 0					
HCM Lane LOS	Â	- A					
HCM 95th %tile Q(veh)	0						

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\September 2015 (5-6 6-7)\790 NB AM.syn MDM Transportation Consultants, Inc.

HCM 2010 TWSC			
3: Main Street (Route	126)/Main Street &	Summer Street	(Route 126)

HCM 2010

Intersection												 	
Int Delay, s/veh	4.2												
Movement	FBI	FBT				WBT	WBF	7	SBL	S	SBR		
Vol veh/h	235	178				56		5	4		35	 	
Conflicting Peds #/hr	200	0				0	(0	0		0		
Sign Control	Free	Free				Free	Free	e	Stop	S	Stop		
RT Channelized	-	None				-	Non	e		N	one		
Storage Length	250	-				-		-	100		0		
Veh in Median Storage. #		0				0		-	0		-		
Grade %	-	Ő				0		-	Ō		-		
Peak Hour Factor	94	94				94	9.	4	94		94		
Heavy Vehicles %	5	29				15	1	0	0		5		
Mymt Flow	250	189				60		5	4		37		
	200	100						-					
Major/Minor	Major1				1	Major2			Minor2			 	
Conflicting Flow All	65	0				-		0	751		62		
Stage 1	-	-				-		-	62		-		
Stage 2	-	-				-		-	689		-		
Critical Hdwy	4.15	-				-		-	2.5		2.5		
Critical Hdwy Stg 1	-	-				-		-	5.4		-		
Critical Hdwy Stg 2	-	-				-		-	5.4		-		
Follow-up Hdwy	2.245	-				-		-	2.5		2.5		
Pot Cap-1 Maneuver	1518	-				-		-	1097	1	409		
Stage 1	-	-				-		-	1341		-		
Stage 2	-	-				-		-	645		-		
Platoon blocked, %		-				-		-					
Mov Cap-1 Maneuver	1518	-				-		-	916	1	409		
Mov Cap-2 Maneuver	-	-				-		-	916		-		
Stage 1	-	-				-		-	1341		-		
Stage 2	-	-				-		-	539		-		
Approach						\//R			SB				
						000			77			 	
HCM Control Delay, s HCM LOS	4.0					U			7.7 A				
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	SBLn1	SBLn2							
Capacity (veh/h)	1518	-	-	-	916	1409	1						
HCM Lane V/C Ratio	0.165	-	-	-	0.005	0.026	;						
HCM Control Delay (s)	7.8	-	-	-	8.9	7.6	i						
HCM Lane LOS	A	-	-	-	A	A	١						
HCM 95th %tile Q(veh)	0.6	-	-	-	0	0.1							

0.2

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBR		SBL		SBR	
Vol, veh/h	1	408				84	6		7		1	
Conflicting Peds, #/hr	0	0				0	0		0		0	
Sign Control	Free	Free				Free	Free		Stop		Stop	
RT Channelized	-	None				-	None		-	I	None	
Storage Length	-	-				-	-		0		-	
Veh in Median Storage, #	-	0				0	-		0		-	
Grade, %	-	0				0	-		0		-	
Peak Hour Factor	93	93				93	93		93		93	
Heavy Vehicles, %	0	4				8	0		0		0	
Mvmt Flow	1	439				90	6		8		1	
Major/Minor	Major1				N	/lajor2			Minor2			
Conflicting Flow All	97	0				-	0		535		94	
Stage 1	-	-				-	-		94		-	
Stage 2	-	-				-	-		441		-	
Critical Hdwy	4.1	-				-	-		4.5		4.5	
Critical Hdwy Stg 1	-	-				-	-		5.4		-	
Critical Hdwy Stg 2	-	-				-	-		5.4		-	
Follow-up Hdwy	2.2	-				-	-		4.5		4.5	
Pot Cap-1 Maneuver	1509	-				-	-		562		754	
Stage 1	-	-				-	-		736		-	
Stage 2	-	-				-	-		537		-	
Platoon blocked, %		-				-	-					
Mov Cap-1 Maneuver	1509	-				-	-	•	561		754	
Mov Cap-2 Maneuver	-	-				-	-		561		-	
Stage 1	-	-				-			736		-	
Stage 2	-	-				-			536		-	
Approach	EB					WB			SB			
HCM Control Delay, s	0					0			11.3			
HCM LOS									В			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1							
Capacity (veh/h)	1509	-	-	-	580							
HCM Lane V/C Ratio	0.001	-	-	-	0.015							
HCM Control Delay (s)	7.4	0	-	-	11.3							
HCM Lane LOS	A	А	-	-	В							
HCM 95th %tile Q(veh)	0	-	-	-	0							

Intersection							
Int Delay, s/veh 1.	3						
Maria	CDT						
	EB1	EBR		475			
Vol, ven/n	118	3	0	1/5	40	5	
Conflicting Peds, #/hr	0	0	U 5	0	U Otan	U	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RI Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	/8	78	78	/8	/8	/8	
Heavy Vehicles, %	3	21	100	2	0	0	
Mvmt Flow	151	4	0	224	51	6	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	155	0	377	153	
Stage 1	-	-	-	-	153	-	
Stage 2	-	-	-	-	224	-	
Critical Hdwy	-	-	5.1	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	-	-	3.1	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	996	-	771	873	
Stage 1	-	-	-		816	-	
Stage 2	-	-	-		760	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	996	i -	771	873	
Mov Cap-2 Maneuver	-	-	-	· -	771	-	
Stage 1	-	-	-	. <u>-</u>	816	-	
Stage 2	-	-			760	-	
Approach	EB		WE	}	NB		
HCM Control Delay s	0		()	9.9		
HCM LOS	0			•	A		
Minor Lane/Major Mvmt	NBLn1 NBLn2	EBT	EBR WBL	_ WBT			
Capacity (veh/h)	771 873	-	- 996	ы -			
HCM Lane V/C Ratio	0.067 0.007	-	-				
HCM Control Delay (s)	10 9.2	-	- () -			
HCM Lane LOS	B A	-	- A	۰ ۱			
HCM 95th %tile Q(veh)	0.2 0	-	- () -			

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\September 2015 (5-6 6-7)\790 NB AM.syn MDM Transportation Consultants, Inc.

Lanes, Volumes, T	imings				
1: Summer Street (Route 126	6) & Milford	Street (Route	109)

2022 Build Condition Weekday Morning Peak Hour

	۶	-	\mathbf{i}	∢	←	₹	1	Ť	1	\$	ţ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	4Î			\$			\$			\$	
Volume (vph)	20	99	3	0	115	44	13	217	1	23	71	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.963			0.999			0.953	
Flt Protected	0.950							0.997			0.992	
Satd. Flow (prot)	1770	2023	0	0	2042	0	0	2042	0	0	1946	0
Flt Permitted	0.406							0.981			0.925	
Satd. Flow (perm)	756	2023	0	0	2042	0	0	2010	0	0	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			25						29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adi, Flow (vph)	21	102	3	0	119	45	13	224	1	24	73	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	105	0	0	164	0	0	238	0	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Riaht	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12	0		0	5		0	0
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	Cl+Ex		Cl+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ff)		94			94			94			94	
Detector 2 Size(ff)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	ta+ma	NA			NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\September 2015 (5-6 6-7)\790 B AM.syn MDM Transportation Consultants, Inc.
Lanes, Volumes, T	imings				
1: Summer Street (Route 126) & Milford	Street (Route	109)

	٦		\mathbf{i}	1	4	×.	1	Ť	1	1	ŧ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	11.3	12.2			10.6			14.3			14.3	
Actuated o/C Ratio	0.35	0.38			0.33			0.44			0.44	
v/c Ratio	0.04	0.14			0.24			0.27			0.18	
Control Delay	6.7	7.0			9.9			10.6			8.9	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	6.7	7.0			9.9			10.6			8.9	
	A	A			А			В			А	
Approach Delay		7.0			9.9			10.6			8.9	
Approach LOS		A			А			В			А	
90th %ile Green (s)	6.9	23.3		11.4	11.4		13.5	13.5		13.5	13.5	
90th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
70th %ile Green (s)	0.0	10.0		10.0	10.0		11.2	11.2		11.2	11.2	
70th %ile Term Code	Skip	Min		Min	Min		Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	10.0		10.0	10.0		8.5	8.5		8.5	8.5	
50th %ile Term Code	Skip	Min		Min	Min		Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	10.0		10.0	10.0		7.8	7.8		7.8	7.8	
30th %ile Term Code	Skip	Hold		Min	Min		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	0.0		0.0	0.0		21.8	21.8		21.8	21.8	
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	
Queue Length 50th (ft)	2	9			13			26			12	
Queue Length 95th (ft)	10	31			69			99			58	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Canacity (vph)	615	2023			1983			1850			1672	
Starvation Can Reductn	0.0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Can Reductn	Õ	0			0			0			0	
Reduced v/c Ratio	0.03	0.05			0.08			0.13			0.09	
Intersection Summary												
Area Type:	Other											
Cycle Length: 95 Actuated Cycle Length: 32	.2											

Natural Cycle: 40 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.27 Intersection Signal Delay: 9.4 Intersection Capacity Utilization 40.1% Analysis Period (min) 15 90th %ile Actuated Cycle: 46.8 70th %ile Actuated Cycle: 31.2 50th %ile Actuated Cycle: 28.5 30th %ile Actuated Cycle: 27.8 10th %ile Actuated Cycle: 26.8

Intersection LOS: A ICU Level of Service A

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

	4	
35 s	60 s	
↓ [™] ø6	▶ _{ø7}	4 ∮ ø8
35 c	15 s	45 s

Intersection

Int Delay, s/veh

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Vol, veh/h	0	0	0	237	69	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	0	0	0	247	72	0	
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	319	72	72	0	-	0	
Stage 1	72	-	-	-	-	-	
Stage 2	247	-	-	-	-	-	
Critical Hdwv	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	678	774	1353	-	-	-	
Stage 1	956	-	-	-	-	-	
Stage 2	799	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	678	774	1353	-	-	-	
Mov Cap-2 Maneuver	678	-	-	-	-	-	
Stage 1	956	-	-	-	-	-	
Stage 2	799	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	0		0		0		
HCM LOS	А						
Minor Lane/Maior Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	1353						
HCM Lane V/C Ratio	-						
HCM Control Delay (s)	0	- 0					
HCM Lane LOS	Δ	- A					
HCM 95th %tile O(veh)	л П						
	0		_				

Intersection

Int Delay, s/veh

4.1

Movement	EBL	EBT				WBT	WB	R	SB	L	SBR		
Vol, veh/h	235	178				96		5		4	65		
Conflicting Peds, #/hr	0	0				0		0		0	0		
Sign Control	Free	Free				Free	Fre	e	Sto	р	Stop		
RT Channelized	-	None				-	Nor	ne		-	None		
Storage Length	250	-				-		-	10	0	0		
Veh in Median Storage, #	-	0				0		-		0	-		
Grade, %	-	0				0		-		0	-		
Peak Hour Factor	94	94				94	ę	94	9	4	94		
Heavy Vehicles, %	5	29				15	1	10		0	5		
Mvmt Flow	250	189				102		5		4	69		
Major/Minor	Major1					Major2			Minor	2			
Conflicting Flow All	107	0						0	79	4	105		
Stage 1	-	-				-		-	10	5	-		
Stage 2	-	-				-		-	68	9	-		
Critical Hdwv	4.15	-				-		-	2.	5	2.5		
Critical Hdwy Stg 1	-	-				-		-	5.	4	-		
Critical Hdwy Stg 2	-	-				-		-	5.	4	-		
Follow-up Hdwy	2.245	-				-		-	2.	5	2.5		
Pot Cap-1 Maneuver	1465	-				-		-	107	9	1388		
Stage 1	-	-				-		-	127	6	-		
Stage 2	-	-				-		-	64	-5	-		
Platoon blocked, %		-				-		-					
Mov Cap-1 Maneuver	1465	-				-		-	89	5	1388		
Mov Cap-2 Maneuver	-	-				-		-	89)5	-		
Stage 1	-	-				-		-	127	'6	-		
Stage 2	-	-				-		-	53	85	-		
Approach	EB					WB			S	B			
HCM Control Delay s	4.5					0			7	.8			
HCM LOS										А			
Minor Lane/Major Mymt	FBI	FRT	WRT	WBR	SBI n1	SBI n2)						
Capacity (voh/h)	1/65			-	20211	1388	 }					 	
Capacity (ven/n)	0 171	-	-	-	0.005	0.05	,						
HOM Control Dolow (a)	υ.171 Ω	-	-	-	0.000	77	,						
	0	-	-	-	5 A	Δ							
	A A	-	-	-	r r	\ /~	,)						
HUNI YOTN %THE Q(VEN)	0.0	-	-	-	L L	0.2	_						

Intersection

Int Delay, s/veh

Movement	EBL	EBT			١	WBT	WBR		SBL	•	SBR	
Vol. veh/h	1	408				84	76		7	,	1	
Conflicting Peds, #/hr	0	0				0	0		C)	0	
Sign Control	Free	Free				Free	Free		Stop)	Stop	
RT Channelized	-	None				-	None		-	-	None	
Storage Length	-	-				-	-		C)	-	
Veh in Median Storage, #	-	0				0	-		C)	-	
Grade, %	-	0				0	-		C)	-	
Peak Hour Factor	93	93				93	93		93	}	93	
Heavy Vehicles, %	0	4				8	0		C)	0	
Mvmt Flow	1	439				90	82		8	}	1	
Major/Minor	Major1				М	ajor2			Minor2	2		
Conflicting Flow All	172	0				-	C		572	2	131	
Stage 1	-	-				-	-	•	131		-	
Stage 2	-	-				-	-		441	1	-	
Critical Hdwy	4.1	-				-	-		4.5	5	4.5	
Critical Hdwy Stg 1	-	-				-	-	-	5.4	1	-	
Critical Hdwy Stg 2	-	-				-		-	5.4	1	-	
Follow-up Hdwy	2.2	-				-	-	-	4.5	5	4.5	
Pot Cap-1 Maneuver	1417	-				-		-	548	3	736	
Stage 1	-	-				-		-	71:	3	-	
Stage 2	-	-				-		-	537	7	-	
Platoon blocked, %		-				-		-				
Mov Cap-1 Maneuver	1417	-				-		-	54	7	736	
Mov Cap-2 Maneuver	-	-				-		-	54	7	-	
Stage 1	-	-				-		-	71	3	-	
Stage 2	-	-				-		-	53	6	-	
0												
Approach	EB					WB			SI	3		
HCM Control Delay, s	0					0			11.	5		
HCM LOS									I	3		
Minor Lane/Maior Mvmt	EBL	EBT	WBT	WBR S	BLn1							
Capacity (veh/h)	1417	-	-	-	565							
HCM Lane V/C Ratio	0.001	-	-	- (0.015							
HCM Control Delay (s)	7.5	0	-	-	11.5							
HCM Lane LOS	A	Á	-	-	В							
HCM 95th %tile Q(veh)	0	-	-	-	0							

Intersection
1110130001011

Int Delay, s/veh

Vol, veh/h 118 63 0 175 40 5 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Free Free Free Free Stop Stop RT Channelized - None - None - None Storage Length - - - 0 160 Veh in Median Storage, # 0 - - 0 0 Grade, % 0 - - 0 0 - Peak Hour Factor 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mymt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 192 - Stage 1 - - 192 - Stage 1 - - - 192 - Stage 2 - - 192 - Stage 2 - <t< th=""><th>Movement</th><th>EBT</th><th>EBR</th><th>WBL</th><th>WBT</th><th>NBL</th><th>NBR</th><th></th></t<>	Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Conflicting Peds, #/hr 0 100 </td <td>Vol, veh/h</td> <td>118</td> <td>63</td> <td>0</td> <td>175</td> <td>40</td> <td>5</td> <td></td>	Vol, veh/h	118	63	0	175	40	5	
Sign Control Free Free Free Free Stop Stop RT Channelized - None - None - None Storage Length - - - 0 160 Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - - Peak Hour Factor 78 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mymt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 6 192 - Stage 1 - - - 192 - - 192 - Stage 2 - - - 224 - - Critical Hdwy - - 5.1 - 3.8 3.8 <td>Conflicting Peds, #/hr</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Conflicting Peds, #/hr	0	0	0	0	0	0	
RT Channelized - None - None - None Storage Length - - - 0 160 Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mvmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - - Stage 2 - - - 224 - - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5	Sign Control	Free	Free	Free	Free	Stop	Stop	
Storage Length - - - 0 160 Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 78 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mvmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 6 Major/Minor Major1 0 232 0 416 192 Stage 1 - - - 192 - - Stage 2 - - - 224 - - Critical Hdwy - - 5.1 - 3.8 3.8 - Critical Hdwy Stg 1 - - - 5.4 - - Follow-up Hdwy - - 3.1 - 3.8 3.8 3.8	RT Channelized	-	None	-	None	-	None	
Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 78 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mwmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - 5tage 2 - - Critical Hdwy - - 5.1 - 3.8 3.8 - Critical Hdwy Stg 1 - - - 5.4 - - Critical Hdwy Stg 2 - - - 5.4 - - Follow-up Hdwy - - 3.1 - 3.8 3.8 3.8	Storage Length	-	-	-	-	0	160	
Grade, % 0 - - 0 0 - Peak Hour Factor 78 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mvmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - - Stage 2 - - - 224 - - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Veh in Median Storage, #	0	-	-	0	0	-	
Peak Hour Factor 78 78 78 78 78 78 78 Heavy Vehicles, % 3 21 100 2 0 0 Mvmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - - Stage 2 - - - 224 - - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8 Deb 0 AM - - - 5.4 -	Grade, %	0	-	-	0	0	-	
Heavy Vehicles, % 3 21 100 2 0 0 Mvmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Peak Hour Factor	78	78	78	78	78	78	
Mvmt Flow 151 81 0 224 51 6 Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Heavy Vehicles, %	3	21	100	2	0	0	
Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - - 192 - Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Mymt Flow	151	81	0	224	51	6	
Major/Minor Major1 Major2 Minor1 Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - 192 - Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - 5.4 - Critical Hdwy Stg 2 - - 5.4 - Follow-up Hdwy - - 3.8 3.8								
Conflicting Flow All 0 0 232 0 416 192 Stage 1 - - - - 192 - Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Major/Minor	Major1		Major2		Minor1		
Stage 1 - - - 192 - Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.8 3.8	Conflicting Flow All	0	0	232	0	416	192	
Stage 2 - - - 224 - Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Stage 1	-	-	-	-	192	-	
Critical Hdwy - - 5.1 - 3.8 3.8 Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Stage 2	-	-	-	-	224	-	
Critical Hdwy Stg 1 - - - 5.4 - Critical Hdwy Stg 2 - - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Critical Hdwv	-	-	5.1	-	3.8	3.8	
Critical Hdwy Stg 2 - - 5.4 - Follow-up Hdwy - - 3.1 - 3.8 3.8	Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Follow-up Hdwy 3.1 - 3.8 3.8	Critical Hdwy Stg 2	-	-	-	-	5.4	-	
	Follow-up Hdwv	-	-	3.1	-	3.8	3.8	
Pot Gap-1 Maneuver 922 - 750 855	Pot Cap-1 Maneuver	-	-	922	-	755	855	
Stage 1 785 -	Stage 1	-	-	-	-	785	-	
Stage 2 760 -	Stage 2	-	-	-	-	760	_	
Platoon blocked. %	Platoon blocked. %	-	-		-			
Mov Cap-1 Maneuver 922 - 755 855	Mov Cap-1 Maneuver	-	-	922	-	755	855	
Mov Cap-2 Maneuver 755 -	Mov Cap-2 Maneuver	-	-	-	-	755	-	
Stage 1 785 -	Stage 1	-	-	-	-	785	-	
Stage 2 760 -	Stage 2	-	-	-	-	760	-	
	Oldgo 2							
Approach EB WB NB	Approach	EB		WB		NB		
HCM Control Delay s 0 0 10	HCM Control Delay, s	0		0		10		
HCM LOS BOLL, STATE STA	HCM LOS	-				В		
Minor Lane/Major Mymt NBLn1 NBLn2 EBT EBR WBL WBT	Minor Lane/Maior Mymt	NBLn1 NBLn2	EBT	EBR WBL	WBT			
Capacity (veb/b) $755 855 - 922 -$	Capacity (veh/h)	755 855		- 922			*****	
HCM Lane V/C Ratio 0.068 0.007	HCM Lane V/C Ratio		-		-			
HCM Control Delay (s) $10.1 9.2 - 0 -$	HCM Control Delay (s)	10.1 0.2	_	- 0	-			
$HCMLang LOS = B \Delta \Delta -$	HCM Lang LOS	R Δ	_	- Δ	_			
HCM 95th % tile $O(veh)$ 0.2 0 0 -	HCM 95th %tile O(veh)		-	- 0	-			

Lanes, Volumes, Timings 1: Summer Street (Route 126) & Milford Street (Route 109)

2021 Build Conditions Weekday Morning Peak Hour

	۶		$\mathbf{\hat{v}}$	*	4	Ł	*	Ť	1	1	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	د]			4			\$			ф.	
Volume (vph)	154	248	10	12	434	54	31	312	12	29	216	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.985			0.996			0.950	
Flt Protected	0.950				0.999			0.996			0.996	
Satd. Flow (prot)	1770	2019	0	0	2094	0	0	2033	0	0	1943	0
Flt Permitted	0.253				0.991			0.926			0.950	_
Satd. Flow (perm)	471	2019	0	0	2077	0	0	1890	0	0	1854	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			2			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	159	256	10	12	447	56	32	322	12	30	223	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	266	0	0	515	0	0	366	0	0	402	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	-		12	Ū		0	Ũ		0	5
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		Ci+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			Cl+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8	TENISOR 200 JANUAR		2		Berlin and	6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B AM.syn MDM Transportation Consultants, Inc.

Lanes, Volumes, Timings <u>1: Summer Street (Route 126) & Milford Street (Route 109)</u>

2021 Build Conditions Weekday Morning Peak Hour

	۶		\mathbf{i}	*	4	×.	1	Ť	1	1	Ļ	\checkmark
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	37.2	37.2			22.5			18.9			18.9	
Actuated g/C Ratio	0.56	0.56			0.34			0.28			0.28	
v/c Ratio	0.36	0.24			0.73			0.68			0.73	
Control Delay	10.4	8.7			26.6			29.5			29.7	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	10.4	8.7			26.6			29.5			29.7	
LOS	В	А			С			С			С	
Approach Delay		9.4			26.6			29.5			29.7	
Approach LOS		А			С			С			С	
90th %ile Green (s)	10.0	51.0		36.0	36.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	
70th %ile Green (s)	10.0	42.5		27.5	27.5		23.1	23.1		23.1	23.1	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
50th %ile Green (s)	10.0	37.3		22.3	22.3		18.5	18.5		18.5	18.5	
50th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	9.2	31.3		17.1	17.1		14.6	14.6		14.6	14.6	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	6.9	24.5		12.6	12.6		10.7	10.7		10.7	10.7	
10th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	27	4/			1/6			129			134	
Queue Length 95th (ft)	72	114			330			264			277	
Internal Link Dist (ft)	450	6820			920			1920			920	
Turn Bay Length (π)	150	4077			4000			004			000	
Base Capacity (vpn)	469	1677			1322			901			900	
Starvation Cap Reductin	0	0			0			0			0	
Spillback Cap Reductin	0	0			0			0			0	
Storage Cap Reductin	0	0			0			0			0	
Reduced V/C Ratio	0.34	0.16			0.39			0.41			0.45	
Intersection Summary	Other	-19-16-17-16-16-1										
Area Type: Cyclo Longth: 05	Other											
Cycle Length, 90												

Actuated Cycle Length: 66.7

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B AM.syn MDM Transportation Consultants, Inc.

Natural Cycle: 60 Control Type: Actuated-Uncoordinated Maximum v/c Ratio: 0.73 Intersection Signal Delay: 23.7 Intersection Capacity Utilization 80.5% Analysis Period (min) 15 90th %ile Actuated Cycle: 91 70th %ile Actuated Cycle: 75.6 50th %ile Actuated Cycle: 65.8 30th %ile Actuated Cycle: 55.9 10th %ile Actuated Cycle: 45.2

Intersection LOS: C ICU Level of Service D

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

¢1 _{g2}	<u></u> ø4
35 s	60 s
↓ ø6	ø7 ∲ ø8
35 s	15 s

Intersection

Int Delay, s/veh

Movement	EBL	EBR		NBL	NBT	SBT SBR
Vol, veh/h	0	0		6	370	180 6
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	96	96		96	96	96 96
Heavy Vehicles, %	0	100		33	2	7 0
Mymt Flow	0	0		6	385	188 6
	·	-		•		
Major/Minor	Minor2		Ν	lajor1		Major2
Conflicting Flow All	589	191		194	0	- 0
Stage 1	191	-		-	-	
Stage 2	398	-		-	-	
Critical Hdwy	6.4	7.2		4.43	-	
Critical Hdwy Stg 1	5.4	-		-	-	
Critical Hdwy Sto 2	5.4	-		-	-	
Follow-up Hdwy	3.5	4.2		2.497	-	
Pot Cap-1 Maneuver	474	653		1214	-	
Stage 1	846	-		_	-	
Stage 2	683	-		-	-	
Platoon blocked. %					-	<u> </u>
Mov Cap-1 Maneuver	471	653		1214	-	<u> </u>
Mov Cap-2 Maneuver	471	-		-	-	
Stage 1	846	-		-	-	
Stage 2	679	-		-	-	
Approach	EB			NB		SB
HCM Control Delay, s	0			0.1		0
HCM LOS	А					
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR		
Capacity (veh/h)	1214		-	-		
HCM Lane V/C Ratio	0.005		-	-		
HCM Control Delay (s)	8	0 0	-	-		
HCM Lane LOS	А	A A	-	-		
HCM 95th %tile Q(veh)	0		-	-		
Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh)	NBL 1214 0.005 8 A 0	NBT EBLn1 0 0 A A 	<u>SBT</u> - - - - -	<u>SBR</u> - - -		

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B AM.syn MDM Transportation Consultants, Inc.

3: Main Street (Ro	ute 126)/Mai	n Stre	et &	Sum	mer	Stree	et (Ro	oute 12	26)	We	eekday	Morning	Peak Hour
	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>							in an		da sensen fresk sids a		******		
Intersection														
Int Delay, s/veh 3	5.7													
Mayamaat	EDI	FDT							CDI		CDD			
						400	20		<u> 17</u>		470			
Vol, Ven/n	343	517				139	33		17		170			
Conflicting Peus, #/III	U Free	U Eroo				U Eroo	U Eroo		U Stop		U Ctop			
Sign Control	Free	Free				Fiee	Nana		Stop		Siop			
	-	None				-	None		-		None			
Storage Length	250	-				-	-		100		U			
Ven in Median Storage, #	-	0				0	-		0		-			
Grade, %	-	0				0	-		0		-			
Peak Hour Factor	94	94				94	94		94		94			
Heavy Vehicles, %	5	29				15	10		0		5			
Mvmt Flow	365	550				148	35		18		181			
Major/Minor	Major1				N/	laior?			Minor?					
	102				17	ajuiz			1445		105			
	183	U				-	U		1440		100			
Stage	-	-				-	-		000		-			
Stage 2	-	-				-	-		1280		-			
Critical Hdwy	4.15	-				-	-		2.5		2.5			
Critical Hdwy Stg 1	-	-				-	-		5.4		-			
Critical Hdwy Stg 2	-	-				-	-		5.4		-			
Follow-up Hdwy	2.245	-				-	-		2.5		2.5			
Pot Cap-1 Maneuver	1374	-				-	-		836		1359			
Stage 1	-	-				-	-		1190		-			
Stage 2	-	-				-	-		319		-			
Platoon blocked, %		-				-	-							
Mov Cap-1 Maneuver	1374	-				-	-		614		1359			
Mov Cap-2 Maneuver	-	-				-	-		614		-			
Stage 1	-	-				-	-	-	1190		-			
Stage 2	-	-				-	-	•	234		-			
Annragah	ED								00					
Approach														
HCM Control Delay, s	3.4					0			8.4					
HCM LOS									А					
Minor Lane/Maior Mymt	EBL	EBT	WBT	WBR S	SBLn1 S	SBLn2								
Capacity (veh/h)	1374		_	-	614	1359								
HCM Lane V/C Ratio	0.266	-	-	-	0.029	0.133								
HCM Control Delay (e)	8 A	-	-	-	11	R 1								
HCM Lane LOS	Δ	-	-	_	R	Δ								
HCM 95th %tile O(veh)	11	-	-	_	01	05								
	1.1	-	-	-	0.1	0.0								

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B AM.syn MDM Transportation Consultants, Inc.

Intersection

Int Delay, s/veh

Movement	EBL	EBT			١	WBT	WBR		SBL	S	BR	
Vol, veh/h	1	842				229	80		18		0	
Conflicting Peds, #/hr	0	0				0	0		0		0	
Sign Control	Free	Free				Free	Free		Stop	S	Stop	
RT Channelized	-	None				-	None		-	N	one	
Storage Length	-	-				-	-		0		-	
Veh in Median Storage, #	-	0				0	-		0		-	
Grade, %	-	0				0	-		0		-	
Peak Hour Factor	93	93				93	93		93		93	
Heavy Vehicles, %	0	4				8	0		0		0	
Mvmt Flow	1	905				246	86		19		0	
Maior/Minor	Maior1				M	aior2		1	Minor2			
Conflicting Flow All	332	0					0		1197		289	
Stage 1		-				-	-		289			
Stage 2	-	-				-	-		908		-	
Critical Hdwv	4.1	-				-	-		4.5		4.5	
Critical Hdwy Stg 1	-	-				-	-		5.4		-	
Critical Hdwy Stg 2	-	-				-	-		5.4		-	
Follow-up Hdwy	2.2	-				-	-		4.5		4.5	
Pot Cap-1 Maneuver	1239	-				-	-		345		664	
Stage 1	-	-				-	-		618		-	
Stage 2	-	-				-	-		343		-	
Platoon blocked, %		-				-	-					
Mov Cap-1 Maneuver	1239	-				_	-		344		664	
Mov Cap-2 Maneuver	-	-				-	-		344		-	
Stage 1	-	-				-	-		618		-	
Stage 2	-	-				-	-		342		-	
Approach	FB					WB			SB			
HCM Control Delay s	0					0			16.1			
HCM LOS	Ŭ					Ũ			C			
Minor Lano/Major Murat	CDI	CDT			:RIn1							
	1000	EDT	VVDI	WDIN O	244							······································
	1239	-	-	-	344 0.059							
HUW Lane V/U Kallo	0.001	-	-	-	0.000							
HUM Control Delay (S)	7.9	U A	-	-	1.01							
	A	A	-	-								
HUM SOU WIIE O(VEU)	U	-	-	-	U.Z							

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B AM.syn MDM Transportation Consultants, Inc.

Intersection

Int Delay, s/veh

Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	372	77	1	499	81	18	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	78	78	78	78	78	78	
Heavy Vehicles, %	3	21	100	2	0	0	
Mvmt Flow	477	99	1	640	104	23	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	576	0	1168	526	······································
Stage 1	-	-	-	-	526	-	
Stage 2	-	-	-	-	642	-	
Critical Hdwy	-	-	5.1	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	-	-	3.1	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	651	-	480	709	
Stage 1	-	-	-	-	561	-	
Stage 2	-	-	-	-	498	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	651	-	479	709	
Mov Cap-2 Maneuver	-	-	-	-	479	-	
Stage 1	-	-	-	-	561	-	
Stage 2	-	-	-	-	497	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0		13.8		
HCM LOS	-		-		В		
Minor Lane/Major Mymt	NBI n1 NBI n2	FRT		WRT			
Capacity (voh/h)	170 700		GE1	1101			
Capacity (Vell/II)	419 109	-	0.000	-			
HOW Cantral Dalay (a)	1/6 100	-	- 0.00Z 10 F	-			
HCM Long LOC	14.0 IV.Z	-	- 10.0	~			
		-	- D ^	А			
HOINI YOTU WTILE Q(VEN)	0.0 0.1	-	- 0	-			

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B AM.syn MDM Transportation Consultants, Inc.

Intersection	
IIII CI SECIUII	

Int Delay, s/veh

HCM 95th %tile Q(veh)

4.3

Movement	EBL	EBT			٧	VBT	WBR	SB	L	SBR	
Vol, veh/h	130	18				10	70		0	0	
Conflicting Peds, #/hr	0	0				0	0		0	0	
Sign Control	Free	Free			F	ree	Free	Sto	р	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	ç	2	92	
Heavy Vehicles. %	0	0				0	0		0	0	
Mvmt Flow	141	20				11	76		0	0	
Major/Minor	Major1				Ма	ajor2		Minoi	r2		
Conflicting Flow All	87	0				-	0	35	51	49	
Stage 1	-	-				-	-	4	19	-	
Stage 2	-	-				-	-	30)2	-	
Critical Hdwy	4.1	-				-	-	6	.4	6.2	
Critical Hdwy Stg 1	-	-				-	-	5	.4	-	
Critical Hdwy Stg 2	-	-				-	-	5	.4	-	
Follow-up Hdwy	2.2	-				-	-	3	.5	3.3	
Pot Cap-1 Maneuver	1522	-				-	-	65	50	1025	
Stage 1	-	-				-	-	97	79	-	
Stage 2	-	-				-	-	75	55	-	
Platoon blocked, %		-				-	-				
Mov Cap-1 Maneuver	1522	-				-	-	58	39	1025	
Mov Cap-2 Maneuver	-	-				-	-	58	39	-	
Stage 1	-	-				-	-	97	79	-	
Stage 2	-	-				-	-	68	84	. -	
Approach	EB					WB		ç	SB		
HCM Control Delay s	6.7					0			0		
HCM LOS	011								A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	BLn1						
Capacity (veh/h)	1522	-	-	-	-						
HCM Lane V/C Ratio	0.093	-	-	-	-						
HCM Control Delay (s)	7.6	0	-	-	0						
HCM Lane LOS	A	. Α	-	-	А						
HCM 95th %tile Q(veh)	0.3	-	-	-	-						

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\Response\790 B AM (Site Driveway).syn MDM Transportation Consultants, Inc.

Lanes, Volumes, Timings	
1: Summer Street (Route 126	6) & Milford Street (Route 109)

	۶	→	\mathbf{v}	4	+	Ł	1	Ť	1	1	ŧ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	4Î			\$			ф ,	-		4	
Volume (vph)	108	355	29	4	425	34	38	177	11	44	334	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			. 0.990			0.994			0.969	
Flt Protected	0.950							0.992			0.996	
Satd. Flow (prot)	1770	2011	0	0	2108	0	0	2020	0	0	1970	0
Flt Permitted	0.254				0.997			0.862			0.953	
Satd. Flow (perm)	473	2011	0	0	2101	0	0	1756	0	0	1885	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			5			3			16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	111	366	30	4	438	35	39	182	11	45	344	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	396	0	0	477	0	0	232	0	0	504	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	Cl+Ex		CI+Ex	Cl+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

Lanes, Volumes, T	imings				
1: Summer Street ((Route 126)) & Milford	Street (Route	109)

2022 No-Build Conditions Weekday Evening Peak Hour

	۶	-+	\mathbf{i}	4	4	₹	1	Ť	1	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.1	32.1			21.8			23.3			23.3	
Actuated g/C Ratio	0.48	0.48			0.33			0.35			0.35	
v/c Ratio	0.27	0.41			0.69			0.38			0.75	
Control Delay	11.4	12.2			27.1			20.8			29.4	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	11.4	12.2			27.1			20.8			29.4	
LOS	В	В			С			С			С	
Approach Delay		12.0			27.1			20.8			29.4	
Approach LOS		В			С			С			С	
90th %ile Green (s)	10.0	48.0		33.0	33.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	41.2		26.2	26.2		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	9.5	37.1		22.6	22.6		24.9	24.9		24.9	24.9	
50th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	7.9	30.3		17.4	17.4		19.1	19.1		19.1	19.1	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	10.9		10.9	10.9		12.1	12.1		12.1	12.1	
10th %ile Term Code	Skip	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	24	97			184			75			189	
Queue Length 95th (ft)	53	174			308			158			#374	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	447	1607			1336			893			965	
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	0.25	0.25			0.36			0.26			0.52	
Intersection Summary	011											
Area Lype:	Other											
Actuated Cycle Length: 66	.7											

 Natural Cycle: 60

 Control Type: Actuated-Uncoordinated

 Maximum v/c Ratio: 0.75

 Intersection Signal Delay: 22.5

 Intersection Capacity Utilization 88.7%

 ICU Level of Service E

 Analysis Period (min) 15

 90th %ile Actuated Cycle: 88

 70th %ile Actuated Cycle: 81.2

 50th %ile Actuated Cycle: 59.4

 10th %ile Actuated Cycle: 33

 #

 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2		
35 s	60 s	
ø6	▶ _{ø7} ₩ _{ø8}	
35 s	15 s	

Intersection							
Int Delay, s/veh	0						
Movement	FRI	FBR	NBI	NRT	SBT	SBR	
Vol veh/h	<u></u>			206	3/1		
Conflicting Peds #/hr	0	0	0	200	041 0	0	
Sign Control	Ston	Ston	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	<u>-</u>	-	
Veh in Median Storage #	0	_	-	0	0	_	
Grade %	Õ	_	-	0	0	_	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles %	0	100	33	2	7	0	
Mymt Flow	Õ	0	0	215	355	0	
	Ū	0	0	210	000	U	
Maior/Minor	Minor2		Maior1		Maior2		
Conflicting Flow All	570	355	355	0		0	
Stage 1	355	-	-	-	-	-	
Stage 2	215	-	-	-	-	-	
Critical Hdwv	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-		-	
Follow-up Hdwy	3.5	4.2	2,497	-		-	
Pot Cap-1 Maneuver	486	515	1051	-	-	-	
Stage 1	714	-	-	-	-	-	
Stage 2	826	-	-	-	-	-	
Platoon blocked. %				-	-	-	
Mov Cap-1 Maneuver	486	515	1051	-	-	-	
Mov Cap-2 Maneuver	486	-	-	-	-	-	
Stage 1	714	-	-	-	-	-	
Stage 2	826	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	0		0		0		
HCM LOS	А						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	1051		-				
HCM Lane V/C Ratio	-						
HCM Control Delay (s)	0	- 0					
HCM Lane LOS	А	- A					
HCM 95th %tile Q(veh)	0						

2022 No-Build Conditions

3: Main Street (Route 126)/Main Street & Summer Street (Route 126)

Weekday Evening Peak Hour

Intersection	
Int Dalau alua	la.

hat Dalars also	
int Delay, s/ven	4.4

Movement	EBL	EBT				WBT	WB	R		SBL	SBR		
Vol, veh/h	181	344				500	2	2		30	307	,	
Conflicting Peds, #/hr	0	0				0		0		0	0)	
Sign Control	Free	Free				Free	Fre	е	5	Stop	Stop)	
RT Channelized	-	None				-	Non	е		-	None)	
Storage Length	250	-				-		-		100	0)	
Veh in Median Storage, #	-	0				0		-		0	-	•	
Grade, %	-	0				0		-		0	-	-	
Peak Hour Factor	94	94				94	9	4		94	94	ŀ	
Heavy Vehicles, %	5	8				20	1	0		0	1		
Mvmt Flow	193	366				532	2	3		32	327	,	
Major/Minor	Major1					Major2			Mir	nor2			
Conflicting Flow All	555	0				-		0	1	295	544	ŀ	
Stage 1	-	-				-		-		544	-	-	
Stage 2	-	-				-		-		751		-	
Critical Hdwy	4.15	-				-		-		4.1	3.4	ļ	
Critical Hdwy Stg 1	-	-				-		-		5.4	-	-	
Critical Hdwy Stg 2	-	-				-		-		5.4	-	-	
Follow-up Hdwy	2.245	-				-		-		4.1	3.4	ļ	
Pot Cap-1 Maneuver	1001	-				-		-		384	810)	
Stage 1	-	-				-		-		521	-	-	
Stage 2	-	-				-		-		424	-	-	
Platoon blocked, %		-				-		-					
Mov Cap-1 Maneuver	1001	-				-		-		310	810)	
Mov Cap-2 Maneuver	-	-				-		-		310		-	
Stage 1	-	-				-		-		521		-	
Stage 2	-	-				-		-		342		-	
Approach	EB					WB				SB			
HCM Control Delay, s	3.3					0				12.9			
HCM LOS										В			
Minor Lane/Major Mymt	FRI	FRT	WRT		RI n1	SBI n2							
Capacity (voh/h)			1101		310	00LiiZ 010					1-1		<u></u>
HCM Lang V/C Patio	0 1001	-	-	-	010	010							
HCM Control Doloy (a)	0.192	-	-	-	17 0	10.403							
HCM Lang LOS	9.0 ^	-	-	-	17.9	۲2.4 ص							
	A	-	-	-		В В							
now som whe Q(ven)	U.7	-	-	-	0.3	2							

Inters	ection.
11110101	00000

Int Delay, s/veh

Vol, veh/h 0 492 771 34 37 0 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Free Free Free Free Stop Stop RT Channelized - None - None - None Storage Length - - 0 - 0 - Veh in Median Storage, # - 0 0 - 0 - Grade, % - 0 0 - 0 - - Peak Hour Factor 94 94 94 94 94 94 Heavy Vehicles, % 25 2 3 10 9 0 Major/Minor Major1 Major2 Minor2 - - - 838 Stage 1 - - - 838 - - 523 - Stage 2 - - - - 523 - - - 523 - <th>Movement</th> <th>EBL</th> <th>EBT</th> <th></th> <th></th> <th></th> <th>WBT</th> <th>WBR</th> <th></th> <th>SB</th> <th>L</th> <th>SBR</th> <th>2</th> <th></th>	Movement	EBL	EBT				WBT	WBR		SB	L	SBR	2	
Conflicting Peds, #/hr 0 - None None	Vol, veh/h	0	492				771	34		3	7	C)	
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 94 94 94 94 94 94 94 Heavy Vehicles, % 25 2 3 10 9 0 Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2	Conflicting Peds, #/hr	0	0				0	C)		0	C)	
RT Channelized - None - None Storage Length - - 0 - 0 - Veh in Median Storage, # - 0 0 - 0 - - Grade, % - 0 0 - 0 - - - Grade, % - 0 0 - 0 - - - Peak Hour Factor 94 94 94 94 94 94 94 Heavy Vehicles, % 25 2 3 10 9 0 Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - - Stage 2 - - - 523 - -	Sign Control	Free	Free				Free	Free	;	Sto	р	Stop)	
Storage Length - - - 0 - Veh in Median Storage, # - 0 0 - 0 - Grade, % - 0 0 - 0 - - Peak Hour Factor 94 94 94 94 94 94 Heavy Vehicles, % 25 2 3 10 9 0 Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - - Stage 2 - - - 523 - -	RT Channelized	-	None				-	None	;		-	None	;	
Veh in Median Storage, # - 0 - 0 - Grade, % - 0 0 - 0 - Peak Hour Factor 94 94 94 94 94 Heavy Vehicles, % 25 2 3 10 9 0 Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - - Stage 2 - - - 523 - -	Storage Length	-	-				-		•		0		-	
Grade, % - 0 0 - 0 - Peak Hour Factor 94 94 94 94 94 94 Heavy Vehicles, % 25 2 3 10 9 0 Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - - Stage 2 - - - 523 -	Veh in Median Storage, #	-	0				0				0		-	
Peak Hour Factor 94	Grade, %	-	0				0		•		0		-	
Heavy Vehicles, % 25 2 3 10 9 0 Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - Stage 2 - - - 523 -	Peak Hour Factor	94	94				94	94	Ļ	9	4	94	1	
Mvmt Flow 0 523 820 36 39 0 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - Stage 2 - - - 523 -	Heavy Vehicles, %	25	2				3	10)		9	()	
Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - Stage 2 - - - 523 -	Mvmt Flow	0	523				820	36	;	3	9	()	
Major/Minor Major1 Major2 Minor2 Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - Stage 2 - - - 523 -														
Conflicting Flow All 856 0 - 0 1361 838 Stage 1 - - - 838 - Stage 2 - - - 523 -	Major/Minor	Major1				М	ajor2			Minor	2			
Stage 1 - - 838 - Stage 2 - - 523 -	Conflicting Flow All	856	0				-	()	136	1	838	3	
Stage 2 523 -	Stage 1	-	-				-		-	83	8		-	
	Stage 2	-	-				-		-	52	3		-	
Critical Hdwy 4.35 4.5 4.5	Critical Hdwy	4.35	-				-		-	4.	5	4.5	5	
Critical Hdwy Stg 1 5.49 -	Critical Hdwy Stg 1	-	-				-		-	5.4	.9		-	
Critical Hdwy Stg 2 5.49 -	Critical Hdwy Stg 2	-	-				-		-	5.4	9		-	
Follow-up Hdwy 2.425 4.5 4.5	Follow-up Hdwy	2.425	-				-		-	4.	5	4.5	5	
Pot Cap-1 Maneuver 694 304 453	Pot Cap-1 Maneuver	694	-				-		-	30)4	453	3	
Stage 1	Stage 1	-	-				-		-	36	60		-	
Stage 2 491 -	Stage 2	-	-				-		-	49)1		-	
Platoon blocked, %	Platoon blocked, %		-				-		-					
Mov Cap-1 Maneuver 694 304 453	Mov Cap-1 Maneuver	694	-				-		-	30)4	453	3	
Mov Cap-2 Maneuver 304 -	Mov Cap-2 Maneuver	-	-				-		-	30)4		-	
Stage 1	Stage 1	-	-				-		-	36	60		-	
Stage 2 491 -	Stage 2	-	-				-		-	49)1		-	
	5													
Approach EB WB SB	Approach	EB					WB			S	В			
HCM Control Delay, s 0 0 18.6	HCM Control Delay, s	0					0			18.	.6			
HCM LOS C	HCM LOS										С			
Minor Lane/Maior Mymt EBL EBT WBT WBR SBLn1	Minor Lane/Maior Mymt	FBI	EBT	WBT	WBR S	BLn1								
Capacity (veh/h) 694 304	Capacity (veh/h)	694			-	304								
HCM Lane V/C Ratio $ -$ 0.129	HCM Lane V/C Ratio	- 00	-	-	- (0 129								
HCM Control Delay (s) $0 18.6$	HCM Control Delay (s)	- 0	_	_	-	18.6								
HCM Lane LOS Δ C	HCM Lane LOS	۰ ۸	-	-	_	ю.о С								
HCM 95th %tile $O(veh)$ 0 0.4	HCM 95th %tile O(veh)	л П	-	-	-	04								

Intersection							
Int Delay, s/veh	1.2		·				
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	477	134	15	522	82	5	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	86	86	86	86	86	86	
Heavy Vehicles, %	2	1	13	3	5	0	
Mvmt Flow	555	156	17	607	95	6	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	710	0	1275	633	
Stage 1	-	-	-	-	633	-	
Stage 2	-	-	-	-	642	-	
Critical Hdwy	-	-	4.23	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.45	-	
Critical Hdwy Stg 2	-	-	-	-	5.45	-	
Follow-up Hdwy	-	-	2.317	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	840	-	449	666	
Stage 1	-	-	-	-	498	-	
Stage 2		-	-	-	494	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	840	-	435	666	
Mov Cap-2 Maneuver	-	-	-	-	435	-	
Stage 1	-	-	-	-	498	-	
Stage 2	-	-	-	-	479	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0.3		15.3		
HCM LOS					С		
Minor Lane/Major Mvmt	NBLn1 NBLn2	EBT	EBR WBL	WBT			
Capacity (veh/h)	435 666	-	- 840	-			
HCM Lane V/C Ratio	0.219 0.009	-	- 0.021	-			
HCM Control Delay (s)	15.6 10.5	-	- 9.4	0			
HCM Lane LOS	С В	-	- A	А			
HCM 95th %tile Q(veh)	0.8 0	-	- 0.1	-			

Lanes, Volumes, T	imings				
1: Summer Street (Route 126) & Milford	Street (Route	109)

2022 Build Condition Weekday Evening Peak Hour

	۶	-	\mathbf{F}	∢	←	₹	1	Ť	۴	1	ţ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	4Î			\$			\$			\$	
Volume (vph)	108	355	29	4	425	34	38	207	11	44	334	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.990			0.994			0.969	
Fit Protected	0.950							0.993			0.996	
Satd. Flow (prot)	1770	2011	0	0	2108	0	0	2023	0	0	1970	0
Flt Permitted	0.254				0.997			0.876			0.949	
Satd. Flow (perm)	473	2011	0	0	2101	0	0	1784	0	0	1877	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			5			2			16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	111	366	30	4	438	35	39	213	11	45	344	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	396	0	0	477	0	0	263	0	0	504	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	1	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			-6			-6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel		_			. -							
Detector 2 Extend (s)		0.0		-	0.0		-	0.0		-	0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

Lanes, Volumes, T	imings				
1: Summer Street (Route 126) & Milford	Street (Route	109)

	٭	-	\mathbf{r}	¥	←	×.	1	Ť	1	1	¥	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.1	32.1			21.8			23.4			23.4	
Actuated g/C Ratio	0.48	0.48			0.33			0.35			0.35	
v/c Ratio	0.27	0.41			0.69			0.42			0.76	
Control Delay	11.4	12.2			27.1			21.4			29.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	11.4	12.2			27.1			21.4			29.5	
LOS	В	В			C			С			С	
Approach Delay		12.0			27.1			21.4			29.5	
Approach LOS		В			С			С			С	
90th %ile Green (s)	10.0	48.0		33.0	33.0		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	41.2		26.2	26.2		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	9.5	37.1		22.6	22.6		25.1	25.1		25.1	25.1	
50th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	7.9	30.3		17.4	17.4		19.2	19.2		19.2	19.2	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	10.9		10.9	10.9		12.2	12.2		12.2	12.2	
10th %ile Term Code	Skip	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	24	98			185			87			190	
Queue Length 95th (ft)	53	174			308			180			#378	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	446	1605			1335			906			960	
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	0.25	0.25			0.36			0.29			0.53	
Intersection Summary	Other	······										
Area Type:	Uther											
Actuated Cycle Length: 66	i.8											

Natural Cycle: 60Control Type: Actuated-UncoordinatedMaximum v/c Ratio: 0.76Intersection Signal Delay: 22.6Intersection Capacity Utilization 89.4%ICUAnalysis Period (min) 1590th %ile Actuated Cycle: 8870th %ile Actuated Cycle: 81.250th %ile Actuated Cycle: 72.230th %ile Actuated Cycle: 59.510th %ile Actuated Cycle: 33.1#95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Intersection LOS: C ICU Level of Service E

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

1 g2	<u></u> j₀4	
35 s	60 s	
ø6	≠ _{ø7} ¥ ø8	
35 s	15 s 45 s	

Intersection							
Int Delay, s/veh	0						
Movement	FBI	FBR	NBI	NRT	SBT	SBR	
Vol veh/h	0	0	0	236	3/1	001	
Conflicting Peds #/hr	0	0	0	0	0,11	0	
Sign Control	Ston	Ston	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage #	0 0	_	-	0	0	_	
Grade. %	0	-	-	õ	0	-	
Peak Hour Factor	96	96	96	96	96	96	
Heavy Vehicles, %	0	100	33	2	7	0	
Mvmt Flow	0	0	0	246	355	0	
Maior/Minor	Minor2		Maior1		Maior2		
Conflicting Flow All	601	355	355	0	-	0	
Stage 1	355	-	-	-	-	-	
Stage 2	246	-	-	-	-	_	
Critical Hdwy	6.4	7.2	4.43	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	4.2	2.497	-	-	-	
Pot Cap-1 Maneuver	467	515	1051	-	-	-	
Stage 1	714	-	-	-	-	-	
Stage 2	800	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	467	515	1051	-	-	-	
Mov Cap-2 Maneuver	467	-	-	-	-	-	
Stage 1	714	-	-	-	-	-	
Stage 2	800	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	0		0		0		
HCM LOS	А						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBR				
Capacity (veh/h)	1051						
HCM Lane V/C Ratio	-						
HCM Control Delay (s)	0	- 0					
HCM Lane LOS	A	- A					
HCM 95th %tile Q(veh)	0						

HCM 2010 TWSC	
3: Main Street (Route 126)/Main Street & Summer Street (Route 126)	

Intersection

4.4 Int Delay, s/veh Movement EBL EBT WBT WBR SBL SBR Vol, veh/h 211 384 500 22 30 307 0 0 0 Conflicting Peds, #/hr 0 0 0 Stop Sign Control Free Free Free Stop Free **RT** Channelized -None _ None None 100 0 Storage Length 250 _ --0 0 Veh in Median Storage, # -0 -_ Grade, % 0 0 _ 0 _ 94 94 94 94 94 94 Peak Hour Factor 5 29 0 5 Heavy Vehicles, % 15 10 532 23 32 327 Mvmt Flow 224 409 Major2 Minor2 Major/Minor Major1 1401 Conflicting Flow All 555 0 0 544 _ 544 Stage 1 _ _ ---Stage 2 857 _ _ _ 4.1 3.4 Critical Hdwy 4.15 _ Critical Hdwy Stg 1 5.4 . _ --Critical Hdwy Stg 2 5.4 Follow-up Hdwy 4.1 3.4 2.245 _ 356 810 Pot Cap-1 Maneuver 1001 _ 521 Stage 1 --Stage 2 380 _ _ Platoon blocked, % . _ Mov Cap-1 Maneuver 1001 276 810 Mov Cap-2 Maneuver 276 --521 Stage 1 _ -295 Stage 2 WB SB EΒ Approach 0 13 HCM Control Delay, s 3.4 В HCM LOS WBT WBR SBLn1 SBLn2 EBL EBT Minor Lane/Major Mvmt Capacity (veh/h) 1001 276 810 ---0.224 0.116 0.403 HCM Lane V/C Ratio -19.7 12.4 9.6 HCM Control Delay (s) _ --HCM Lane LOS А ... С В -_ 0.9 _ 0.4 2 HCM 95th %tile Q(veh) _ _

Intersection	
111613661011	

Int Delay, s/veh

Movement	EBL	EBT			WBT	- W	VBR		SBL	SBR	2	
Vol, veh/h	0	492			771		34		107	C)	
Conflicting Peds, #/hr	0	0			C)	0		0	C)	
Sign Control	Free	Free			Free	e F	ree		Stop	Stop)	
RT Channelized	-	None			-	- N	one		-	None	;	
Storage Length	-	-				-	-		0	-	-	
Veh in Median Storage, #	-	0			C)	-		0	-	-	
Grade, %	-	0			C)	-		0	-	-	
Peak Hour Factor	93	93			93	3	93		93	93	3	
Heavy Vehicles, %	0	4			8	3	0		0	C)	
Mvmt Flow	0	529			829	9	37		115	C)	
Major/Minor	Major1				Major2	2		М	inor2			
Conflicting Flow All	866	0				-	0		1376	847	7	
Stage 1	-	-				-	-		847		-	
Stage 2	-	-				-	-		529		-	
Critical Hdwy	4.1	-				-	-		4.5	4.5	5	
Critical Hdwy Stg 1	-	-				-	-		5.4		-	
Critical Hdwy Stg 2	-	-				-	-		5.4		-	
Follow-up Hdwy	2.2	-				-	-		4.5	4.5	5	
Pot Cap-1 Maneuver	786	-				-	-		300	450)	
Stage 1	-	-				-	-		364		-	
Stage 2	-	-				-	-		495		-	
Platoon blocked, %		-				-	-					
Mov Cap-1 Maneuver	786	-				-	-		300	450)	
Mov Cap-2 Maneuver	-	-				-	-		300		-	
Stage 1	-	-				-	-		364		-	
Stage 2	-	-				-	-		495		-	
-												
Approach	EB				WE	3			SB			
HCM Control Delay, s	0				(C			24.3			
HCM LOS									С			
Minor Lane/Major Mvmt	EBL	EBT	WBT W	/BR SBL	.n1							
Capacity (veh/h)	786	-	-	- 3	800							
HCM Lane V/C Ratio	-	-	-	- 0.3	84							
HCM Control Delay (s)	0	-	-	- 24	4.3							
HCM Lane LOS	Ā	-	-	-	С							
HCM 95th %tile Q(veh)	0	-	-	- '	1.7							

Intersection

Int Delay, s/veh

Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	477	134	15	522	142	5	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	78	78	78	78	78	78	
Heavy Vehicles, %	3	21	100	2	0	0	
Mvmt Flow	612	172	19	669	182	6	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	783	0	1405	697	
Stage 1	-	-	-	-	697	-	
Stage 2	-	-	-	-	708	-	
Critical Hdwy	-	-	5.1	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	-	-	3.1	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	527	-	412	641	
Stage 1	-	-	-	-	470	_	
Stage 2	-	-	-	-	465	-	
Platoon blocked. %	-	-		_			
Mov Cap-1 Maneuver	-	-	527	-	389	641	
Mov Cap-2 Maneuver	-	-	-	-	389	-	
Stage 1	-	-	-	-	470	-	
Stage 2	_	-	-	-	438	-	
oldgo 2					100		
Approach	EB		WB		NB		
HCM Control Delay, s	0		0.3		21.7		
HCMLOS	-				C		
					-		
Minor Lane/Maior Mymt	NBLn1 NBLn2	EBT	EBR WBL	WBT			
Capacity (veh/h)	389 641		- 527	_			***************************************
HCM Lane V/C Ratio	0.468 0.01	-	- 0.036	_			
HCM Control Delay (s)	22 1 10 7	_	- 121	0			
HCM Lane LOS	C R	-	- R	Δ			
HCM 95th %tile O(veh)	24 0	_	- 01	-			
Major/Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Pot Cap-1 Maneuver Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-2 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Mov Cap-2 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 2 Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Lane LOS HCM 95th %tile Q(veh)	Major1 0 - - - - - - - - - - - - - - - - - -	0 - - - - - - - - - - - - - - - - - - -	Major2 783 - 5.1 - 3.1 527 - 527 - 527 - 527 - 527 - 527 - 527 - 527 - 527 - - 527 - 527 - 527 - 527 - 527 - - 527 - - - - - - - - - - - - - - - - - - - </td <td>0 - - - - - - - - - - - - - - - - - - -</td> <td>Minor1 1405 697 708 3.8 5.4 5.4 3.8 412 470 465 389 389 470 438 NB 21.7 C</td> <td>697 - - 3.8 - - - 3.8 641 - - - 641 - -</td> <td></td>	0 - - - - - - - - - - - - - - - - - - -	Minor1 1405 697 708 3.8 5.4 5.4 3.8 412 470 465 389 389 470 438 NB 21.7 C	697 - - 3.8 - - - 3.8 641 - - - 641 - -	

Lanes, Volumes, T	imings					
1: Summer Street (Route 1	126) 8	& Milford	Street (Route	109)

2021 Build Conditions Weekday Evening Peak Hour

	ځر		*	*	♣	×.	4	Ť	۴	\$	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ĵ.			4			\$			4	
Volume (vph)	118	451	45	22	378	45	23	210	9	32	356	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	15	16	16	16	16	16	16	16	16	16
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.986			0.995			0.968	
Flt Protected	0.950				0.998			0.995			0.997	
Satd. Flow (prot)	1770	2006	0	0	2095	0	0	2029	0	0	1969	0
FIt Permitted	0.273				0.961			0.937			0.968	
Satd. Flow (perm)	509	2006	0	0	2017	0	0	1911	0	0	1911	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6900			1000			2000			1000	
Travel Time (s)		156.8			22.7			45.5			22.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	0%	0%	1%	3%	5%	5%	7%	3%	7%	2%
Adj. Flow (vph)	122	465	46	23	390	46	24	216	9	33	367	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	511	0	0	459	0	0	249	0	0	524	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			Cl+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

Lanes, Volumes, T	imings				
1: Summer Street (Route 126) & Milford	Street	(Route	109)

2021 Build Conditions Weekday Evening Peak Hour

	ځر		\mathbf{r}	*	4	×,	1	Ť	p	\$	ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	15.0		15.0	15.0		11.0	11.0		11.0	11.0	
Total Split (s)	15.0	60.0		45.0	45.0		35.0	35.0		35.0	35.0	
Total Split (%)	15.8%	63.2%		47.4%	47.4%		36.8%	36.8%		36.8%	36.8%	
Maximum Green (s)	10.0	55.0		40.0	40.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.4	32.4			21.9			24.4			24.4	
Actuated g/C Ratio	0.48	0.48			0.32			0.36			0.36	
v/c Ratio	0.30	0.53			0.70			0.36			0.75	
Control Delay	11.8	14.2			27.9			20.1			28.8	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	11.8	14.2			27.9			20.1			28.8	
LOS	В	В			С			С			С	
Approach Delay		13.7			27.9			20.1			28.8	
Approach LOS		В			С			С			С	
90th %ile Green (s)	10.0	47.1		32.1	32.1		30.0	30.0		30.0	30.0	
90th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
70th %ile Green (s)	10.0	41.3		26.3	26.3		30.0	30.0		30.0	30.0	
70th %ile Term Code	Max	Hold		Gap	Gap		Hold	Hold		Max	Max	
50th %ile Green (s)	9.5	36.1		21.6	21.6		25.7	25.7		25.7	25.7	
50th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.1	30.7		17.6	17.6		20.1	20.1		20.1	20.1	
30th %ile Term Code	Gap	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	12.7		12.7	12.7		15.0	15.0		15.0	15.0	
10th %ile Term Code	Skip	Hold		Gap	Gap		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	27	138			179			79			194	
Queue Length 95th (ft)	58	237			299			164			#403	
Internal Link Dist (ft)		6820			920			1920			920	
Turn Bay Length (ft)	150											
Base Capacity (vph)	447	1598			1279			926			933	
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	0.27	0.32			0.36			0.27			0.56	
Intersection Summary												
Area Type:	Other											
Cycle Length: 95 Actuated Cycle Length: 67.	7											

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

Natural Cycle: 60Control Type: Actuated-UncoordinatedMaximum v/c Ratio: 0.75Intersection Signal Delay: 22.3Intersection Capacity Utilization 96.2%Icu Level of Service FAnalysis Period (min) 1590th %ile Actuated Cycle: 87.170th %ile Actuated Cycle: 81.350th %ile Actuated Cycle: 71.830th %ile Actuated Cycle: 60.810th %ile Actuated Cycle: 37.7#95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Summer Street (Route 126) & Milford Street (Route 109)

ø2	- p4	
35 s	60 s	
ø6	▶ _{ø7}	8a
35 s	15s	45 s

Intersection

Int Delay, s/veh

Movement	EBL	EBR	NBI	- NBT	SBT	SBR	
Vol, veh/h	2	4	() 250	399	0	
Conflicting Peds, #/hr	0	0	() 0	0	0	
Sign Control	Stop	Stop	Free	e 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	96	96	96	5 96	96	96	
Heavy Vehicles, %	0	100	33	3 2	7	0	
Mymt Flow	2	4	() 260	416	0	
	_					-	
Major/Minor	Minor2		Major	1	Major2		
Conflicting Flow All	676	416	416	3 0	-	0	
Stage 1	416	-			-	-	
Stage 2	260	-			-	-	
Critical Hdwy	6.4	7.2	4.43	3 -	-	-	
Critical Hdwy Stg 1	5.4	-			-	-	
Critical Hdwy Stg 2	5.4	-			-	-	
Follow-up Hdwy	3.5	4.2	2.49	7 -	-	-	
Pot Cap-1 Maneuver	422	471	99	5 -	-	-	
Stage 1	670	-			-	-	
Stage 2	788	-			-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	422	471	99	5 -	-	-	
Mov Cap-2 Maneuver	422	-			-	-	
Stage 1	670	-			-	-	
Stage 2	788	-			-	-	
Approach	EB		N	3	SB		
HCM Control Delay, s	13.1			0	0		
HCM LOS	В						
Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT SBI	۲			
Capacity (veh/h)	995	- 453	-	-			
HCM Lane V/C Ratio	-	- 0.014	-	-			
HCM Control Delay (s)	0	- 13.1	-	-			
HCM Lane LOS	А	- B	-	-			
HCM 95th %tile Q(veh)	0	- 0	-	-			

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

HCM 2010 TWSC	2
3: Main Street (Route 126)/Main Street & Summer Street (Route 126)	

Intersection												
nt Delay, s/veh 5.1												
Movement	EBL	EBT				WBT	WBR		SBL	SI	BR	
Vol. veh/h	236	414				493	14		38	3	65	
Conflicting Peds. #/hr	0	0				0	0		0	-	0	
Sian Control	Free	Free				Free	Free		Stop	St	top	
RT Channelized	-	None				-	None		-	No	ne	
Storage Length	250	-				-	-		100		0	
Veh in Median Storage, #	-	0				0	-		0		-	
Grade, %	-	0				0	-		0		-	
Peak Hour Factor	94	94				94	94		94		94	
Heavy Vehicles, %	5	8				20	10		0		1	
Mvmt Flow	251	440				524	15		40	3	888	
Major/Minor	Major1					Major2			Minor2			
Conflicting Flow All	539	0				-	0		1475	5	532	
Stage 1	-	-				-	-		532		-	
Stage 2	-	-				-	-		943		-	
Critical Hdwy	4.15	-				-	-		4.1	;	3.4	
Critical Hdwy Stg 1	-	-				-	-		5.4		-	
Critical Hdwy Stg 2	-	-				-	-		5.4		-	
Follow-up Hdwy	2.245	-				-	-		4.1		3.4	
Pot Cap-1 Maneuver	10 1 4	-				-	-		338	8	315	
Stage 1	-	-				-	-		527		-	
Stage 2	-	-				-	-		348		-	
Platoon blocked, %		-				-	-					
Mov Cap-1 Maneuver	1014	-				-	-		254	8	315	
Mov Cap-2 Maneuver	-	-				-	-	•	254		-	
Stage 1	-	-				-	-	-	527		-	
Stage 2	-	-				-	-		262		-	
Approach	FB					WB			SB			
HCM Control Delay s	35					0			14.2	······		
HCM LOS	0.0					Ŭ			нч. <u>2</u> В			
									2			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2						
Capacity (veh/h)	1014	-	-	-	254	815						
HCM Lane V/C Ratio	0.248	-	-	-	0.159	0.476						
HCM Control Delay (s)	9.7	-	-	-	21.8	13.4						
HCM Lane LOS	A	-	-	-	С	В						
HCM 95th %tile Q(veh)	1	-	-	-	0.6	2.6						

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBR	ł	SBL	:	SBR	
Vol, veh/h	4	583				825	33	}	107		0	
Conflicting Peds, #/hr	0	0				0	C)	0		0	
Sign Control	Free	Free				Free	Free	;	Stop	:	Stop	
RT Channelized	-	None				-	None	;	-	Ν	lone	
Storage Length	-	-				-			0		-	
Veh in Median Storage, #	-	0				0		-	0		-	
Grade, %	-	0				0		-	0		-	
Peak Hour Factor	94	94				94	94	ļ	94		94	
Heavy Vehicles, %	25	2				3	10)	9		0	
Mvmt Flow	4	620				878	35	5	114		0	
Major/Minor	Major1				N	/lajor2			Minor2			
Conflicting Flow All	913	0				-	()	1524		895	
Stage 1	-	-				-		-	895		-	
Stage 2	-	-				-		-	629		-	
Critical Hdwy	4.35	-				-		-	4.5		4.5	
Critical Hdwy Stg 1	-	-				-		-	5.49		-	
Critical Hdwy Stg 2	-	-				-		-	5.49		-	
Follow-up Hdwy	2.425	-				-		-	4.5		4.5	
Pot Cap-1 Maneuver	659	-				-		-	266		434	
Stage 1	-	-				-		-	340		-	
Stage 2	-	-				-		-	443		-	
Platoon blocked, %		-				-		-				
Mov Cap-1 Maneuver	659	-				-		-	264		434	
Mov Cap-2 Maneuver	-	-				-		-	264		-	
Stage 1	-	-				-		-	340		-	
Stage 2	-	-				-		-	439		-	
Approach	EB					WB			SB			
HCM Control Delay, s	0.1		•••			0			28.6			
HCM LOS									D			
Minor Lane/Maior Mvmt	EBL	EBT	WBT	WBR S	SBLn1							
Capacity (veh/h)	659				264					······································		
HCM Lane V/C Ratio	0.006	-	_	_	0 431							
HCM Control Delay (s)	10.5	0	_	-	28.6							
HCM Lane LOS	10.0 R	Δ	-	-	_0.0 D							
HCM 95th %tile Q(veh)	0	-	-	-	2							

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

Intersection		
Int Delay, s/veh	1.8	

Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	480	119	9	492	127	6	
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	160	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	86	86	86	86	86	86	
Heavy Vehicles, %	2	1	13	3	5	0	
Mvmt Flow	558	138	10	572	148	7	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	697	0	1220	627	
Stage 1	-	-	-	-	627	-	
Stage 2	-	-	-	-	593	-	
Critical Hdwy	-	-	4.23	-	3.8	3.8	
Critical Hdwy Stg 1	-	-	-	-	5.45	-	
Critical Hdwy Stg 2	-	-	-	-	5.45	-	
Follow-up Hdwy	-	-	2.317	-	3.8	3.8	
Pot Cap-1 Maneuver	-	-	850	-	465	668	
Stage 1	-	-	-	-	501	-	
Stage 2	-	-	-	-	519	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	850	-	457	668	
Mov Cap-2 Maneuver	-	-	-	-	457	-	
Stage 1	-	-	-	-	501	-	
Stage 2	-	-	-	-	510	-	
Approach	EB		WB		NB		····
HCM Control Delay, s	0		0.2		16.3		
HCM LOS					С		
Minor Long/Major Mumt		EDT					
		EDI		VVDI			
Capacity (ven/n)		-	- 850	-			
	0.323 0.01	-	- 0.012	-			
HUM Control Delay (s)	16.6 10.4	-	- 9.3	U			
HCM Lane LOS	C B	-	- A	A			

-

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\790 B PM.syn MDM Transportation Consultants, Inc.

0

-

1.4

HCM 95th %tile Q(veh)

Intersection

Int Delay, s/veh

Movement	EBL	EBT				WBT	WBF	ł	S	BL	S	BR	
Vol, veh/h	0	37				37	()		70		130	
Conflicting Peds, #/hr	0	0				0	()		0		0	
Sign Control	Free	Free				Free	Free	;	S	top	S	top	
RT Channelized	-	None				-	None	;		-	Ne	one	
Storage Length	-	-				-		-		0		-	
Veh in Median Storage, #	-	0				0		-		0		-	
Grade, %	-	0				0		-		0		-	
Peak Hour Factor	92	92				92	92	2		92		92	
Heavy Vehicles, %	0	0				0	()		0		0	
Mvmt Flow	0	40				40	()		76		141	
Major/Minor	Major1				Ν	/lajor2			Min	or2			
Conflicting Flow All	40	0				-	()		80		40	
Stage 1	-	-				-		-		40		-	
Stage 2	-	-				-		-		40		-	
Critical Hdwy	4.1	-				-		-		6.4		6.2	
Critical Hdwy Stg 1	-	-				-		-		5.4		-	
Critical Hdwy Stg 2	-	-				-		-		5.4		-	
Follow-up Hdwy	2.2	-				-		-		3.5		3.3	
Pot Cap-1 Maneuver	1583	-				-		-	ę	927	1	037	
Stage 1	-	-				-		-	ç	988		-	
Stage 2	-	-				-		-	ç	988		-	
Platoon blocked, %		-				-		-					
Mov Cap-1 Maneuver	1583	-				-		-	ç	927	1	037	
Mov Cap-2 Maneuver	-	-				-		-	ę	927		-	
Stage 1	-	-				-		-	ç	988		-	
Stage 2	-	-				-		-	ę	988		-	
Approach	EB					WB				SB			
HCM Control Delay, s	0					0				9.6			
HCM LOS										А			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR S	SBLn1								
Capacity (veh/h)	1583	-	-	-	996								
HCM Lane V/C Ratio	-	-	-	-	0.218								
HCM Control Delay (s)	0	-	-	-	9.6								
HCM Lane LOS	A	-	-	-	А								
HCM 95th %tile Q(veh)	0	-	-	-	0.8								

G:\Projects\790 - Medway (Exelon Power)\Synchro\Construction\Response\790 B PM (Site Driveway).syn MDM Transportation Consultants, Inc.