Proposed Residential Development
Coventry, Rhode Island

Centre of New England

TRAFFIC IMPACT STUDY

CROSSMAN ENGINEERING

Civil • Transportation • Environmental • Site Planning •

Proposed Residential Development

Centre of New England

Coventry, Rhode Island

TRAFFIC IMPACT STUDY

Prepared for:

Mr. Timothy Eden, Managing Director
Starr Capital, LLC
4800 Hampden Lane, Suite 200
Bethesda, MD 20814

Prepared by:

CROSSMAN ENGINEERING

August 2024

CROSSMAN ENGINEERING

Civil • Transportation • Environmental • Site Planning • Surveying • Permitting

August 15, 2024

Mr. Timothy Eden, Managing Director
Starr Capital, LLC
4800 Hampden Lane, Suite 200
Bethesda, MD 20814

Re: Proposed Residential Development
Centre of New England
Hopkins Hill Road and Arnold Road
Coventry, Rhode Island

Dear Mr. Eden:

Crossman Engineering, in accordance with our scope of services, has completed a traffic impact study for a proposed residential development project in the Town of Coventry, Rhode Island. The subject properties totaling 81 acres in size, are located within an existing, large scale mixed-use site known as the *Centre of New England.* The lots are on land that were previously cleared and graded as part of a pre-existing sand and gravel business that had operated for decades on the 431-acre site. They have been partially revegetated over the years of no activity, and represent one of the final areas to be developed within the *Centre of New England* project approved by the Town of Coventry in 2004.

Based upon our discussions and a review of the conceptual site plans prepared by DiPrete Engineering, it is our understanding that the current proposal includes development of three of the vacant lots for residential use. Two of the lots (Parcel 2 and 3), with access from Hopkins Hill Road, are planned to contain a total of 362 duplex housing units. The third lot, Parcel 4, with frontage on Arnold Road is proposed to contain seven apartment style buildings and will have primary access on Arnold Road.

The study included herein, was conducted to determine the adequacy of the existing servicing roadways to accommodate anticipated traffic to be generated by the residential development project. An analysis of potential impacts to the roadway capacity and safety has been completed and is discussed in the following report.

Very truly yours,
Crossman Engineering

Paul J. Bannon
Senior Project Director

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1.0 INTRODUCTION

The objective of the following study is to assess the potential traffic impacts associated with a proposed residential development in the Town of Coventry, Rhode Island. The subject parcels are situated within the large-scale mixed-use site, the *Centre of New England,* which abuts the I-95 corridor along its southern border, and has access via two interchanges including New London Turnpike and Hopkins Hill Road. Refer to Figure 1 on the following page depicting the location of the project in the community.

The project under consideration by the town consists of a total of 712 residential units proposed on over 81 acres of undeveloped land. The new homes and apartments are proposed on three separate parcels that were defined in the original 2004 approvals by the town. Access/egress will be provided via several routes including Centre of New England Boulevard and Dante Boulevard within the site, with primary access to higher order roadways including I-95, from Hopkins Hill Road and Arnold Road.

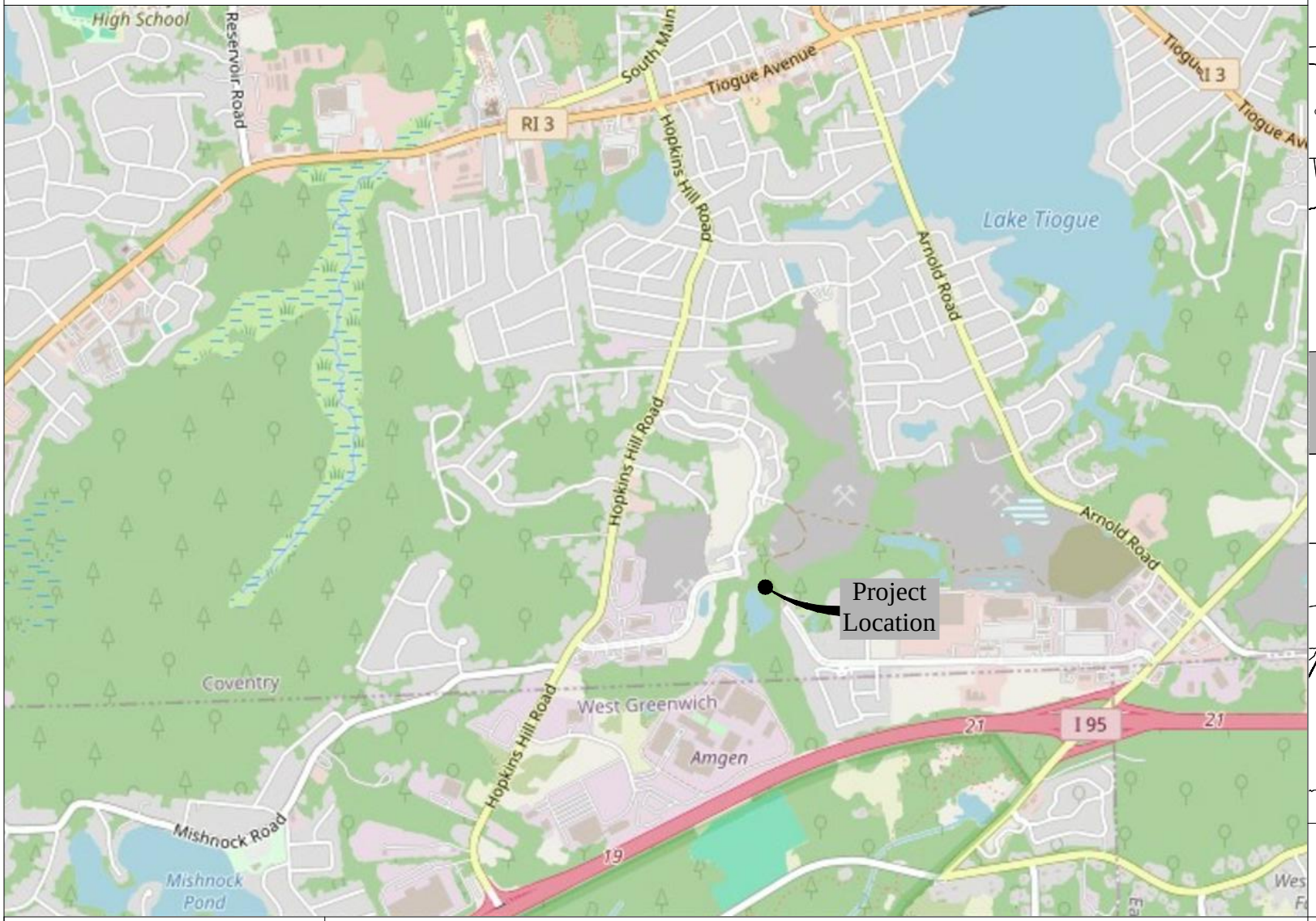
The study summarized herein focused on both traffic flow efficiency and safety along Hopkins Hill Road and Arnold Road in the immediate vicinity of the subject property, including the existing and proposed site access roads. The potential impacts associated with the site related traffic have been defined and evaluated in accordance with standard traffic engineering guidelines and procedures.

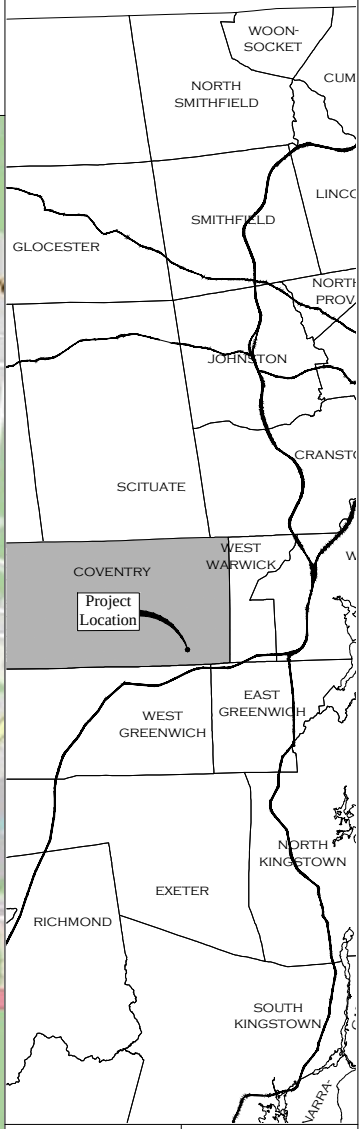
The traffic engineering study completed for this project included the following:

- A traffic counting program to define the existing traffic patterns and operational characteristics along the servicing roadways. The data collection included Automatic Traffic Recorder (ATR) counts on Hopkins Hill Road and Arnold Road, and Manual Turning Movement Counts (TMC) at the Hopkins Hill Road intersections with Centre of New England Boulevard and Dante Boulevard, and the Arnold Road intersections with New London Turnpike and Crestwood Drive. A review of historical counts from previous studies conducted in the general vicinity of the subject property and from the Rhode Island Department of Transportation (RIDOT), was also completed.
- An inventory of the physical roadway characteristics of Hopkins Hill Road, Arnold Road, Centre of New England Boulevard and Dante Boulevard in the immediate site vicinity to determine the adequacy of the existing roadway geometric features in reference to safety and operations.
- An analysis of crash records obtained from the Coventry Police Department to determine if there are any safety concerns relative to the frequency, severity, or pattern of crashes in the project area.
- An estimate of future traffic volumes for the proposed residential development was calculated using data from the *Trip Generation Manual*, an informational report published by the Institute of Transportation Engineers (ITE).
- Evaluation and analysis of the traffic safety and operations for existing and future build traffic conditions and development of recommendations where necessary, that would be required to maintain safe and efficient traffic flow in the project area.

Centre of New England

COVENTRY, RHODE ISLAND





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Project Location Map

Figure 1

2.0 PROJECT AREA

The residential project under review in this study is proposed within the existing *Centre of New England* mixed use development that is located within the communities of Coventry and West Greenwich. The subject lots are situated within the Town of Coventry in the western and northern sections of the property that have primary access off of Hopkins Hill Road and Arnold Road. Figure 2 on the following page depicts the general project area, and the boundary lines of the subject properties presently under consideration by the town.

As noted, the *Centre of New England,* which was initially approved in 2004 with a comprehensive master development plan of land uses that included a mixture of large big box stores, small strip retail buildings, restaurants, hotels, offices, commercial buildings and various residential style buildings. This approval also included a *Transportation Master Plan* prepared by Rizzo Associates/Tetra Tech that outlined an off-site infrastructure mitigation program based upon a phased approach to the development, and traffic monitoring as the project was to be completed over an extended period of time. Construction of elements within the expansive 431-acre property began in the late 1990's and have been continuing on a lot-by-lot basis over the last 20 years with the initial, major focus being the commercial portions directly off of New London Turnpike and Hopkins Hill Road.

Centre of New England Boulevard was approved as a primary arterial road servicing the abutting lots within the project, and was designed to extend as a through road between New London Turnpike and Hopkins Hill Road. The road has been constructed in sections over time, starting at either end as lots were developed along its length. The short segments of road completed as part of the initial phase in the early 2000's, were constructed to service the *Cracker Barrel*, *Wendy's*, *Applebee's, Hampton Inn* and *BJ's Wholesale Club* on the east, and office, warehousing and contractor buildings on the west.

Much of the current buildout of the *Centre of New England* was completed in subsequent phases by 2010, that included on the east, the *Home Depot*, *Walmart Supercenter, Holiday Inn Express, Residence Inn, GrandeVille at Greenwich* apartment complex, *Village Green* condominiums, and the *Brookdale* senior living facility. To service these large tenants within the site, the eastern section of the Centre of New England Boulevard was extended approximately 3,800 feet to its present western dead-end terminus, which abuts a major wetland complex. During this period off of Hopkins Hill Road, Dante Boulevard was constructed to provide access to the *Highlands* residential neighborhood element of the project. This minor residential street provides a second means of access from Hopkins Hill Road to the western section of Centre of New England Boulevard, intersecting at its current easterly terminus that also extends to the wetland boundary limits.

Permitting to extend and connect the boulevard to create the through road was initially denied by the RIDEM, and for years the crossing was not pursued due to economic conditions of the recession and other factors that impacted development opportunities within the *Centre of New England*. As a result of safety and operational concerns identified by town public safety officials the dead-ended boulevard created, modifications to the original six lane boulevard style road were made, reducing its width to only two lanes

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Project Area Map

Figure 2

through the wetland complex. This design was recently approved by the RIDEM in May 2024 allowing for construction which was initiated at the beginning of August 2024. It is anticipated that this work could be completed within a 12-month period. The connection will result in a major redistribution of traffic on the local roadways of New London Turnpike, Hopkins Hill Road, Arnold Road, and at the I-95 interchanges. This change will require a future analysis to document the traffic redistribution, and what if any modifications to the existing points of access to the *Centre of New England* and to the adjacent roadways and intersections servicing the development are necessary.

Presently there are approximately ten undeveloped lots within the *Centre of New England*. Of these ten, the applicant for the subject project, in addition to the three lots under consideration for this project, has obtained the rights to develop four of the remaining undeveloped parcels. The potential uses and environmental constraints on these additional lots have not been fully established at this juncture, and will require separate permitting with the town. In the interim, it is anticipated that the boulevard connection will be constructed and new traffic patterns established in the next few years while these parcels are under review by the town. It is recommended as part of the review of those additional properties, that an updated traffic operational analysis of the servicing roads be provided that would capture the traffic pattern changes created by the connected boulevard. The updated study would be able to provide a basis for any necessary, near and long-term infrastructure mitigation going forward for the remaining undeveloped lots within the *Centre of New England,* through full buildout. The analysis of actual conditions and estimated future growth as the remaining sites are developed, will provide an update to, and be consistent with the approach of the originally approved *Transportation Master Plan*.

To be conservative in our initial analysis of the three residential lots, the current infrastructure providing access to the site was reviewed as a basis to determine potential impacts of the 712 residential units with access being provided off of Hopkins Hill Road for Parcels 2 and 3 and off of Arnold Road for Parcel 4. Internal connections to Dante Boulevard and Centre of New England Boulevard are proposed for access to Parcels 2 and 3. A new road is proposed for Parcel 4 that will intersect Arnold Road opposite Crestwood Drive and to be conservative, was reviewed as the only primary access. There is a long-term intent to provide an internal connection between the residential parcels, but environmental constraints will dictate the potential connection location and design requirements. These issues and feasibility of a connection will be addressed during the conceptual design of the adjacent Parcel 5 which has the greatest potential for environmental constraints that will dictate building layout and access.

In addition to the internal uses within the *Centre of New England*, land use in the immediate areas along both Hopkins Hill Road and Arnold Road providing access to the site can be defined as a mixture of single-family residential lots and small commercial properties, with medium density single family neighborhoods off of intersecting side streets. Larger commercial properties including shopping plazas are located to the north along the Tiogue Avenue (Route 3) corridor, and to the south off of Technology Way in the vicinity of the I-95 interchange with Hopkins Hill Road, where the large *Amgen* biomanufacturing facility and *U-Haul* storage warehouse are located.

Based upon the generally good operating characteristics of these roadways in the immediate area, and the amount of anticipated traffic associated with the residential development, a study impact area was defined for this project. The limits of our analysis focused on Hopkins Hill Road between I-95 and King Street and Arnold Road between Harrington Road and New London Turnpike, and the internal local roads of Centre of New England Boulevard and Dante Boulevard including their intersections.

3.0 Existing Conditions

3.1 Roadways

Hopkins Hill Road

Hopkins Hill Road in the project area is an urban minor arterial road maintained by the Town of Coventry, that transitions from a four-lane layout near the Interstate 95 interchange, to a two-lane layout to the north of Centre of New England Boulevard extending to Tiogue Avenue. The roadway, in the section from I-95 in the south to Centre of New England Boulevard, is a 60-foot wide four lane facility consisting of two 12-foot travel lanes and 5-foot shoulder in each direction, separated by a 2-foot striped median. There is sloped concrete curbing and no sidewalks within these limits. The pavement surface can be classified as being in good condition. These features can be seen in the above photograph looking north towards Centre of New England Boulevard.

The roadway is posted at 35 mph to the south extending to the I-95 interchange, and 25 mph to the immediate north of Centre of New England Boulevard through the higher density residential area to Tiogue Avenue. In the vicinity of Dante Boulevard, the roadway is 40-feet wide with 12-foot travel lanes and 8-foot shoulders that are designated as bicycle lanes. The above

photograph depicts the typical cross section looking south from Arbor Drive. In this section, the overall pavement condition can also be defined as good with minor pavement cracking, providing a safe and comfortable riding surface. A closed drainage system is present along the roadway to control storm-water runoff. The roadway is edged with concrete curbing and concrete sidewalks along both sides of the road. Also, the utility corridor is located along the easterly side of Hopkins Hill Road in this area, with cobra head lighting provided for night-time visibility.

Arnold Road

Arnold Road is an north/south urban minor arterial running between Tiogue Avenue (Route 3) at is northerm limit, to New London Turpike where it becomes Crompton Road/Shippeetown Road and intersects with Division Road in the Town of East Greenwich. The roadway, posted at 35 mph, provides immediate local access to properties along its length, and to intersecting neighborhood side streets, while also functioning as the primary collector route to the major highways and I-95 via New London Turnpike in this area of the community. Arnold Road in the defined project area transitions from a two lane road between New London Turnpike and Crestwood Drive, to a three lane road extending to the north to Johnson Boulevard just south of the Tiogue Lake frontage. The median turn lane provides a refuge area for drivers to safely turn in and out of the many local neighborhood streets, while permitting uninterupted through traffic flow along this segment of road.

The two lane section is approximately 32 feet wide, consisting of an 11-foot travel lane and 5-foot shoulder in each direction. A double yellow centerline delineates the two lanes of travel, and solid white markings define the shoulder areas. The shoulder areas are also defined as a designated bike lane with appropriate markings. Concrete curbing is provided along both sides of the road, but sidewalks are limited to only the easterly side. The utility corridor also runs along the easterly side of the road where cobra head light fixtures are mounted on the poles for illumination of the roadway during nighttime conditions.

The three lane section is 44 feet wide consisting of an 11 foot travel lane and 5 foot shoulder in each direction, separated by a 12 foot median dual left turn lane. Double yellow median turn lane markings with turn arrows delinate the median area, and solid white markings define the shoulder area that is an extension of, and marked as a dedicated bike lane. In this area concrete sidewalks are provided along both sides of the road and there are several high visibilty crosswalks with solar powered RRFB's, crossing Arnold Road that link residential neighborhoods to the east and west. These features can be seen in the above photograph looking north from Larch Drive.

Centre of New England Boulevard

The section of Centre of New England Boulevard under study for this project extends from Hopkins Hill Road to its easterly dead-end terminus as previously described. It is an east/west local roadway servicing a small portion of the large-scale mixed-use *Centre of New England* development. The roadway as it presently exists was constructed between 1998 and 2007, extending from Hopkins Hill Road to the east to initially service the small group of commercial buildings in the immediate vicinity of Hopkins Hill Road. It was extended further east to intersect with Dante Boulevard as that portion of the project containing a residential use was constructed, providing a loop connection to Hopkins Hill Road.

As noted earlier, the original design of the boulevard style roadway was to extend the new six lane road fully between New London Turnpike and Hopkins Hill Road to the west paralleling I-95. The roadway was never completed and presently extends approximately 5,000 feet from New London Turnpike and 2,600 feet from Hopkins Hill Road, both ending at a dead-end terminus. A short 800-foot section has not been constructed as it requires a wetland crossing that has recently been permitted by RIDEM and work initiated, and is expected to be completed within a 12 month period. The roadway as originally designed, will provide a transportation benefit in the communities surrounding this large-scale development by limiting unnecessary travel along the local arterials.

The boulevard style roadway is typically 84-feet wide consisting of 36-foot-wide curb to curb pavement section on either side of a raised 12-foot median that separates each direction of travel. The lanes are not delineated or have worn markings as the roadway was never completed with a surface course or markings due to the limited length of road extending from Hopkins Hill Road. These features can be seen in the adjacent photograph. There is currently a maintenance program being completed on this and other roadways within the *Centre of New England* that was initiated in this July on the eastern section of the boulevard extending from New London Turnpike and within the *Highlands* residential neighborhood. The maintenance work estimated to be completed in 2024, will include repair of deteriorated sections of the binder course, and a mill and overlay, including placement of a final surface course on the road that was never completed. Though markings are limited or presently don't exist, it is anticipated, based upon the roadway width and future traffic demands, that the boulevard will be delineated with two travel lanes in each direction, and a left turn lane adjacent to the center median, providing for safe and efficient access to the driveways along its length.

As noted, the roadway infrastructure is substantially complete with granite curbing and concrete/brick sidewalks that are provided along the majority of both sides of the road. There are sections of sidewalk missing along the frontage of the few vacant lots that require installation when these properties are developed. The roadway median area provides for a landscaped boulevard environment that includes lighting for the roadway for proper nighttime illumination. There is no posted speed limit on the road. Travel speeds were observed to be highly variable between 25 and 40 mph over the different roadway sections due to the roadway geometry. As part of the roadway maintenance program, 30 mph speed limit signs will be installed to maintain appropriate speeds along the major route within the *Centre of New England*.

Dante Boulevard

Dante Boulevard is a local neighborhood street extending between Hopkins Hill Road and Centre of New England Boulevard. It serves as the main collector road within the condominium neighborhood, linking to parallel residential streets that provide access to the homes. The private road was constructed to service the homes within the *Highlands* condominium community, and easements were recorded to provide additional access to the adjacent properties approved for residential use within the *Centre of New England.* There are no homes or driveways located directly along Dante Boulevard, where all traffic entering and exiting the neighborhood must travel for property access.

The roadway was designed in a curvilinear manner with narrow lanes and numerous horizontal curves, serving to maintain proper, low travel speeds through the neighborhood. The boulevard style road is 40 feet wide with 15-foot travel lanes in each direction separated by a 10-foot landscaped median with ornamental lighting. Concrete curbing and sidewalks are provided along both sides of the road. Small traffic circles are utilized at the intersecting side streets for intersection control. It should be noted that there is no signing or pavement markings at these junctions to properly direct drivers or indicate required movement control. It is recommended that proper signing and pavement markings be installed along the road and at intersections during the maintenance upgrade of the streets which is underway within this neighborhood. Similar to Centre of New England Boulevard, these roads were never completed and have been surfaced with only a binder course since construction over 15 years ago. The above photograph depicts the physical characteristics of the roadway looking east when entering the site from Hopkins Hill Road.

3.2 INTERSECTIONS

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road intersects Centre of New England Boulevard to form an unsignalized, three-way junction. Hopkins Hill Road forms the north and south legs, while Centre of New England Boulevard forms the eastern leg. The northbound movements are delineated with two lanes including a through travel lane and a through/right turn lane. The southbound approach consists of one left turn lane and one through travel lane. The westbound approach provides a width for separate left and right turn lanes though they are not specifically defined. Sidewalks are provided on all quadrants, though no pedestrian accommodations including ramps or crosswalks are available for pedestrian accessibility.

The intersection has no defined control as there is no *Stop* sign or *Stop* line in place on the minor westbound Centre of New England Boulevard approach. There are also no lanes delineated for exiting traffic, though the approach is 36 feet wide. Drivers were observed positioning themselves to the left or right when making desired turns, therefore operating as two-lane approach with dedicated left and right turn lanes. It is recommended as part of the resurfacing maintenance program, that the approach be properly delineated and signing be added for both lane and intersection control.

The intersection was physically designed for traffic signal control when warranted under future development phases of the *Centre of New England* as recommended in the *Transportation Master Plan*. It is anticipated, that with the additional residential development specifically relating to the subject parcels, combined with other parcel development in this area, and the future boulevard connection, there will be a need for additional control of the intersection. A traffic signal should be considered for installation when satisfying MUTCD signal warrants as part of the overall *Centre of New England* development project, in coordination with the town Public Works and Public Safety officials.

Hopkins Hill Road at Dante Boulevard

Hopkins Hill Road intersects Dante Boulevard to form an unsignalized, three-way junction. Hopkins Hill Road forms the north and south legs, while Dante Boulevard forms the eastern leg. The northbound movements are delineated with a single through/right turn lane. The southbound approach consists of one through/left travel lane. The westbound approach is comprised of a single left/right turn lane.

Sidewalks are provided on all quadrant with accessible ramps limited to Dante Boulevard, though they appear not to be ADA compliant. The sidewalk is concrete along the westerly side of Hopkins Hill Road but are a paver material on Dante Boulevard, extending onto Hopkins Hill Road along the site frontage. Crosswalks are available across the northern and eastern legs of the intersection, though no curb ramps are provided for full pedestrian accessibility to the crosswalk on Hopkins Hill Road. The minor approach is properly signed with stop control (sign and pavement marking).

New London Turnpike and Arnold Road/Crompton Road

Arnold Road intersects New London Turnpike to form a signalized, four-way junction. The New London Turnpike eastbound approach consists of double left turn lanes and a shared through/right turn lane. The westbound approach contains a separate left, a through lane, and a shared through/right turn lane. The Arnold Road southbound approach provides a shared left/through lane and a right turn lane. The Arnold Road/Crompton Road northbound approach is delineated to include a left turn lane and a shared through/right turn lane.

The intersection, depicted in the adjacent aerial, was initially expanded and signalized as part of the early phase for the *Centre of New England* project where New London Turnpike was widened and signal control introduced in 2005. The signal equipment that is in good condition, is of varying age, extending back 20 years from its initial installation, to more recent modifications that included new signal heads and pedestrian accommodations that were not installed at the time of the initial widening project. Subsequent developments along the short section of New London Turnpike to the east of Centre of New England Boulevard including; *Coventry Crossings*, *Cumberland Farms* and the *Dunkin Donuts* have resulted in minor adjustments to the intersection.

The traffic signal was determined to operate in a fully actuated mode consisting of a seven-phase dual ring configuration. New London Turnpike movements are serviced in two phases including protected left turns with an Arnold Road southbound right turn overlap. The protected phase is followed by through/right concurrent movements for each approach, with permitted westbound left turns. Arnold Road movements are serviced under the remaining two phases including a protected/permitted northbound left, followed by through/right concurrent movements. In addition, pedestrian signals and control are available with marked crosswalks delineated across all of the intersection approaches, however, no sidewalks are available on the northeastern and southeastern quadrants of the intersection.

3.3 TRAFFIC DATA

Existing traffic flow characteristics for this area were developed from a traffic counting program completed by Crossman specifically for this project, and review of historical traffic count data from the initial *Centre of New England Transportation Master Plan* that also included a traffic monitoring program, and subsequent studies for other projects completed in the area. Specifically for this project, Automatic Traffic Recorder (ATR) counts were conducted on Hopkins Hill Road south of Centre of New England Boulevard in June 2024, and on Arnold Road in July 2024 to obtain daily traffic volume, speed and classification data for these roadways. Manual Turning Movement Counts (TMC) were also completed in June and July 2024 at the Hopkins Hill Road intersections with Centre of New England Boulevard and Dante Boulevard, and the Arnold Road intersections with New London Turnpike and Crestwood Drive. Data was obtained during the morning and afternoon peak hours of traffic to define traffic volumes and patterns of the roadways providing access to the site.

Utilizing this data, a weekday average daily traffic volume of approximately 10,200 vehicles per day was determined for Hopkins Hill Road to the immediate south of Centre of New England Boulevard. On a typical weekday along this section of Hopkins Hill Road, traffic volumes begin to increase at 6:00 AM, until the morning peak hour between 7:00 and 8:00 AM with a total volume of approximately 725 vehicles. The volumes then decrease and range between 500 and 650 vehicles per hour until 2:00 PM before gradually increasing to the daily afternoon peak hour of traffic between 4:00 to 5:00 PM of 940 vehicles. During the morning peak period between 60 to 70 percent of the traffic is destined to the south, while in the afternoon peak period approximately 65 percent is northbound. The 2024 traffic volume data was compared to the 2004 record information available for this same section of Hopkins Hill Road. A review of the daily and hourly volumes found a minor growth rate in traffic of less than 0.5 percent per year. The 2004 daily volume of 9,350 vpd increased by approximately 850 vehicles per day over the 20-year review period. During the daily peak hours of traffic, the morning peak hour was determined to be 25 vehicles less today, and the afternoon peak hour 125 vehicles more, which are both negligible in relation to peak hour intersection operations and delay.

The weekday average daily traffic for Arnold Road to the north of Grandview Street was found to be approximately 15,350 vehicles per day. On a typical weekday along this section of Arnold Road, traffic volumes begin to increase at 6:00 AM, until the morning peak hour between 11:00 and Noon with no defined commuter peak as volumes gradually increase to over 800 vehicles per hour for several hours until the late morning with a peak of approximately 980 vehicles. The volumes then continue to gradually increase until the daily afternoon peak hour of traffic between 4:00 to 5:00 PM with 1,185 vehicles serviced in this section. This traffic pattern is typical of commercial corridors indicating Arnold Road is utilized as a primary route to the commercial *Centre of New England* site.

A review of RIDOT Seasonal Adjustment factors for urban highways determined that the data obtained on a weekday during the count period represents slightly higher than average traffic conditions along the roadway. Based on this, count data was not adjusted lower to represent average conditions for our study,

therefore a conservative analysis of traffic operations was completed. Complete count information can be found in the Appendix.

In addition to the ATR counts, Crossman completed manual turning movement counts at the study intersections noted along Hopkins Hill Road and Arnold Road. Data was collected during the peak weekday periods between 7:00-9:00 AM and 4:00-6:00 PM when the proposed site and surrounding roadway would service the highest combined peak volume of traffic. Figure 3 on the following page depicts the daily peak hour turning movement volumes for the morning and afternoon peak periods at the study intersections. The manual traffic count corroborated the ATR data and also the minor changes in peak hour volumes that have occurred in the project area over the last 20 years.

4.0 Safety Analysis

In order to determine if there are any limiting factors affecting safety relating to access to the proposed residential project, the physical characteristics of both Hopkins Hill Road and Arnold Road in the project area were investigated. These limiting factors would potentially include horizontal or vertical roadway geometric changes or roadside obstructions that limit sight distances for vehicles traveling along the road or entering the road from a side street or driveway location. In this instance, the *Stopping Sight Distance* requirement is a design standard necessary to permit turning vehicles to safely enter and exit the development at the existing intersections serving the property and at the proposed site access road intersection with Arnold Road. In addition to the review of physical roadway features, a review of record crash data from the Coventry Police Department was also completed to determine if there was a frequency, severity, or pattern of crashes in the project area that requires mitigation.

Stopping Sight Distance

Stopping Sight Distance (SSD) is the minimum distance that a driver travelling along a roadway at or near the design speed, requires in order to adequately perceive, react and safely come to a stop prior to reaching an object in its travel path and avoid a collision. The available and required SSD are a function of the roadway geometry and design speed respectively, and are factored in when determining the appropriate and safe location of a site driveway or roadway intersection.

A review of the existing roadway geometry of Hopkins Hill Road in the defined project area, found that the horizontal geometry can be described as curvilinear with multiple horizontal and vertical curves along its length. The roadway has two minor horizontal curves to the north and south of the Dante Boulevard

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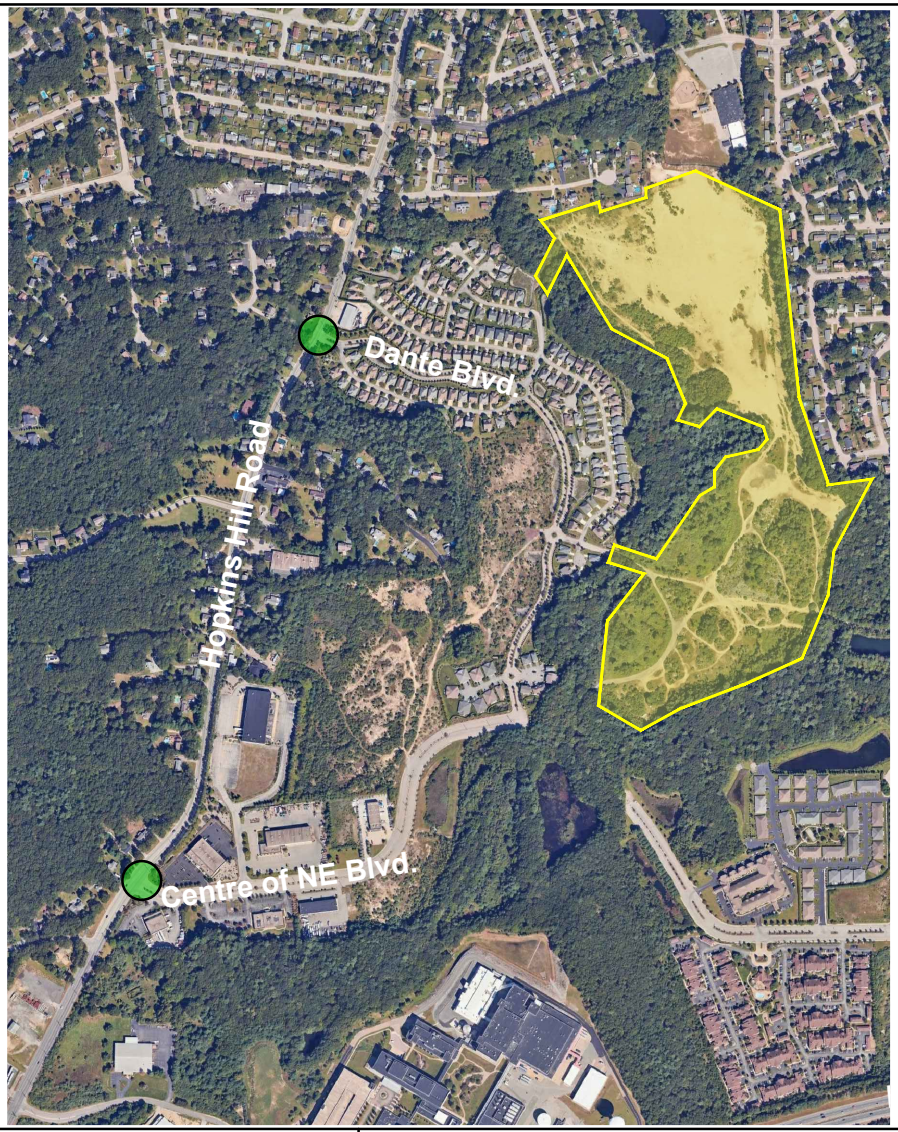

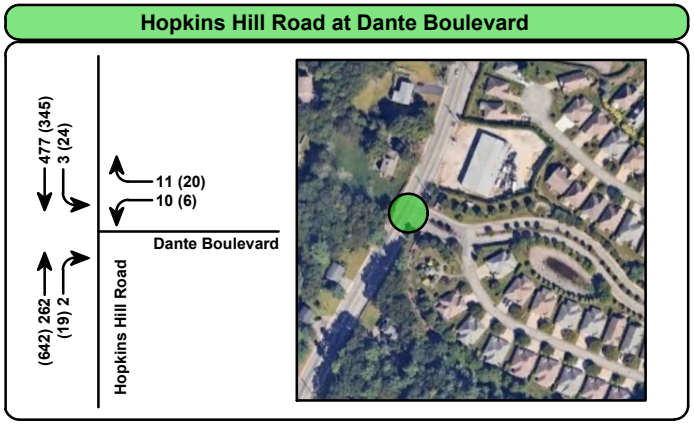

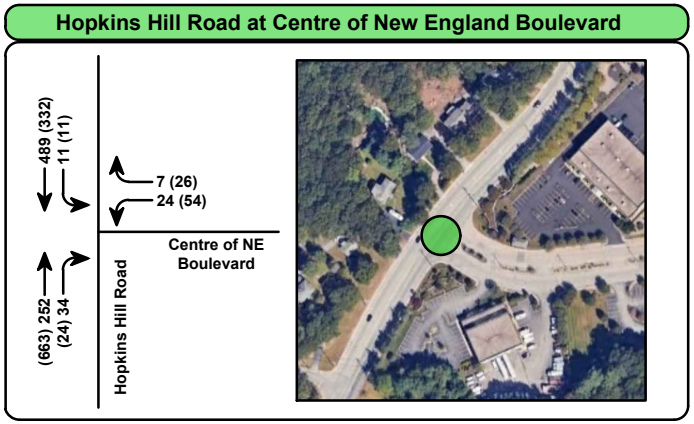

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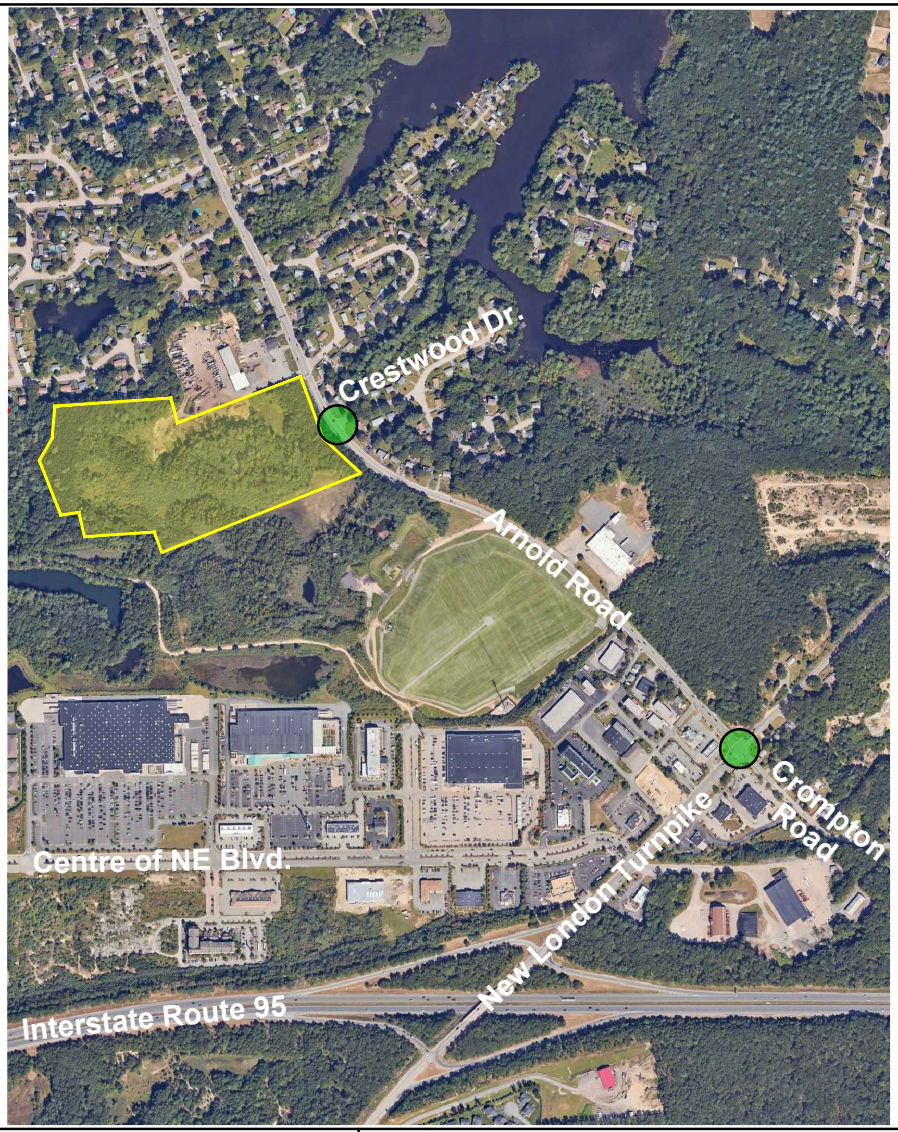
Existing Traffic Volumes

TURN LANE
XXX AM PEAK VOLUMES (8:15 TO 9:15)
(XXX) PM PEAK VOLUMES (12:00 TO 1:00)
STUDY INTERSECTION

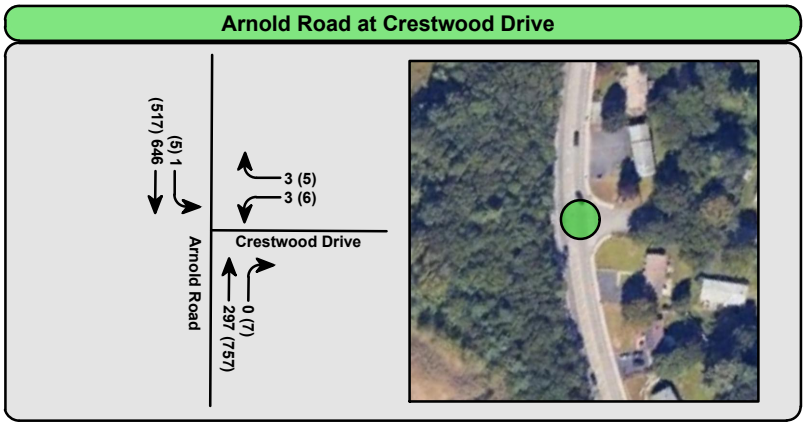
Figure 3a

Centre of New England

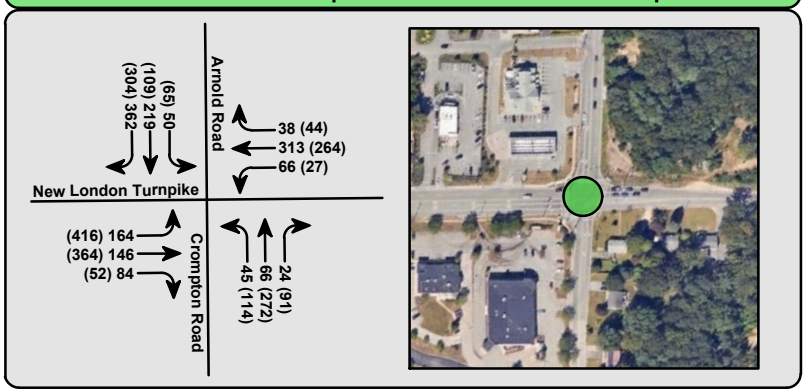
COVENTRY, RHODE ISLAND



Arnold Road at Crestwood Drive



Arnold Road / Crompton Road at New London Turnpike



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Existing Traffic Volumes

TURN LANE
XXX AM PEAK VOLUMES (8:15 TO 9:15)
(XXX) PM PEAK VOLUMES (12:00 TO 1:00)
STUDY INTERSECTION

Figure 3b

intersection, which is located on the tangent between these two curves. The roadway gradient is relatively level to the north with a gradual incline heading in a southerly direction, up to the crest of the curve in the vicinity of Bestwick Trail. In the immediate vicinity of the Centre of New England Boulevard intersection, a reverse horizontal curve extending to both the north and south of the minor side street is present, and the vertical alignment can be described as generally level with several minor crest vertical curves that do not limit sight lines while travelling along the road. These features can be seen in the photograph on the previous page.

A review of the existing roadway geometry of Arnold Road found that the horizontal geometry in the project area can be described as curvilinear to the south from Larch Drive to New London Turnpike that also has a gradual vertical incline to the south in this same area. The roadway to the north extending to Tiogue Avenue is relatively straight and level. Specifically at Crestwood Drive where the proposed access road will be located to the west creating a four-way junction, the roadway has a gradual horizontal curve and minor incline to the south as can be seen in the adjacent photograph.

Based upon the roadway geometry as described and the available sight distanced determined at the study intersections, a review of the required stopping sight distance was undertaken to ensure safe operations. The *required* SSD is based upon the speed of traffic travelling along the roadway and this value is compared to the available or *measured* SSD to determine if this safety measure is satisfied. In determining the required SSD, the design speed of the roadway must be established. The most recent edition of the American Association of State Highway and Transportation Official's (AASHTO's) publication *A Policy on Geometric Design of Highways and Streets, Table 3-1* is referenced in determining the required stopping sight distances, which is based on the design speeds for each roadway.

One method of determining the design speed of a roadway is referenced in the *RIDOT Highway Design Manual*. On roadways with a posted speed limit less than 40 mph, the design speed is estimated to be the posted speed limit, plus 5 mph in urban areas, and plus 10 mph in rural areas. To determine if the minimum requirements for safe SSDs were met in this study, design speeds of 40 mph and 30 mph were utilized for evaluating the stopping sight distance on Hopkins Hill Road in the vicinity of the Centre of New England Boulevard and Dante Boulevard intersections respectfully, and 40 mph for Arnold Road.

In addition to evaluating the SSD based upon the posted *speed limit* and resultant *design speed*, to be conservative, actual speed data was also obtained to determine the 85th percentile speed for drivers travelling along Hopkins Hill Road and Arnold Road in the project area. The 85th percentile speed

represents the speed at which 85 percent of drivers are travelling at or slower and is utilized when available in the analysis of required sight distances. Based on speed data obtained as part of the data collection program, the 85th percentile speed for Hopkins Hill Road in the 4-lane section with a posted speed limit of 35 mph was determined to be 47 miles per hour for southbound and 49 mph for northbound traffic. For Arnold Road, in the higher speed two lane section with a posted speed limit of 35 mph, the 85th percentile speed was determined to be 44 miles per hour for northbound and 42 miles per hour for southbound traffic.

Based upon the roadway geometry as defined for Hopkins Hill Road, the sight distances available at the Centre of New England Boulevard intersection were determined to be in excess of 450 feet in both directions, which is greater than the required safe stopping sight distance of 250 feet based on the posted speed of 35 mph, 305 feet for the AASHTO requirements for design speed established per RIDOT policy, and the 414 feet for the 85th percentile travel speeds between 47 and 49 mph recorded along this section of road. Based on observations of the intersection, it is recommended that landscaping to the south of Centre of New England Boulevard be properly maintained to have the low-level shrubs maintained at less than two feet, and the branches on the mature trees removed/trimmed up to a height of 10 feet to allow for unimpeded sight lines in this direction.

Based upon the roadway geometry of Hopkins Hill Road in the vicinity of the Dante Boulevard intersection, the available sight distances were determined to be in excess of 500 feet in both directions. These values are greater than the required safe stopping sight distance of 155 feet based on the posted speed of 25 mph, 200 feet for the AASHTO requirements for design speed established per RIDOT policy, and the 305 feet for observed travel speeds between 30 and 40 mph along this section of road.

Based upon the roadway geometry in the vicinity of the proposed Arnold Road intersection with the site access road, the available sight distances were determined to be approximately 500 feet to the south and in excess of 750 feet to the north as the access road approach will be positioned on the outside of the horizontal curve. These values are greater than the required safe stopping sight distance of 250 feet based on the posted speed of 35 mph, 305 feet for the AASHTO requirements for design speed established per RIDOT policy, and the 327 feet for the 85th percentile travel speed of 42 mph for southbound traffic recorded along this section of road. It should be noted that the Crestwood Drive approach is on the inside of the horizontal curve that limits sight lines to the south due to an existing chain link fence at the back of sidewalk in combination with overgrown seasonal vegetation. The chain link fence allows for a sufficient sight line, but vehicles must position themselves beyond the stop line to adequately observe oncoming traffic when seasonal vegetation is not maintained.

Also, as part of our analysis, a review of crash statistics was completed. Data was reviewed from the Town of Coventry Police Department for the latest full three-year period (2019 and 2022-2023) not influenced by restrictions implemented during the pandemic to determine if any location in the immediate vicinity of the development experienced a high frequency or pattern of crashes. The 2020 and 2021 data were not requested

due to the atypical travel conditions during both years. A total of eight crashes (avg. < 3 per year) were on record in the project area over the three-year study period.

Summarizing the data, there were no locations specifically that experienced a high number of crashes, though several were referenced to Arbor Drive that included; two involving rearend crashes for stopped vehicles turning left, one was a deer and one involved a mechanical brake failure. Three of the eight crashes involved a deer. A summary of the accident data depicting the number, type, and severity is provided in the Appendix for reference.

Based upon the historical crash data obtained from the local police, and a review of existing roadway geometry and operations, roadway or traffic related safety enhancements could be implemented to improve safety within the immediate project area. As previously noted, landscaping should be maintained along the frontage of Hopkins Hill Road as not to hinder sight lines south of Centre of New England Boulevard, and roadway striping specifically at the Centre of New England Boulevard intersection should also be completed including installation of a *Stop* sign as part of the current roadway maintenance project to improve lane delineation and proper utilization.

5.0 Impact Analysis

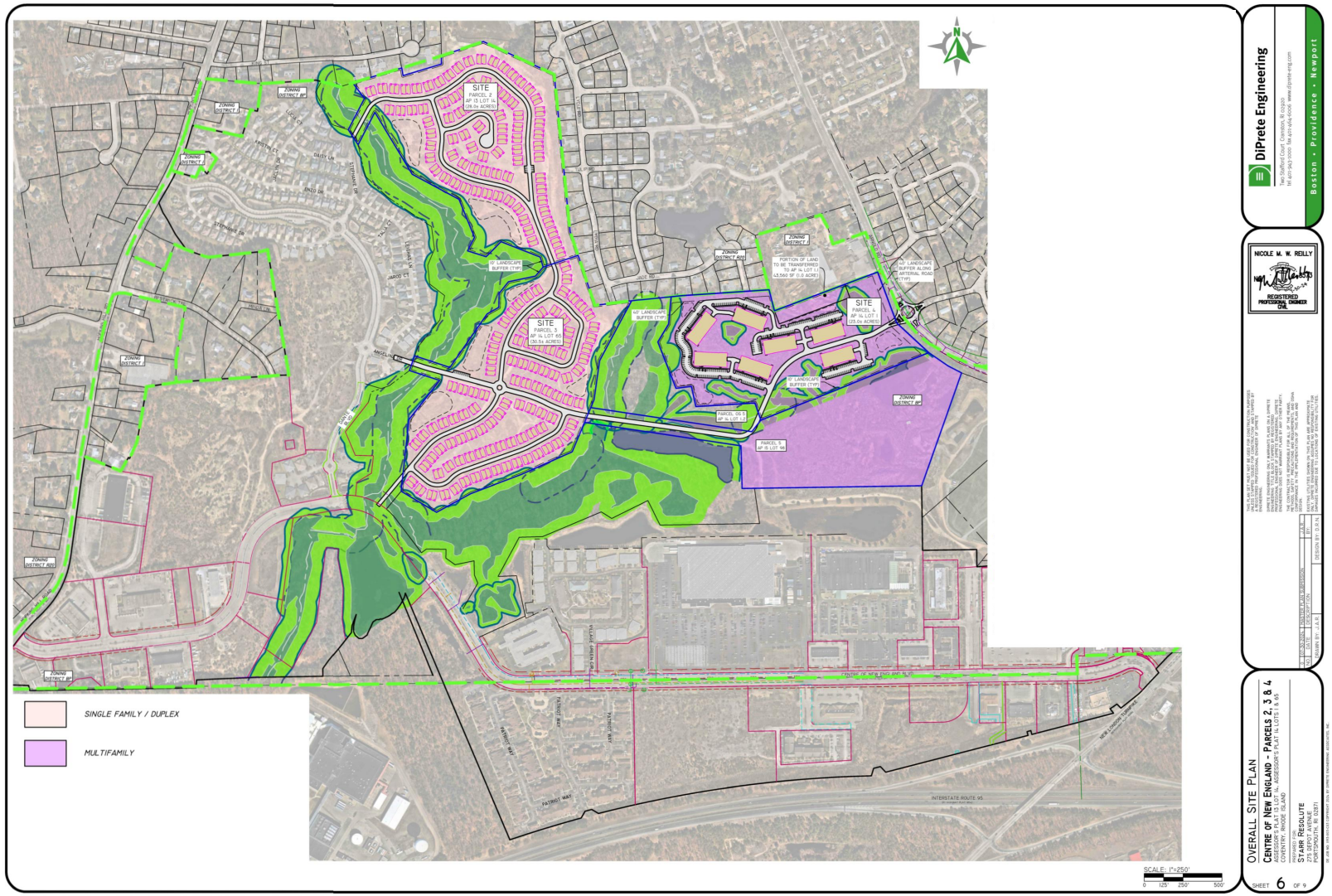
5.1 Trip Generation

To determine the traffic impact of a proposed development, estimates of anticipated traffic to be generated by a particular land use must be calculated. As previously discussed, development proposal includes construction of a total of 712 residential units on over 81 acres of undeveloped land within the *Centre of New England*. The new homes and apartments are proposed on three separate parcels that were defined for residential use in the original 2004 Master Plan approval by the town. Two of the lots (Parcel 2 and 3), with access from Hopkins Hill Road, are planned to contain a total of 362 duplex housing units. The third lot, Parcel 4, with frontage on Arnold Road is proposed to contain seven apartment style buildings with a total of 350 apartment units. Access/egress to the new residential units will be provided via several routes including the internal roadways of Centre of New England Boulevard and Dante Boulevard within the site, with primary access to higher order roadways from Hopkins Hill Road and Arnold Road. Figure 4 on the following page depicts the site layout and access plan provided by *DiPrete Engineering.*

For this site, projected traffic volumes for the residential project were based on use of trip generation factors. These factors are taken from the "Trip Generation" manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. For the proposed residential project, Land Use Code 215 Single Family Attached and Land Use Code 221 Multifamily (Mid-Rise), were utilized. Table 1 provides a summary of peak hour trips estimated for the residential development project.

Centre of New England

COVENTRY, RHODE ISLAND



DiPrete Engineering
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NICOLE M. W. REILLY
REGISTERED PROFESSIONAL ENGINEER
CIVIL

OVERALL SITE PLAN
CENTRE OF NEW ENGLAND - PARCELS 2, 3 & 4
ASSESSOR'S PLAT 13 LOT 14, ASSESSOR'S PLAT 14 LOTS 1 & 65
COVENTRY, RHODE ISLAND
PREPARED FOR:
STARR REGOLUTE
PORTSMOUTH, RI 02871
SHEET 6 OF 9

TABLE 1 – Trip Generation Estimate

	Description	Enter	Exit	Total
AM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	54	120	174
ITE Land Use Code 221	Multifamily (Mid-Rise)	64	214	278
	TOTAL	124	338	462
PM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	117	89	206
ITE Land Use Code 221	Multifamily (Mid-Rise)	179	114	293
	TOTAL	303	212	515

5.2 Future Traffic Conditions

In order to properly assess the impacts of a development, future traffic conditions of area roadways should be estimated for the period when the development is constructed and fully occupied. Typically, the expansion of base traffic is calculated when a project is to be constructed over an extended period (+3 to 5 years). In all instances, area growth that may affect capacity results should be considered. It is anticipated that the new homes and apartments will be constructed within a five-year period, therefore a future 2029 build condition was reviewed for this study.

Potential traffic growth which may affect capacity results during the defined study period that were considered in our analysis included historic annual community and traffic growth, and potential other site-specific developments approved or under construction in the immediate project area. A review of this information determined that the local communities have experienced an average growth rate of less than 0.5 percent per year. In addition to population trends, a comparison of the record 2004 and current 2024 traffic count data was completed where it was found that traffic volumes along the servicing routes have also grown at a rate of approximately 0.5 percent per year for the last 20 years. Based upon these growth trends over the last two decades, the 2024 existing peak hour traffic volumes obtained for this project were expanded using a conservative one (1) percent annual growth rate over the 5-year study horizon to establish a future year, 2029 base traffic condition.

In addition to the base background growth, as noted, site specific developments were also considered in establishing the future study period traffic conditions. A review of both potential developments within the *Centre of New England* on vacant lots, and within the community in the immediate site vicinity was completed. The *Centre of New England* overall development project is nearing full buildout, with only ten lots remaining within the large mixed-use site. Seven of the lots are under control for development by the owner of the subject parcels, and three of which are being advanced as part of this project. Only two of the noted lots would impact base traffic volumes within the western section of the *Centre of New England*. These two lots were estimated to include apartments and a self-storage warehouse per the

allowed zoning, and were included in the future base growth along with the undeveloped portion of the *Highlands* along the westerly side of Dante Boulevard.

Base traffic growth outside of the *Centre of New England* site was also included through coordination with the town planning department, where other known developments that are approved or under construction in the immediate area that may impact traffic conditions were added to existing traffic volumes. These projects included the *Willow Lakes* Senior Housing project on New London Turnpike receiving recent approvals and *Crompton Meadows* residential neighborhood on Crompton Road currently under construction. The Future 2029 Build condition includes the volumes estimated in this No Build condition, with the addition of the site generated traffic from the proposed residential development within the *Centre of New England*. Other, smaller potential projects in the area that may be under review, that may contribute additional traffic to the servicing roadways, would be included in the conservative one percent base growth rate that was utilized in our study.

In developing the intersection volumes to be analyzed under build conditions, a directional distribution of the site traffic was estimated. The distribution was based on journey to work data for the community, previous studies completed in the area including the original *Transportation Master Plan*, and from the current traffic patterns defined from the traffic counting program completed for this project. Based upon the location of the site and local infrastructure as described, it is assumed that 65 percent of the site trips will be oriented to and from the south along Hopkins Hill Road and Arnold Road for the morning and afternoon periods respectively, and distributed throughout the network based on existing traffic patterns at the major junctions. Figure 5 on the following page depicts the estimated future traffic volumes at the study intersections.

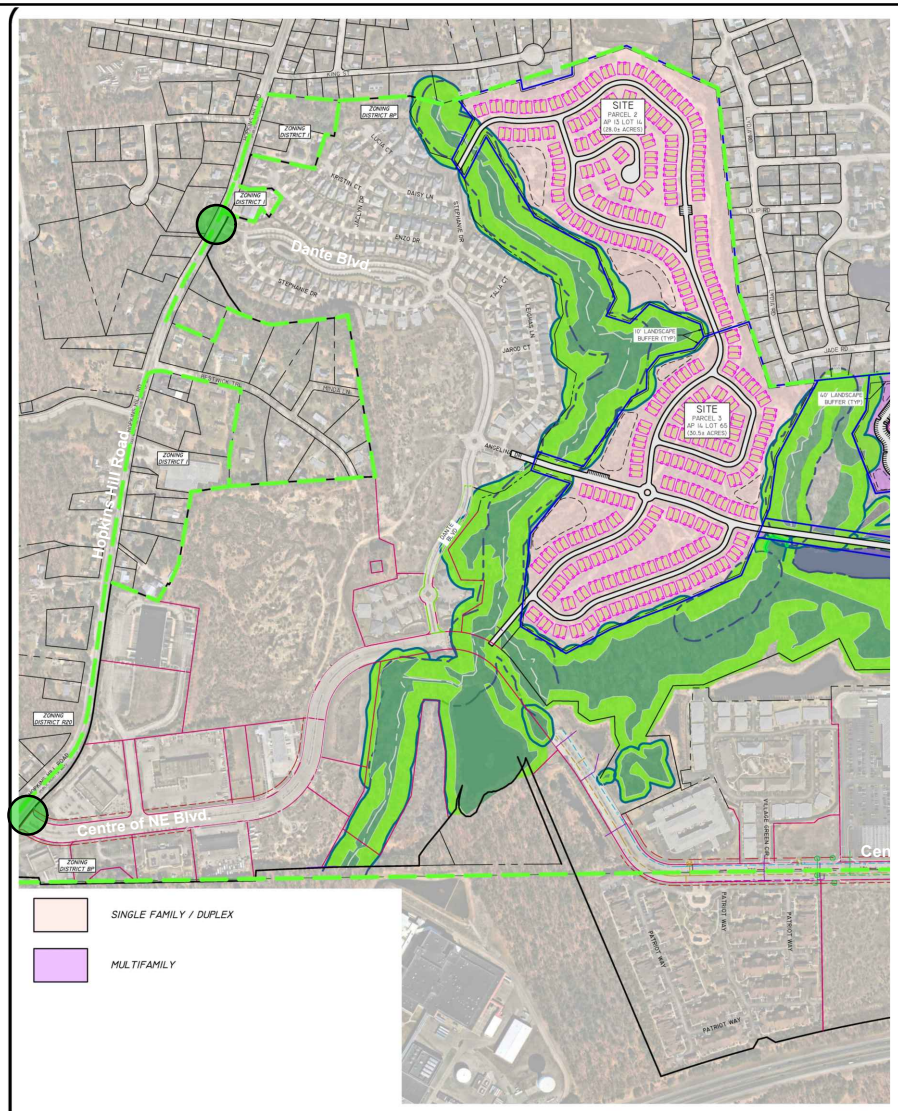
5.3 Operational Analysis

The key to any traffic impact analysis is the evaluation of roadway operations during peak traffic periods on the servicing roadway system. This condition would occur when the site-generated traffic, combined with the traffic volumes on the main roadway, result in the highest one-hour volume serviced along a roadway segment, or through an intersection. Review of the traffic data obtained for this project found that the weekday morning and afternoon peak hours would represent this worst-case combination of site-generated traffic, with the servicing roadway peak traffic periods.

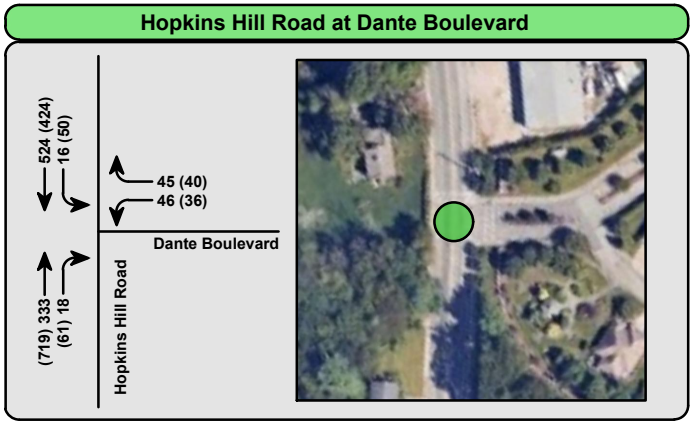
The Highway Capacity Manual methodology provides the most accurate means of evaluating traffic capacity and delays for roadways and intersections. The results of this procedure are expressed in terms of Level of Service (LOS). Level of Service is a qualitative measure of traffic flow efficiency based on anticipated vehicle delays. For example, LOS “A” represents the best condition with little or no delay, while LOS “F” indicates that the roadway/intersection/movement is at full capacity, resulting in extended vehicle delays and potential queuing. Table 2 outlines the Level of Service delay criteria presented in the Highway Capacity Manual for signalized and unsignalized intersections.

Centre of New England

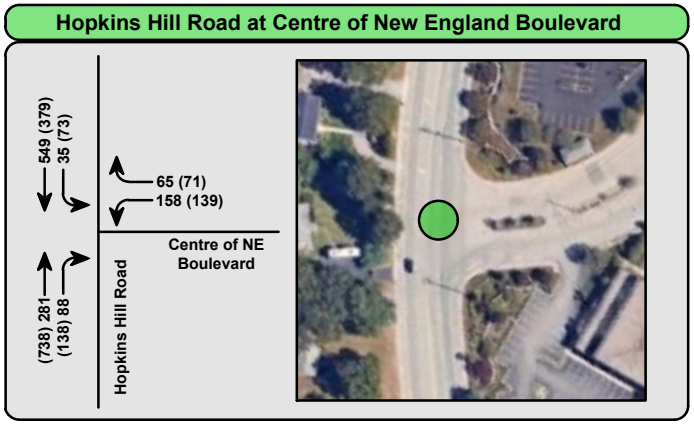
COVENTRY, RHODE ISLAND



Hopkins Hill Road at Dante Boulevard



Hopkins Hill Road at Centre of New England Boulevard



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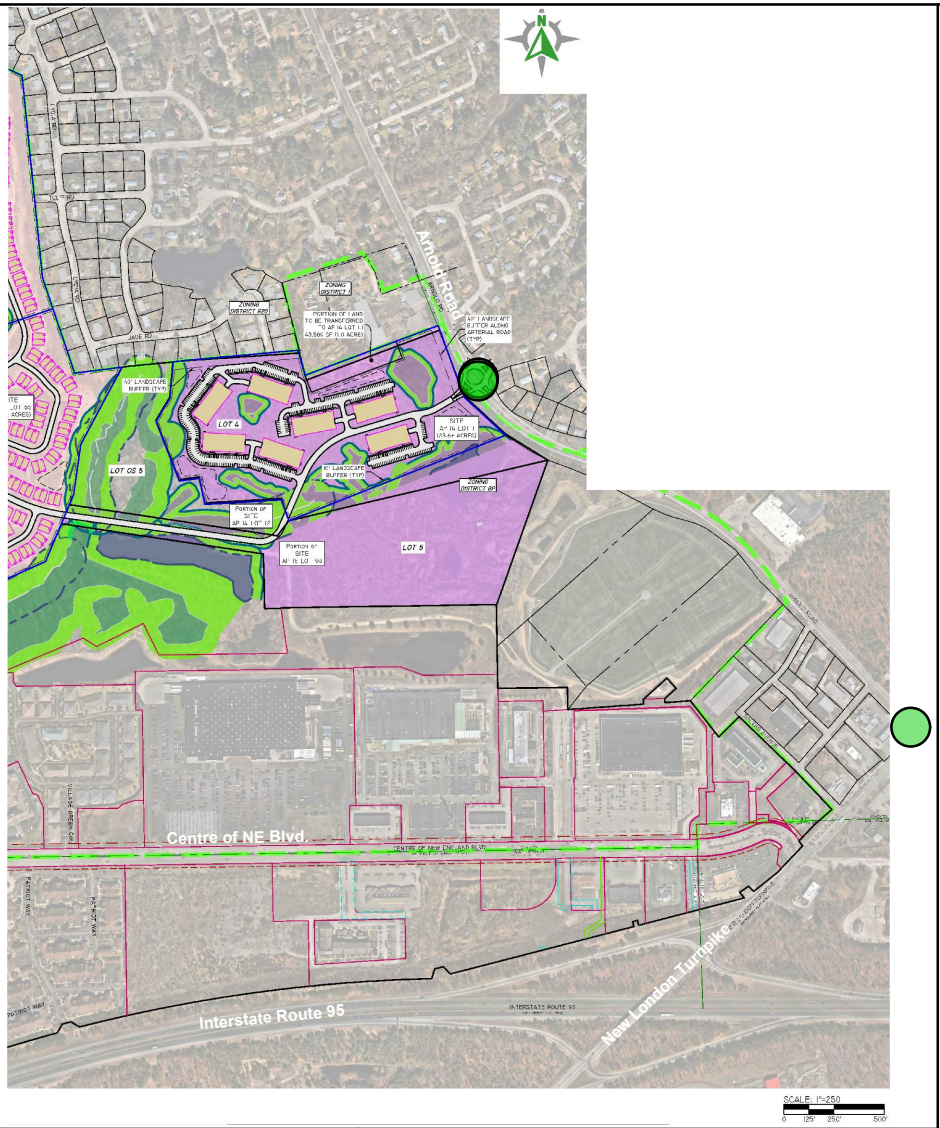
Future Build Traffic Volumes

TURN LANE
XXX AM PEAK VOLUMES (8:15 TO 9:15)
(XXX) PM PEAK VOLUMES (12:00 TO 1:00)
STUDY INTERSECTION

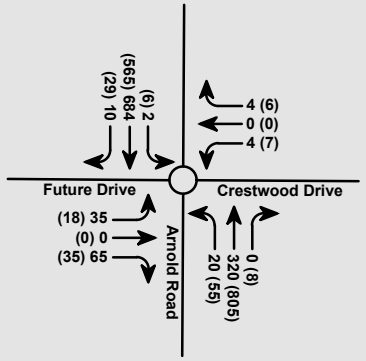
Figure 5a

Centre of New England

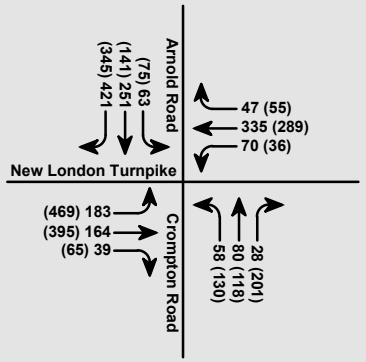
COVENTRY, RHODE ISLAND



Arnold Road at Crestwood Drive



Arnold Road / Crompton Road at New London Turnpike



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Future Build Traffic Volumes

TURN LANE
XXX AM PEAK VOLUMES (8:15 TO 9:15)
(XXX) PM PEAK VOLUMES (12:00 TO 1:00)
STUDY INTERSECTION

Figure 5b

TABLE 2 – Highway Capacity Criteria

Level of Service	Unsignalized Delay Per Vehicle (sec)	Signalized Delay Per Vehicle (sec)
A	<10	<10
B	>10 and <15	>10 and <20
C	>15 and <25	>20 and <35
D	>25 and <35	>35 and <55
E	>35 and <50	>55 and <80
F	>50	>80

The Hopkins Hill Road intersections with Centre of New England Boulevard and Dante Boulevard and the Arnold Road intersections with New London Turnpike and Crestwood Drive were all analyzed for the weekday morning and afternoon peak hours. The capacity analysis worksheets are included in the Appendix and Tables 3 and 4 summarize the results of the analyses for existing and future build conditions.

Table 3 on the following page depicts the current operating conditions at the study intersections. As can be seen in the table, the signalized intersection of Arnold Road/Crompton Road with New London Turnpike currently operates at a good LOS C or better during the daily peak hours analyzed. No critical movements operate at less than LOS D for the signalized intersection which is considered an acceptable design condition for peak traffic conditions. At the unsignalized intersections of Arnold Road with Crestwood Drive and Hopkins Hill Road with Centre of New England Boulevard and Dante Boulevard, all critical movements currently operate at LOS C or better with the greatest delays limited to left turning traffic exiting the minor approaches and turning onto the main roadway.

Table 4 presents the future design period taking into consideration base traffic growth along the servicing roadways while also adding in the new trips generated by the proposed residential development. The results of the signalized analysis determined that the Arnold Road/Crompton Road intersection with New London Turnpike will continue to operate overall at a good LOS C during the daily peak hours of traffic similar to existing operations with only minor increases in delays of a few seconds for many of the movements. No improvements or adjustments are warranted in the near term. The intersection though, should be reevaluated upon completion of the boulevard construction and resultant redistribution of traffic that is anticipated. Once the traffic conditions have been leveled and reestablished after the boulevard is completed, the reevaluation of the junction will determine the need for any adjustments that may be necessary to account for the turning movement volume changes. It is anticipated that overall volumes at this intersection will be reduced in the future as a secondary means of access becomes available to the large-scale commercial component of the *Centre of New England,* which today only has a single access to the site located off of New London Turnpike.

TABLE 3 – Level of Service Summary (Existing Conditions)

Location / Movement	2024 EXISTING CONDITIONS							
	AM				PM			
	LOS	Delay	95th % Queue Length (ft.)	v/c	LOS	Delay	95th % Queue Length (ft.)	v/c
Arnold Road/Crompton Road at New London Turnpike *(S)*								
Crompton Road NB Left	B	19.6	34	0.19	C	29.1	85	0.52
Crompton Road NB Thru/Right	B	16.9	49	0.16	C	30.1	256	0.69
Arnold Road SB Left/Thru	C	27.1	212	0.59	D	40.7	174	0.66
Arnold Road SB Right	C	28.8	66	0.75	C	25.7	44	0.58
New London Turnpike EB Left	D	36.0	65	0.64	D	42.1	170	0.82
New London Turnpike EB Thru/Right	B	15.0	107	0.26	B	16.8	326	0.48
New London Turnpike WB Left	B	12.3	38	0.12	B	17.0	23	0.06
New London Turnpike WB Thru/Right	C	20.2	296	0.53	C	24.7	347	0.48
Overall Intersection	C	24.0	-	-	C	29.1	-	-
Arnold Road at Crestwood Drive(*U*)								
Arnold Road SB Left	A	7.9	0	0.00	A	9.5	0	0.01
Crestwood Drive Left/Right	B	14.6	1	0.12	C	23.1	1	0.06
Hopkins Hill Road at Dante Boulevard (*U*)								
Hopkins Hill Road SB Left	A	7.8	0	0.00	A	9.2	1	0.03
Dante Boulevard WB Left/Right	B	12.8	1	0.05	C	16.1	1	0.08
Hopkins Hill Road at Centre of New England Boulevard (*U*)								
Hopkins Hill Road SB Left	A	7.9	0	0.01	A	9.2	0	0.01
Centre of NE Boulevard WB Left	C	17.5	1	0.08	D	28.2	1	0.28
Centre of NE Boulevard WB Right	A	9.2	0	0.01	B	11.0	1	0.05

(U) – Unsignalized Intersection
(S) – Signalized Intersection

The unsignalized intersection of Arnold Road with Crestwood Drive is proposed to be modified in the build scenario to include a new eastbound approach from the site, converting the intersection from a three-legged, T-intersection to a conventional four-legged intersection. The new access road approach is initially proposed to be stop-controlled, and assumed to have one lane for right turns, and one lane for left/thru traffic. The northbound approach from Arnold Road will also be modified with restriping to allow for a separate left turn lane.

TABLE 4 – Level of Service Summary (Future Conditions)

Location / Movement	2029 FUTURE BUILD CONDITIONS							
	AM				PM			
	LOS	Delay	95th % Queue Length (ft.)	v/c	LOS	Delay	95th % Queue Length (ft.)	v/c
Arnold Road/Crompton Road at New London Turnpike *(S)*								
Crompton Road NB Left	C	20.2	41	0.27	C	28.4	95	0.60
Crompton Road NB Thru/Right	B	16.8	58	0.18	C	28.4	301	0.69
Arnold Road SB Left/Thru	C	30.4	281	0.69	D	46.2	250	0.75
Arnold Road SB Right	D	36.9	117	0.86	C	22.8	83	0.57
New London Turnpike EB Left	D	35.7	71	0.66	D	42.8	192	0.83
New London Turnpike EB Thru/Right	B	15.8	120	0.29	C	21.6	369	0.58
New London Turnpike WB Left	B	12.9	39	0.13	C	20.4	28	0.58
New London Turnpike WB Thru/Right	C	22.4	341	0.59	C	32.9	95	0.65
Overall Intersection	C	27.2	-	-	C	29.1	-	-
Arnold Road at Crestwood Drive/Site Access Road (*U*)								
Arnold Road SB Left	A	8.0	0	0.00	A	9.7	0	0.01
Arnold Road NB Left	A	9.3	1	0.03	A	9.1	1	0.06
Site Access Road EB Left/Thru	D	31.8	1	0.22	F	70.6	1	0.27
Site Access Road EB Right	C	15.5	1	0.17	B	13.1	1	0.08
Crestwood Drive WB Left/Right	C	20.6	1	0.04	E	41.9	1	0.13
Hopkins Hill Road at Dante Boulevard (*U*)								
Hopkins Hill Road SB Left	A	8.1	0	0.02	A	9.9	1	0.07
Dante Boulevard WB Left/Right	C	17.4	1	0.26	D	32.0	2	0.39
Hopkins Hill Road at Centre of New England Boulevard (*U*)								
Hopkins Hill Road SB Left	A	8.2	1	0.03	B	10.6	1	0.11
Centre of NE Boulevard WB Left	F	>50	5	0.72	F	>50	10	1.27
Centre of NE Boulevard WB Right	A	9.9	1	0.09	B	12.8	1	0.14

(U) – Unsignalized Intersection
(S) – Signalized Intersection

The estimated volume of left turning traffic from Arnold Road into the minor side streets was determined to operate efficiently at LOS A with delays of less than 10 seconds during both the future weekday morning and afternoon peak hours. The site access road is expected to operate efficiently with minor delays for the right turn exiting vehicles with typically only one to two vehicles waiting to exit at any one time during both the future weekday morning and afternoon peak hours. The movements that will experience greater delays are the left turning exiting movement from the site access road and Crestwood Drive, where delays have been estimated to be in excess of 50 seconds during the daily peak traffic periods.

One condition that does have a positive impact on delays experienced on the minor side streets and the available gaps in traffic on Arnold Road, are the signalized intersections to the north at Tiogue Avenue and to the south at New London Turnpike. These traffic signals form platoons of traffic that help create larger gaps in Arnold Road traffic that minor approach side street traffic can utilize to better access the main road. The positive effect of the signals cannot be adequately modeled into the HCS analysis, which typically results in overly conservative HCS delay calculations. Field observations found that the average queue for this movement on the Crestwood Drive approach was one vehicle, resulting in no congestion and minor delays on the access to the existing 34 home closed neighborhood. This acceptable operation can also be expected on the proposed site access road exit due to the low estimated volume of left turning traffic. To increase capacity and reduce delays, the site access road has been designed with separate left and right turn exiting lanes, allowing right turning traffic to operate more efficiently with less delay as seen in the table.

The unsignalized capacity analysis results indicating prolonged minor approach delays for the future condition for left turning traffic is consistent with most unsignalized driveway or side street intersections along the corridor. Typically, low volume commercial driveways and side streets would yield the delay results found in our study due to the volume of main street traffic and limitations of the unsignalized analysis. Of concern is whether the side street or driveway has the appropriate stacking distance to accommodate potential queuing based upon the traffic demands, and that favorable intersection geometry exists. In this instance, both concerns are satisfied in addition to the previously mentioned signalization factor, which helps create additional gaps, yielding better operations than the analysis results indicate. It is anticipated that the low volume minor side street approaches will operate with acceptable delays, with average queuing of one to two vehicles, resulting in no congestion and acceptable operations.

If determined in the future, based upon a traffic monitoring program recommended as part of future development within the *Centre of New England*, and changes resulting from internal connections that may possibly be made to other residential areas of the site, an alternative to reduce delays and enhance safety should be considered. An option could potentially include a roundabout for access control. A roundabout at this location could serve as a gateway to the three-lane section of Arnold Road and promote lower speeds along the corridor. This area services numerous residential side streets and has greater pedestrian activity as observed with the multiple high visibility crossing locations installed along this section of road, extending to the Tiogue Lake frontage.

At the Hopkins Hill Road intersections, the estimated volumes of left turning traffic from Hopkins Hill Road into the minor side streets of Dante Boulevard and Centre of New England Boulevard were determined to operate efficiently at LOS B or better with delays of 10 seconds of less during both the future weekday morning and afternoon peak hours. The Dante Boulevard minor approach exiting traffic is estimated to operate at an acceptable LOS D or better during the morning and afternoon peak periods with average queues of one to two vehicles and no congestion.

The Centre of New England Boulevard intersection is estimated to experience the greatest delays in the future due to the higher exiting volumes anticipated for the primary road providing access to the *Centre of New England* when this area of the site is fully developed. As expected, the westbound left turn exiting movement from Centre of New England Boulevard is estimated to operate at LOS F with delays in excess of 50 seconds, while the right turn exiting traffic, with a dedicated lane, will operate efficiently at LOS B or better during peak daily traffic conditions. The delays for left turning traffic are estimated to result in average queuing of 5 to 10 vehicles during the morning and afternoon peak periods respectively. Under existing conditions, delays and queuing of the minor approach are acceptable, but as development occurs over an extended period of time, operations will continue to deteriorate to a point where improved control is required to maintain safe and adequate operations at this junction. It is recommended through coordination with the town, that a traffic monitoring program be established to review future conditions in order to determine the appropriate time for the upgrade. To provide an understanding of the potential signalization impacts, an analysis was completed and is presented in the Appendix for reference. Based upon the analysis, it was determined that the intersection with signal control would operate overall at a good LOS A during both peak periods reviewed for this study with all movements operating at LOS B or better.

6.0 CONCLUSIONS AND RECOMMENDATIONS

In summary, the study has shown that the proposed residential development project access and circulation plan has been designed to provide a level of traffic safety and efficiency on the servicing roadway system. The safety of the study intersections along Hopkins Hill Road and Arnold Road were reviewed for geometry and sight distances. The study intersections were determined to provide sufficient sight distances in accordance with AASHTO criteria for visibility and decision making of drivers attempting to enter/exit the existing and proposed site access roadways.

In reference to safety, as previously noted, as part of the ongoing roadway maintenance construction, it is recommended that all appropriate regulatory signage and pavement markings be installed along the internal servicing routes of Centre of New England Boulevard and Dante Boulevard and at their intersections including Hopkins Hill Road. Also, as noted, minor trimming of existing landscaping features in the vicinity of the Centre of New England Boulevard intersection with Hopkins Hill Road should be completed regularly during the growing season.

The results of the operational analysis determined that the estimated increase in traffic during the peak periods resulting from the proposed residential development project will have a negligible impact on overall traffic operations along both Hopkins Hill Road and Arnold Road specifically during the weekday peak periods when the site and adjacent servicing roadways would service their greatest daily traffic volumes. The additional delays as demonstrated in the analysis provided are estimated to be limited to the minor approaches providing access to the *Centre of New England,* but do not result in excessive delays or congestion at the study intersections where typically one to two vehicles would be queued on the minor approaches waiting to access the main roadway.

One exception though, as previously noted, is the main access from the west at the Hopkins Hill Road intersection with Centre of New England Boulevard, where estimated delays for left turning vehicles from the minor street result in queuing between 5 and 10 vehicles during the future buildout daily peak periods. This delay and queuing if realized, may result in the need for additional control including signalization in order to provide adequate access to the major route from the *Centre of New England* for left turn exiting traffic. Left turn entering and right turn exiting traffic are estimated to operate in an acceptable manor with minor delays and negligible queuing.

It is noted that the delays on the Centre of New England Boulevard are presently acceptable, but over and extended three to five year period as the 362 residential units are constructed and occupied, along with other parcels in this area of the *Centre of New England,* delays will increase as presented in the table, at which time, traffic volumes may satisfy signal installation warrants. In advance of this future long-term growth potential, warrants may also be satisfied in the near term based upon completion of the Centre of New England Boulevard connection. In coordinating with local officials, they have recommended that the traffic signal be installed as originally planned under the initial *Centre of New England* approvals that included the full Centre of New England Boulevard connection between Hopkins Hill Road and New London Turnpike.

The effort to enhance safety and operations at this location should be coordinated with the town as the roadway maintenance and wetland crossing projects connecting the boulevard that are presently under construction, are completed. Once the connection is complete, and traffic redistribution patterns established, a supplemental traffic monitoring program should be completed to determine the need for traffic signal control at this location. This approach is consistent with the original *2004 Transportation Master Plan* that recommended an active traffic monitoring program, which was ongoing through 2007 as parcels within the *Centre of New England* were developed. The monitoring program that was undertaken at that time during the review process for the large-scale project, allowed the town to determine if thresholds were met that would require implementation of measures to offset potential impacts to the transportation network providing access to the site.

With little substantiative development occurring within the site over the last dozen years due to economic conditions, limited traffic growth has occurred as demonstrated in the data collection effort completed for this project. Now that development opportunities have improved and the remaining parcels within the *Centre of New England* are under pressure for development, it is recommended that a monitoring program be completed as appropriate, over the next five plus years to ensure that the roadways and

intersections, both internally and externally servicing the *Centre of New England* are operating safely and efficiently, promoting the long-term success of the large-scale project and limiting impacts to the servicing roadway network within the Town of Coventry and adjacent communities.

Therefore, based upon the data collected on the servicing roadways, the analysis completed as part of this study, along with the access design and recommendations proposed to address deficiencies and mitigate impacts, the proposed residential development project was determined to have adequate and safe access to a public street, and will not have an adverse impact on public safety and welfare in the study area.

APPENDIX

A. Traffic Volume Data

B. Traffic Crash Data

C. Trip Generation

D. Operational Analysis

APPENDIX A – Traffic Volume Data

Automatic Traffic Recorder Count

Hopkins Hill Road

Arnold Road

Intersection Turning Movement Count

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road at Dante Boulevard

Arnold Road at New London Turnpike

Arnold Road at Crestwood Drive

A

Automatic Traffic Recorder Count

Hopkins Hill Road

Arnold Road

Hopkins Hill Road

Traffic Volumes

Transportation Data Corporation
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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

05824AVOLUME
Site Code: 2873

Start Time	6/3/2024 Mon	6/4/2024 Tue	6/5/2024 Wed	6/6/2024 Thu	6/7/2024 Fri	Weekday Average	6/8/2024 Sat	6/9/2024 Sun
12:00 AM	33	44	47	63	53	48	92	73
01:00	22	25	21	15	21	21	29	45
02:00	20	11	16	14	14	15	23	28
03:00	22	17	28	20	22	22	20	15
04:00	70	69	76	72	78	73	24	24
05:00	205	199	227	213	229	215	90	61
06:00	518	508	507	522	477	506	183	127
07:00	**762**	**753**	**752**	662	683	722	282	189
08:00	671	711	685	**668**	**736**	694	413	280
09:00	526	602	612	541	516	559	536	367
10:00	530	508	535	490	575	528	591	460
11:00	532	598	581	490	601	560	**682**	**539**
12:00 PM	633	632	658	675	676	655	**696**	**559**
01:00	556	563	615	578	602	583	622	509
02:00	709	743	742	729	719	728	605	511
03:00	824	899	903	834	800	852	568	518
04:00	**982**	**972**	**937**	**911**	**883**	937	603	506
05:00	745	823	854	780	807	802	511	447
06:00	500	584	521	506	492	521	450	380
07:00	419	427	445	386	413	418	367	336
08:00	288	320	323	300	331	312	309	258
09:00	192	223	207	217	239	216	214	144
10:00	103	112	110	121	164	122	199	109
11:00	76	76	72	92	117	87	120	49
Total	9938	10419	10474	9899	10248		8229	6534
Percentage	97.5%	102.2%	102.7%	97.1%	100.5%		80.7%	64.1%
AM Peak	07:00	07:00	07:00	08:00	08:00	-	11:00	11:00
Vol.	762	753	752	668	736	-	682	539
PM Peak	16:00	16:00	16:00	16:00	16:00	-	12:00	12:00
Vol.	982	972	937	911	883	-	696	559
Total		10419	10474					

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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

05824Avolume
Site Code: 2873

Start	6/3/2024		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	19	14	32	12	32	15	47	16	37	16	33	15	74	18	51	22
01:00	16	6	18	7	13	8	10	5	15	6	14	6	23	6	29	16
02:00	12	8	4	7	9	7	9	5	9	5	9	6	17	6	23	5
03:00	6	16	4	13	15	13	7	13	12	10	9	13	14	6	8	7
04:00	26	44	14	55	19	57	16	56	23	55	20	53	8	16	15	9
05:00	57	148	51	148	62	165	59	154	65	164	59	156	34	56	14	47
06:00	171	347	184	324	174	333	166	356	163	314	172	335	70	113	44	83
07:00	275	**487**	297	**456**	295	**457**	234	**428**	256	**427**	271	**451**	121	161	95	94
08:00	**322**	349	318	393	290	395	**288**	380	**338**	398	**311**	383	188	225	133	147
09:00	242	284	295	307	287	325	254	287	255	261	267	293	257	279	174	193
10:00	273	257	259	249	282	253	251	239	281	294	269	258	315	276	226	234
11:00	288	244	**356**	242	**314**	267	257	233	323	278	308	253	**363**	**319**	**291**	**248**
12:00 PM	359	274	329	303	356	302	343	**332**	361	315	350	305	**377**	**319**	**316**	**243**
01:00	322	234	318	245	364	251	314	264	347	255	333	250	365	257	285	224
02:00	416	293	461	282	455	287	437	292	430	289	440	289	354	251	298	213
03:00	541	283	599	300	586	317	540	294	515	285	556	296	327	241	305	213
04:00	**663**	**319**	**635**	**337**	**619**	**318**	**589**	322	**549**	**334**	**611**	**326**	358	245	290	216
05:00	502	243	565	258	545	309	513	267	504	303	526	276	305	206	272	175
06:00	292	208	362	222	313	208	310	196	279	213	311	209	256	194	216	164
07:00	247	172	252	175	273	172	231	155	266	147	254	164	229	138	212	124
08:00	195	93	205	115	208	115	187	113	215	116	202	110	189	120	171	87
09:00	117	75	138	85	139	68	144	73	152	87	138	78	139	75	99	45
10:00	63	40	85	27	79	31	76	45	112	52	83	39	126	73	68	41
11:00	56	20	50	26	51	21	61	31	76	41	59	28	79	41	33	16
Total	5480	4458	5831	4588	5780	4694	5343	4556	5583	4665	5605	4592	4588	3641	3668	2866
Day	9938		10419		10474		9899		10248		10197		8229		6534	
AM Peak	08:00	07:00	11:00	07:00	11:00	07:00	08:00	07:00	08:00	07:00	08:00	07:00	11:00	11:00	11:00	11:00
Vol.	322	487	356	456	314	457	288	428	338	427	311	451	363	319	291	248
PM Peak	16:00	16:00	16:00	16:00	16:00	16:00	16:00	12:00	16:00	16:00	16:00	16:00	12:00	12:00	12:00	12:00
Vol.	663	319	635	337	619	318	589	332	549	334	611	326	377	319	316	243

Comb. Total	9938	10419	10474	9899	10248	10197	8229	6534

ADT ADT 9,392 AADT 9,392

Automatic Traffic Recorder Count

ty / Town : COVENTRY
Location : Hopkins Hill Road
Weather : Clear
Project : CNE

Site Code: 000000000000
hopkins 2004
Date Start: 24-Mar-04
Date End: 29-Mar-04

Start Time	22-Mar-04 Mon	23-Mar-04 Tue	24-Mar-04 Wed	25-Mar-04 Thu	26-Mar-04 Fri	Weekday Average	27-Mar-04 Sat	28-Mar-04 Sun
12:00 AM	*	*	*	64	80	72	103	87
01:00	*	*	*	24	33	28	45	62
02:00	*	*	*	13	24	18	32	26
03:00	*	*	*	25	35	30	27	21
04:00	*	*	*	36	55	46	38	29
05:00	*	*	*	109	105	107	64	39
06:00	*	*	*	398	402	400	146	99
07:00	*	*	*	654	642	648	218	154
08:00	*	*	*	**656**	**676**	666	312	192
09:00	*	*	*	424	484	454	353	272
10:00	*	*	*	391	435	413	457	285
11:00	*	*	*	436	491	464	**539**	**439**
12:00 PM	*	*	615	589	673	626	**592**	**508**
01:00	*	*	587	495	563	548	564	489
02:00	*	*	516	568	624	569	527	443
03:00	*	*	716	700	738	718	521	457
04:00	*	*	**877**	801	858	845	530	423
05:00	*	*	851	**902**	**875**	876	512	357
06:00	*	*	613	641	690	648	436	394
07:00	*	*	416	383	403	401	346	266
08:00	*	*	274	292	291	286	219	198
09:00	*	*	195	196	215	202	210	138
10:00	*	*	142	143	181	155	175	92
11:00	*	*	111	107	161	126	135	73
Total	0	0	5913	9047	9734	9348	7101	5543
Percentage	0.0%	0.0%	63.3%	96.8%	104.2%		76.0%	59.3%
AM Peak	-	-	-	08:00	08:00	-	11:00	11:00
Vol.	-	-	-	656	676	-	539	439
PM Peak	-	-	16:00	17:00	17:00	-	12:00	12:00
Vol.	-	-	877	902	875	-	592	508

Automatic Traffic Recorder Count

ty / Town : COVENTRY
Location : Hopkins Hill Road
Weather : Clear
Project : CNE

Site Code: 000000000000
hopkins 2004
Date Start: 24-Mar-04
Date End: 29-Mar-04

Start	22-Mar-04		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	Chan NB	Chan SB	Chan NB	Chan SB	Chan NB	Chan SB	Chan NB	Chan SB	Chan NB	Chan SB	Chan NB	Chan SB	Chan NB	Chan SB	Chan NB	Chan SB
12:00 AM	*	*	*	*	*	*	54	10	60	20	57	15	79	24	49	38
01:00	*	*	*	*	*	*	18	6	18	15	18	10	30	15	31	31
02:00	*	*	*	*	*	*	8	5	17	7	12	6	22	10	17	9
03:00	*	*	*	*	*	*	16	9	22	13	19	11	22	5	15	6
04:00	*	*	*	*	*	*	10	26	21	34	16	30	18	20	14	15
05:00	*	*	*	*	*	*	26	83	20	85	23	84	20	44	19	20
06:00	*	*	*	*	*	*	102	296	111	291	106	294	47	99	41	58
07:00	*	*	*	*	*	*	198	**456**	182	**460**	190	**458**	96	122	82	72
08:00	*	*	*	*	*	*	**249**	407	**260**	416	**254**	412	159	153	96	96
09:00	*	*	*	*	*	*	180	244	222	262	201	253	181	172	131	141
10:00	*	*	*	*	*	*	188	203	183	252	186	228	238	219	137	148
11:00	*	*	*	*	*	*	235	201	251	240	243	220	**281**	**258**	**217**	**222**
12:00 PM	*	*	*	*	339	276	313	276	379	294	344	282	290	**302**	233	**275**
01:00	*	*	*	*	279	308	262	233	296	267	279	269	299	265	**272**	217
02:00	*	*	*	*	267	249	318	250	326	298	304	266	288	239	239	204
03:00	*	*	*	*	440	276	428	272	447	291	438	280	302	219	256	201
04:00	*	*	*	*	553	**324**	548	253	556	302	552	293	**315**	215	239	184
05:00	*	*	*	*	**574**	277	**603**	**299**	**569**	**306**	**582**	**294**	278	234	214	143
06:00	*	*	*	*	390	223	394	247	396	294	393	255	227	209	218	176
07:00	*	*	*	*	225	191	218	165	222	181	222	179	205	141	149	117
08:00	*	*	*	*	157	117	163	129	169	122	163	123	121	98	101	97
09:00	*	*	*	*	111	84	122	74	124	91	119	83	125	85	75	63
10:00	*	*	*	*	83	59	86	57	112	69	94	62	92	83	46	46
11:00	*	*	*	*	72	39	64	43	89	72	75	51	82	53	36	37
Total	0	0	0	0	3490	2423	4803	4244	5052	4682	4890	4458	3817	3284	2927	2616
Day	0		0		5913		9047		9734		9348		7101		5543	
AM Peak	-	-	-	-	-	-	08:00	07:00	08:00	07:00	08:00	07:00	11:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	249	456	260	460	254	458	281	258	217	222
PM Peak	-	-	-	-	17:00	16:00	17:00	17:00	17:00	17:00	17:00	17:00	16:00	12:00	13:00	12:00
Vol.	-	-	-	-	574	324	603	299	569	306	582	294	315	302	272	275

Vehicle Speeds

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

Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/03/24	0	1	1	1	1	2	2	10	1	0	0	0	0	19
01:00	0	3	0	0	3	1	4	1	3	0	0	1	0	16
02:00	0	1	0	0	0	2	5	3	1	0	0	0	0	12
03:00	0	0	0	0	1	3	1	0	1	0	0	0	0	6
04:00	1	2	0	0	1	1	9	8	4	0	0	0	0	26
05:00	0	11	3	1	1	4	13	15	6	1	2	0	0	57
06:00	4	9	16	1	5	22	44	40	23	7	0	0	0	171
07:00	9	16	22	1	5	28	61	76	42	12	3	0	0	275
08:00	11	19	18	9	7	55	74	71	43	11	3	1	0	322
09:00	6	7	17	3	7	25	84	66	20	7	0	0	0	242
10:00	11	14	14	3	8	48	98	56	19	2	0	0	0	273
11:00	14	13	16	1	9	43	102	59	22	7	1	0	1	288
12 PM	7	16	15	2	15	52	117	90	37	6	2	0	0	359
13:00	9	4	10	0	9	56	124	71	31	7	1	0	0	322
14:00	12	11	16	4	38	83	136	91	22	2	1	0	0	416
15:00	19	9	25	19	28	100	185	118	30	7	1	0	0	541
16:00	18	13	17	15	44	138	232	143	34	8	1	0	0	663
17:00	20	11	16	5	24	89	168	118	43	8	0	0	0	502
18:00	18	12	23	0	13	36	105	56	24	5	0	0	0	292
19:00	11	4	15	2	8	40	76	63	20	6	1	1	0	247
20:00	10	13	7	1	8	49	67	28	11	1	0	0	0	195
21:00	4	8	4	1	1	20	41	26	7	5	0	0	0	117
22:00	0	7	3	0	2	11	22	15	3	0	0	0	0	63
23:00	0	6	10	1	2	7	14	9	4	3	0	0	0	56
Total	184	210	268	70	240	915	1784	1233	451	105	16	3	1	5480

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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/04/24	1	0	0	0	2	8	9	5	5	2	0	0	0	32
01:00	0	0	2	0	0	6	6	1	3	0	0	0	0	18
02:00	0	1	0	0	0	1	1	1	0	0	0	0	0	4
03:00	0	0	0	0	0	1	1	2	0	0	0	0	0	4
04:00	0	1	0	1	0	1	6	2	2	0	1	0	0	14
05:00	1	4	3	1	1	4	18	15	3	1	0	0	0	51
06:00	5	16	10	5	3	22	49	46	19	8	0	1	0	184
07:00	12	13	28	1	5	30	89	62	47	5	1	4	0	297
08:00	24	21	7	1	14	62	92	62	24	6	4	1	0	318
09:00	9	20	12	2	12	55	88	70	19	7	1	0	0	295
10:00	13	8	8	0	14	44	93	57	17	3	2	0	0	259
11:00	12	13	21	2	14	58	127	77	23	5	2	2	0	356
12 PM	13	19	14	3	15	57	109	70	23	4	0	2	0	329
13:00	14	11	16	4	8	45	111	75	27	5	2	0	0	318
14:00	16	18	22	16	45	78	161	86	17	2	0	0	0	461
15:00	20	15	23	20	52	168	176	91	27	5	1	1	0	599
16:00	32	21	15	5	19	113	244	136	42	6	2	0	0	635
17:00	17	11	20	3	12	93	195	141	53	15	3	2	0	565
18:00	12	14	28	4	14	60	112	77	35	5	1	0	0	362
19:00	9	5	11	3	3	16	61	87	35	13	7	2	0	252
20:00	5	8	7	4	6	17	79	56	17	3	3	0	0	205
21:00	2	8	8	2	5	25	42	29	10	6	1	0	0	138
22:00	2	13	5	1	2	12	29	15	4	2	0	0	0	85
23:00	2	7	5	0	3	10	6	12	5	0	0	0	0	50
Total	221	247	265	78	249	986	1904	1275	457	103	31	15	0	5831

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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/05/24	0	0	3	0	1	8	9	6	3	2	0	0	0	32
01:00	0	0	0	0	1	6	1	2	1	0	1	1	0	13
02:00	0	0	0	0	0	3	3	1	2	0	0	0	0	9
03:00	0	3	0	0	3	4	2	2	0	1	0	0	0	15
04:00	1	2	2	1	2	3	4	2	1	0	0	0	1	19
05:00	2	9	5	0	0	4	24	14	2	2	0	0	0	62
06:00	11	10	11	5	7	21	48	39	17	3	2	0	0	174
07:00	12	16	23	6	6	38	78	73	38	4	1	0	0	295
08:00	10	12	21	2	18	49	81	64	29	3	0	1	0	290
09:00	7	10	17	0	12	59	85	65	27	3	2	0	0	287
10:00	11	16	9	3	11	47	72	85	19	7	2	0	0	282
11:00	8	12	10	2	8	63	95	84	25	5	0	2	0	314
12 PM	11	6	17	5	16	61	123	82	28	6	1	0	0	356
13:00	20	12	11	3	12	80	120	77	23	6	0	0	0	364
14:00	22	15	17	8	33	94	132	94	34	4	2	0	0	455
15:00	21	16	15	9	39	123	206	109	42	4	2	0	0	586
16:00	19	29	28	11	36	145	199	125	23	3	1	0	0	619
17:00	11	14	32	20	33	92	170	130	38	5	0	0	0	545
18:00	7	13	15	3	12	59	102	76	18	6	1	0	1	313
19:00	12	8	17	4	6	47	84	65	25	5	0	0	0	273
20:00	4	8	9	2	7	25	72	51	23	7	0	0	0	208
21:00	3	10	8	1	8	23	49	25	8	4	0	0	0	139
22:00	2	6	5	1	6	13	22	16	5	3	0	0	0	79
23:00	1	2	4	1	3	13	13	11	3	0	0	0	0	51
Total	195	229	279	87	280	1080	1794	1298	434	83	15	4	2	5780

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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/06/24	1	1	2	1	3	6	18	7	6	2	0	0	0	47
01:00	0	0	0	0	0	1	5	4	0	0	0	0	0	10
02:00	0	3	0	0	0	4	1	0	1	0	0	0	0	9
03:00	0	0	2	0	0	0	2	1	2	0	0	0	0	7
04:00	0	2	0	0	2	2	7	2	1	0	0	0	0	16
05:00	1	7	3	0	0	8	22	10	7	1	0	0	0	59
06:00	3	15	12	0	8	21	46	43	15	1	1	1	0	166
07:00	10	8	16	1	4	31	71	54	30	8	1	0	0	234
08:00	16	8	16	1	14	32	60	71	52	10	6	0	2	288
09:00	4	4	21	1	11	40	68	60	34	7	2	2	0	254
10:00	11	0	16	2	4	24	69	56	52	11	3	3	0	251
11:00	4	10	13	4	6	27	74	64	44	11	0	0	0	257
12 PM	9	14	16	1	13	50	127	76	26	7	4	0	0	343
13:00	6	8	15	0	5	38	108	77	48	6	2	1	0	314
14:00	13	9	20	14	25	61	134	107	38	11	4	1	0	437
15:00	17	7	18	9	52	120	173	105	35	3	1	0	0	540
16:00	29	11	22	9	16	103	198	138	52	8	1	0	2	589
17:00	12	4	25	11	18	67	184	119	59	13	1	0	0	513
18:00	11	6	13	2	7	16	98	93	51	11	2	0	0	310
19:00	6	11	13	2	1	18	70	65	31	11	2	0	1	231
20:00	3	7	6	0	3	14	64	57	26	6	1	0	0	187
21:00	4	7	4	2	3	18	36	44	17	6	3	0	0	144
22:00	2	0	6	2	3	19	23	15	5	0	0	0	1	76
23:00	1	4	1	1	5	11	19	12	5	1	1	0	0	61
Total	163	146	260	63	203	731	1677	1280	637	134	35	8	6	5343

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Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/07/24	0	1	0	0	3	4	9	12	7	1	0	0	0	37
01:00	0	0	0	0	0	5	6	4	0	0	0	0	0	15
02:00	0	0	0	1	2	2	2	2	0	0	0	0	0	9
03:00	1	0	0	0	2	3	3	3	0	0	0	0	0	12
04:00	0	1	0	0	1	1	9	4	5	1	1	0	0	23
05:00	1	12	6	0	0	4	15	20	7	0	0	0	0	65
06:00	10	15	6	1	2	20	51	31	19	7	1	0	0	163
07:00	10	16	16	1	10	28	71	67	27	6	3	0	1	256
08:00	14	15	18	5	22	56	107	70	24	7	0	0	0	338
09:00	11	5	14	5	13	42	94	44	20	3	2	2	0	255
10:00	6	17	11	1	15	44	95	73	15	3	0	1	0	281
11:00	11	10	8	1	14	58	108	70	33	5	5	0	0	323
12 PM	12	22	16	2	22	53	120	84	23	6	1	0	0	361
13:00	5	9	16	2	10	57	111	89	40	6	2	0	0	347
14:00	14	7	13	8	30	72	137	94	41	11	2	0	1	430
15:00	23	12	14	11	28	84	176	121	37	8	1	0	0	515
16:00	17	18	24	12	28	95	190	113	46	4	2	0	0	549
17:00	14	12	26	11	8	70	157	146	51	6	2	0	1	504
18:00	6	15	15	1	1	24	68	100	38	11	0	0	0	279
19:00	8	10	8	1	1	22	75	91	37	9	4	0	0	266
20:00	6	8	9	0	9	45	50	51	25	8	3	0	1	215
21:00	3	6	7	0	5	20	48	40	17	4	2	0	0	152
22:00	3	9	5	0	9	16	30	30	9	0	1	0	0	112
23:00	2	7	3	0	4	16	24	15	5	0	0	0	0	76
Total	177	227	235	63	239	841	1756	1374	526	106	32	3	4	5583

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Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/08/24	1	4	8	0	1	19	17	13	9	1	1	0	0	74
01:00	2	0	0	1	1	3	5	6	5	0	0	0	0	23
02:00	0	0	0	0	2	4	5	2	3	1	0	0	0	17
03:00	0	0	0	0	1	1	4	5	1	2	0	0	0	14
04:00	1	0	0	0	0	1	3	2	0	0	0	1	0	8
05:00	2	4	2	1	2	5	7	9	1	1	0	0	0	34
06:00	2	6	5	1	1	6	16	19	9	4	0	1	0	70
07:00	5	3	4	0	2	15	33	32	16	8	0	3	0	121
08:00	4	11	10	0	3	6	48	54	45	7	0	0	0	188
09:00	5	11	13	3	2	29	77	74	35	8	0	0	0	257
10:00	11	12	23	4	4	35	88	86	36	14	2	0	0	315
11:00	12	11	17	8	23	33	94	102	44	13	3	2	1	363
12 PM	9	7	13	1	3	40	124	104	59	16	1	0	0	377
13:00	8	13	18	3	7	29	94	104	65	16	7	1	0	365
14:00	10	11	17	1	7	34	96	105	54	13	5	1	0	354
15:00	11	19	8	3	7	31	87	99	50	10	2	0	0	327
16:00	9	15	22	3	2	25	90	110	64	17	1	0	0	358
17:00	4	15	22	2	3	20	92	83	48	14	1	1	0	305
18:00	9	14	22	4	1	37	69	61	30	8	0	1	0	256
19:00	5	15	12	1	8	30	85	46	17	10	0	0	0	229
20:00	7	10	12	0	1	24	54	53	16	7	4	1	0	189
21:00	6	9	2	0	2	19	47	36	14	4	0	0	0	139
22:00	0	6	4	0	8	23	34	28	19	4	0	0	0	126
23:00	3	1	0	0	3	12	30	17	8	5	0	0	0	79
Total	126	197	234	36	94	481	1299	1250	648	183	27	12	1	4588

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Northbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/09/24	1	4	2	0	1	9	14	13	4	3	0	0	0	51
01:00	0	1	4	0	2	4	7	9	2	0	0	0	0	29
02:00	1	2	2	0	0	7	6	3	2	0	0	0	0	23
03:00	0	0	3	0	0	1	1	2	1	0	0	0	0	8
04:00	1	0	0	0	0	1	5	4	2	1	0	1	0	15
05:00	2	3	2	0	0	1	3	2	1	0	0	0	0	14
06:00	0	1	6	0	0	8	11	8	7	3	0	0	0	44
07:00	5	9	5	0	3	14	24	20	10	3	2	0	0	95
08:00	4	11	13	1	0	9	44	32	14	2	3	0	0	133
09:00	7	17	10	1	3	17	38	44	26	10	1	0	0	174
10:00	8	18	12	3	6	17	63	64	28	5	2	0	0	226
11:00	6	7	21	2	6	32	68	98	37	12	2	0	0	291
12 PM	11	5	18	1	3	22	85	97	50	20	4	0	0	316
13:00	11	6	26	5	3	17	44	69	66	28	9	0	1	285
14:00	4	5	21	2	4	24	72	89	61	12	4	0	0	298
15:00	7	18	14	6	1	15	57	110	54	13	8	2	0	305
16:00	9	11	19	2	4	18	82	87	49	7	1	1	0	290
17:00	12	15	16	1	3	11	55	86	59	12	0	1	1	272
18:00	12	8	14	0	3	10	57	70	33	7	2	0	0	216
19:00	4	13	8	2	1	22	47	75	22	12	3	3	0	212
20:00	6	7	9	3	2	13	53	38	30	7	3	0	0	171
21:00	4	10	4	1	3	20	28	21	8	0	0	0	0	99
22:00	4	1	2	0	4	10	18	18	7	4	0	0	0	68
23:00	0	0	0	0	2	5	11	7	7	1	0	0	0	33
Total	119	172	231	30	54	307	893	1066	580	162	44	8	2	3668
Grand Total	1185	1428	1772	427	1359	5341	11107	8776	3733	876	200	53	16	36273

	15th Percentile :	32 MPH
	50th Percentile :	42 MPH
	85th Percentile :	49 MPH
	95th Percentile :	54 MPH
Statistics	Mean Speed(Average) :	41 MPH
	10 MPH Pace Speed :	41-50 MPH
	Number in Pace :	19883
	Percent in Pace :	54.8%
	Number of Vehicles > 35 MPH :	30102
	Percent of Vehicles > 35 MPH :	83.0%

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Southbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/03/24	0	2	1	0	3	4	2	0	1	1	0	0	0	14
01:00	0	0	0	0	1	2	2	1	0	0	0	0	0	6
02:00	0	2	0	0	0	1	1	3	1	0	0	0	0	8
03:00	0	0	0	0	3	3	3	4	3	0	0	0	0	16
04:00	0	0	0	0	0	8	18	16	2	0	0	0	0	44
05:00	1	2	0	3	10	19	54	37	19	2	1	0	0	148
06:00	5	8	3	5	9	49	135	104	19	8	1	1	0	347
07:00	17	8	2	3	25	82	197	109	36	5	2	1	0	487
08:00	23	10	2	5	14	62	134	67	20	8	2	1	1	349
09:00	9	12	5	2	16	70	105	47	14	3	1	0	0	284
10:00	9	13	3	4	16	70	83	47	7	3	2	0	0	257
11:00	15	9	3	1	21	64	86	37	6	2	0	0	0	244
12 PM	17	11	3	4	24	84	93	29	8	1	0	0	0	274
13:00	11	7	0	3	22	57	89	36	8	1	0	0	0	234
14:00	16	15	1	5	17	94	95	43	6	1	0	0	0	293
15:00	34	20	2	3	17	83	80	33	10	1	0	0	0	283
16:00	32	19	2	6	24	88	95	37	13	3	0	0	0	319
17:00	30	22	2	5	16	52	75	28	9	2	0	1	1	243
18:00	14	28	2	6	15	47	52	28	14	0	2	0	0	208
19:00	13	23	2	2	32	37	47	14	1	0	1	0	0	172
20:00	8	9	3	1	4	25	30	9	2	1	0	1	0	93
21:00	3	9	1	1	3	24	19	11	1	3	0	0	0	75
22:00	2	7	0	0	7	11	10	1	0	2	0	0	0	40
23:00	1	0	0	0	3	7	9	0	0	0	0	0	0	20
Total	260	236	37	59	302	1043	1514	741	200	47	12	5	2	4458

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Southbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/04/24	0	1	0	1	2	3	4	1	0	0	0	0	0	12
01:00	0	0	0	0	1	4	1	1	0	0	0	0	0	7
02:00	0	0	0	0	2	0	1	3	1	0	0	0	0	7
03:00	0	0	0	0	3	4	2	2	2	0	0	0	0	13
04:00	1	1	0	0	1	9	17	19	6	1	0	0	0	55
05:00	1	2	0	3	1	19	56	50	10	6	0	0	0	148
06:00	9	7	1	9	11	44	126	88	24	3	1	1	0	324
07:00	15	11	2	6	21	80	168	96	47	7	3	0	0	456
08:00	21	13	4	7	26	103	128	69	15	7	0	0	0	393
09:00	14	10	3	8	22	95	99	42	13	0	1	0	0	307
10:00	10	8	2	1	11	70	93	42	9	3	0	0	0	249
11:00	14	14	1	6	15	91	64	28	7	1	1	0	0	242
12 PM	24	13	1	4	25	84	100	41	7	3	0	1	0	303
13:00	15	10	1	7	15	72	85	29	8	3	0	0	0	245
14:00	17	9	3	5	20	81	97	43	6	1	0	0	0	282
15:00	25	13	3	2	25	70	97	49	12	2	0	0	2	300
16:00	37	12	6	4	30	89	94	51	12	2	0	0	0	337
17:00	18	26	4	3	7	49	102	35	11	2	1	0	0	258
18:00	17	23	2	0	8	40	77	39	8	4	3	1	0	222
19:00	12	23	3	6	3	31	56	33	6	1	1	0	0	175
20:00	9	11	1	2	8	21	38	20	3	1	0	0	1	115
21:00	10	10	2	2	6	26	23	3	3	0	0	0	0	85
22:00	1	3	0	1	3	7	7	4	1	0	0	0	0	27
23:00	2	1	1	1	4	4	7	4	2	0	0	0	0	26
Total	272	221	40	78	270	1096	1542	792	213	47	11	3	3	4588

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Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/05/24	1	0	0	1	3	4	5	0	1	0	0	0	0	15
01:00	0	0	0	0	1	3	2	1	0	1	0	0	0	8
02:00	0	0	0	0	0	1	3	3	0	0	0	0	0	7
03:00	0	1	0	0	2	7	1	0	0	2	0	0	0	13
04:00	0	0	0	1	4	12	23	10	4	1	1	1	0	57
05:00	2	1	1	3	2	20	66	49	16	3	1	1	0	165
06:00	17	8	3	5	12	55	118	84	24	5	2	0	0	333
07:00	23	12	3	6	11	83	177	95	37	9	1	0	0	457
08:00	25	9	0	4	16	95	168	50	24	3	0	0	1	395
09:00	18	9	2	7	22	82	126	39	16	3	1	0	0	325
10:00	11	10	1	3	20	69	102	25	11	1	0	0	0	253
11:00	13	11	2	5	25	78	90	33	7	2	0	1	0	267
12 PM	20	18	3	3	23	83	102	35	15	0	0	0	0	302
13:00	14	11	3	6	19	74	85	31	6	2	0	0	0	251
14:00	29	17	5	8	28	66	92	33	8	1	0	0	0	287
15:00	31	12	4	5	30	78	102	51	4	0	0	0	0	317
16:00	31	18	2	3	20	79	105	49	9	1	1	0	0	318
17:00	31	25	3	5	16	62	98	61	7	1	0	0	0	309
18:00	14	22	3	2	7	39	81	31	6	2	1	0	0	208
19:00	10	36	1	2	8	44	46	17	5	2	0	1	0	172
20:00	9	20	0	1	7	20	35	18	5	0	0	0	0	115
21:00	5	8	1	2	12	25	11	3	1	0	0	0	0	68
22:00	3	1	1	1	6	9	8	1	1	0	0	0	0	31
23:00	1	0	0	0	2	10	4	4	0	0	0	0	0	21
Total	308	249	38	73	296	1098	1650	723	207	39	8	4	1	4694

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Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/06/24	1	1	0	0	2	5	5	1	1	0	0	0	0	16
01:00	0	0	0	0	0	0	3	1	1	0	0	0	0	5
02:00	0	0	0	0	0	1	2	2	0	0	0	0	0	5
03:00	0	0	0	0	3	6	1	0	2	1	0	0	0	13
04:00	0	0	0	1	1	16	21	8	9	0	0	0	0	56
05:00	2	2	0	1	7	27	63	41	7	3	1	0	0	154
06:00	8	7	1	4	15	87	127	78	22	4	2	1	0	356
07:00	12	7	4	10	24	105	156	72	31	7	0	0	0	428
08:00	15	12	1	12	30	73	136	70	24	5	1	0	1	380
09:00	8	10	2	5	22	59	123	37	14	6	1	0	0	287
10:00	15	14	1	2	12	49	72	52	16	4	2	0	0	239
11:00	12	9	4	3	14	70	71	36	10	1	3	0	0	233
12 PM	24	20	2	8	13	70	132	47	12	4	0	0	0	332
13:00	8	14	3	4	11	80	96	35	12	0	1	0	0	264
14:00	18	21	2	4	24	75	95	38	11	3	1	0	0	292
15:00	23	20	3	4	17	59	101	47	18	2	0	0	0	294
16:00	28	16	4	6	25	62	111	44	20	4	1	1	0	322
17:00	20	19	5	2	17	46	112	34	7	3	1	1	0	267
18:00	11	15	2	0	7	30	78	40	12	1	0	0	0	196
19:00	12	11	1	2	9	28	58	28	5	1	0	0	0	155
20:00	12	13	2	2	12	16	31	15	7	2	1	0	0	113
21:00	3	7	1	0	5	26	17	12	2	0	0	0	0	73
22:00	1	5	1	2	6	12	10	2	5	1	0	0	0	45
23:00	1	3	1	0	3	9	9	2	3	0	0	0	0	31
Total	234	226	40	72	279	1011	1630	742	251	52	15	3	1	4556

Transportation Data Corporation
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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Southbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/07/24	1	1	0	0	0	6	5	2	1	0	0	0	0	16
01:00	0	1	0	0	1	0	1	2	1	0	0	0	0	6
02:00	0	0	0	0	2	0	1	2	0	0	0	0	0	5
03:00	1	0	0	0	1	2	5	1	0	0	0	0	0	10
04:00	0	0	0	2	1	10	21	14	5	1	0	1	0	55
05:00	2	3	0	1	6	15	74	39	19	4	1	0	0	164
06:00	9	9	0	4	13	52	123	63	31	8	1	1	0	314
07:00	27	4	2	3	14	76	169	89	29	13	1	0	0	427
08:00	16	16	0	7	30	92	146	64	23	2	1	1	0	398
09:00	12	6	3	3	23	77	99	28	7	2	1	0	0	261
10:00	12	7	7	7	25	77	100	46	9	2	2	0	0	294
11:00	15	13	0	2	16	80	104	40	6	1	1	0	0	278
12 PM	23	14	2	11	32	96	97	27	11	1	0	1	0	315
13:00	10	7	0	1	14	70	102	31	15	5	0	0	0	255
14:00	17	17	0	5	33	73	80	51	9	2	1	0	1	289
15:00	33	14	2	10	22	52	87	53	10	0	2	0	0	285
16:00	27	18	6	7	22	74	118	49	11	2	0	0	0	334
17:00	24	24	5	5	9	49	122	48	13	4	0	0	0	303
18:00	15	22	2	2	5	38	72	35	19	1	2	0	0	213
19:00	15	12	3	0	13	31	47	20	5	1	0	0	0	147
20:00	14	15	1	5	14	28	25	10	4	0	0	0	0	116
21:00	11	13	0	1	4	23	24	9	2	0	0	0	0	87
22:00	5	6	2	1	5	9	11	11	1	1	0	0	0	52
23:00	4	4	0	1	5	11	10	4	1	1	0	0	0	41
Total	293	226	35	78	310	1041	1643	738	232	51	13	4	1	4665

Transportation Data Corporation
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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Southbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/08/24	1	2	0	1	2	1	7	3	1	0	0	0	0	18
01:00	0	0	0	0	1	3	2	0	0	0	0	0	0	6
02:00	0	0	1	0	0	3	1	1	0	0	0	0	0	6
03:00	0	0	0	0	1	3	2	0	0	0	0	0	0	6
04:00	0	1	0	0	2	5	4	3	0	0	1	0	0	16
05:00	0	1	0	1	5	8	16	13	8	3	0	1	0	56
06:00	4	1	0	0	5	18	36	36	10	2	1	0	0	113
07:00	3	11	0	1	6	33	51	45	9	2	0	0	0	161
08:00	7	11	1	3	7	48	83	45	12	3	4	0	1	225
09:00	9	8	2	3	15	62	118	50	8	4	0	0	0	279
10:00	12	12	3	2	15	59	109	51	11	1	1	0	0	276
11:00	22	20	4	1	12	62	124	52	15	5	1	0	1	319
12 PM	15	20	1	3	14	78	113	60	13	2	0	0	0	319
13:00	17	11	2	1	8	68	107	31	9	1	2	0	0	257
14:00	14	8	5	1	15	55	93	43	13	4	0	0	0	251
15:00	12	15	3	1	9	67	89	31	11	3	0	0	0	241
16:00	15	12	0	0	6	50	95	48	16	3	0	0	0	245
17:00	13	13	3	3	3	38	82	40	8	1	1	1	0	206
18:00	10	12	2	1	13	32	59	54	11	0	0	0	0	194
19:00	5	14	0	1	4	28	56	20	8	1	1	0	0	138
20:00	7	14	0	0	1	32	44	15	4	3	0	0	0	120
21:00	5	7	0	0	12	21	16	10	3	1	0	0	0	75
22:00	2	8	1	2	12	19	15	12	1	1	0	0	0	73
23:00	2	5	1	4	1	10	13	3	2	0	0	0	0	41
Total	175	206	29	29	169	803	1335	666	173	40	12	2	2	3641

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Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon
Southbound

05824Aspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
06/09/24	0	6	0	0	0	3	8	3	2	0	0	0	0	22
01:00	0	3	0	0	0	3	4	3	2	1	0	0	0	16
02:00	0	0	0	0	0	2	2	1	0	0	0	0	0	5
03:00	0	1	0	0	1	3	0	1	1	0	0	0	0	7
04:00	0	0	0	0	0	1	3	3	2	0	0	0	0	9
05:00	2	0	0	0	2	6	7	20	8	1	1	0	0	47
06:00	0	1	0	0	2	18	36	18	5	2	0	1	0	83
07:00	1	6	0	2	2	19	49	14	1	0	0	0	0	94
08:00	3	8	0	0	5	37	59	23	7	4	1	0	0	147
09:00	4	7	1	1	9	56	70	33	8	3	0	1	0	193
10:00	14	17	2	1	11	67	73	37	10	0	1	1	0	234
11:00	10	23	1	5	14	48	98	40	8	1	0	0	0	248
12 PM	18	13	3	6	8	52	77	50	12	4	0	0	0	243
13:00	12	22	5	1	6	38	64	58	11	4	0	3	0	224
14:00	15	18	3	4	9	37	76	36	11	4	0	0	0	213
15:00	12	27	4	0	3	31	74	49	10	3	0	0	0	213
16:00	8	15	9	2	15	46	74	31	13	3	0	0	0	216
17:00	11	16	1	0	5	28	64	42	6	2	0	0	0	175
18:00	11	19	1	1	6	31	52	33	9	0	1	0	0	164
19:00	6	10	4	0	5	27	43	17	9	2	1	0	0	124
20:00	8	7	0	0	3	17	30	17	5	0	0	0	0	87
21:00	4	4	0	0	7	15	11	3	0	1	0	0	0	45
22:00	1	7	0	0	1	6	18	6	1	1	0	0	0	41
23:00	2	4	0	0	0	3	4	1	1	0	1	0	0	16
Total	142	234	34	23	114	594	996	539	142	36	6	6	0	2866
Grand Total	1684	1598	253	412	1740	6686	10310	4941	1418	312	77	27	10	29468

	15th Percentile :	31 MPH
	50th Percentile :	41 MPH
	85th Percentile :	47 MPH
	95th Percentile :	51 MPH
Statistics	Mean Speed(Average) :	39 MPH
	10 MPH Pace Speed :	36-45 MPH
	Number in Pace :	16996
	Percent in Pace :	57.7%
	Number of Vehicles > 35 MPH :	23781
	Percent of Vehicles > 35 MPH :	80.7%

Arnold Road

Traffic Volumes

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

Arnold Road
north of Grandview Street
City, State: Coventry, RI
Client: Crossman/P. Bannon

05872Bvolume
Site Code: 2873

Start Time	7/22/2024 Mon	7/23/2024 Tue	7/24/2024 Wed	7/25/2024 Thu	7/26/2024 Fri	Weekday Average	7/27/2024 Sat	7/28/2024 Sun
12:00 AM	*	*	91	88	106	95	153	108
01:00	*	*	48	45	48	47	95	98
02:00	*	*	29	32	43	35	54	51
03:00	*	*	44	58	52	51	31	35
04:00	*	*	181	169	165	172	74	47
05:00	*	*	308	293	285	295	157	85
06:00	*	*	602	600	618	607	291	195
07:00	*	*	856	791	805	817	459	339
08:00	*	*	844	851	836	844	762	587
09:00	*	*	848	892	941	894	899	682
10:00	*	*	864	956	939	920	1025	919
11:00	*	*	**927**	**997**	**1012**	979	**1026**	**988**
12:00 PM	*	*	957	1050	1054	1020	1029	**1069**
01:00	*	*	955	1097	1061	1038	**1111**	1000
02:00	*	*	1048	1127	1189	1121	1015	959
03:00	*	*	1128	**1255**	1088	1157	1056	930
04:00	*	*	**1164**	1143	**1242**	1183	899	857
05:00	*	*	1051	1050	1021	1041	864	809
06:00	*	*	822	844	938	868	837	719
07:00	*	*	666	651	785	701	657	577
08:00	*	*	509	568	619	565	578	393
09:00	*	*	365	397	480	414	471	271
10:00	*	*	241	260	340	280	333	225
11:00	*	*	156	175	249	193	237	112
Total	0	0	14704	15389	15916		14113	12055
Percentage	0.0%	0.0%	95.9%	100.3%	103.8%		92.0%	78.6%
AM Peak	-	-	11:00	11:00	11:00	-	11:00	11:00
Vol.	-	-	927	997	1012	-	1026	988
PM Peak	-	-	16:00	15:00	16:00	-	13:00	12:00
Vol.	-	-	1164	1255	1242	-	1111	1069
Total		0	14704					

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Arnold Road
north of Grandview Street
City, State: Coventry, RI
Client: Crossman/P. Bannon

05872Bvolume
Site Code: 2873

Start	7/22/2024		7/23/2024		7/24/2024		7/25/2024		7/26/2024		Weekday Average		7/27/2024		7/28/2024	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	72	19	73	15	76	30	74	21	105	48	78	30
01:00	*	*	*	*	28	20	26	19	27	21	27	20	59	36	68	30
02:00	*	*	*	*	12	17	9	23	22	21	14	20	31	23	30	21
03:00	*	*	*	*	12	32	11	47	13	39	12	39	14	17	23	12
04:00	*	*	*	*	20	161	23	146	27	138	23	148	12	62	20	27
05:00	*	*	*	*	58	250	47	246	54	231	53	242	42	115	14	71
06:00	*	*	*	*	140	462	132	468	153	465	142	465	83	208	44	151
07:00	*	*	*	*	255	**601**	229	562	235	570	240	**578**	155	304	125	214
08:00	*	*	*	*	265	579	265	**586**	269	567	266	577	268	494	218	369
09:00	*	*	*	*	344	504	379	513	349	**592**	357	536	336	563	276	406
10:00	*	*	*	*	378	486	386	570	381	558	382	538	**459**	566	370	**549**
11:00	*	*	*	*	**414**	513	**499**	498	**484**	528	**466**	513	454	**572**	**460**	528
12:00 PM	*	*	*	*	474	**483**	516	**534**	494	560	495	**526**	473	556	494	**575**
01:00	*	*	*	*	500	455	569	528	538	523	536	502	533	**578**	**501**	499
02:00	*	*	*	*	570	478	628	499	628	**561**	609	513	498	517	496	463
03:00	*	*	*	*	683	445	**735**	520	605	483	674	483	**565**	491	478	452
04:00	*	*	*	*	**741**	423	674	469	**742**	500	**719**	464	440	459	442	415
05:00	*	*	*	*	621	430	648	402	579	442	616	425	433	431	417	392
06:00	*	*	*	*	451	371	447	397	495	443	464	404	427	410	363	356
07:00	*	*	*	*	401	265	382	269	441	344	408	293	330	327	326	251
08:00	*	*	*	*	300	209	325	243	356	263	327	238	341	237	237	156
09:00	*	*	*	*	213	152	235	162	308	172	252	162	268	203	164	107
10:00	*	*	*	*	138	103	160	100	202	138	167	114	188	145	136	89
11:00	*	*	*	*	111	45	118	57	175	74	135	59	154	83	78	34
Total	0	0	0	0	7201	7503	7516	7873	7653	8263	7458	7880	6668	7445	5858	6197
Day	0		0		14704		15389		15916		15338		14113		12055	
AM Peak	-	-	-	-	11:00	07:00	11:00	08:00	11:00	09:00	11:00	07:00	10:00	11:00	11:00	10:00
Vol.	-	-	-	-	414	601	499	586	484	592	466	578	459	572	460	549
PM Peak	-	-	-	-	16:00	12:00	15:00	12:00	16:00	14:00	16:00	12:00	15:00	13:00	13:00	12:00
Vol.	-	-	-	-	741	483	735	534	742	561	719	526	565	578	501	575

Comb. Total	0	0	14704	15389	15916	15338	14113	12055

ADT ADT 14,435 AADT 14,435

Vehicle Speeds

Transportation Data Corporation
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Arnold Road
north of Grandview Street
City, State: Coventry, RI
Client: Crossman/P. Bannon
Northbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/24/24	0	0	0	0	9	25	22	12	2	2	0	0	0	72
01:00	0	0	0	3	2	16	3	2	1	1	0	0	0	28
02:00	0	0	0	1	3	3	4	1	0	0	0	0	0	12
03:00	0	0	0	0	2	5	5	0	0	0	0	0	0	12
04:00	0	0	1	0	3	7	5	4	0	0	0	0	0	20
05:00	1	0	0	0	2	22	25	4	2	2	0	0	0	58
06:00	2	1	0	0	4	44	54	28	4	3	0	0	0	140
07:00	17	0	2	3	14	97	97	18	6	0	1	0	0	255
08:00	13	0	1	5	23	108	92	19	2	2	0	0	0	265
09:00	9	1	4	5	28	148	111	31	7	0	0	0	0	344
10:00	18	0	0	3	39	164	117	34	3	0	0	0	0	378
11:00	14	0	0	2	36	191	141	29	1	0	0	0	0	414
12 PM	18	0	0	0	49	208	160	35	4	0	0	0	0	474
13:00	26	1	1	19	51	206	160	31	4	1	0	0	0	500
14:00	23	0	0	2	44	261	197	40	3	0	0	0	0	570
15:00	19	0	0	5	72	281	253	49	2	1	0	1	0	683
16:00	19	0	3	16	97	299	253	48	6	0	0	0	0	741
17:00	17	1	0	8	58	238	213	76	10	0	0	0	0	621
18:00	9	0	0	3	49	175	172	35	7	0	1	0	0	451
19:00	3	1	7	11	54	178	115	27	4	1	0	0	0	401
20:00	2	0	0	7	33	115	106	33	4	0	0	0	0	300
21:00	0	0	0	0	26	88	74	21	4	0	0	0	0	213
22:00	0	0	0	2	9	58	45	16	7	1	0	0	0	138
23:00	1	0	0	0	7	33	55	11	3	1	0	0	0	111
Total	211	5	19	95	714	2970	2479	604	86	15	2	1	0	7201

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Arnold Road
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Northbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/25/24	0	0	0	2	7	35	23	5	0	0	1	0	0	73
01:00	0	0	0	1	1	15	8	1	0	0	0	0	0	26
02:00	0	0	0	0	1	6	1	1	0	0	0	0	0	9
03:00	0	0	0	0	2	3	3	3	0	0	0	0	0	11
04:00	0	0	0	3	1	7	9	1	1	1	0	0	0	23
05:00	2	0	0	1	5	17	18	4	0	0	0	0	0	47
06:00	7	0	0	0	3	41	49	26	4	2	0	0	0	132
07:00	15	0	0	2	10	60	104	31	6	1	0	0	0	229
08:00	6	0	0	1	18	113	100	21	6	0	0	0	0	265
09:00	13	0	1	3	58	159	126	17	2	0	0	0	0	379
10:00	14	0	0	5	65	169	108	22	2	1	0	0	0	386
11:00	13	1	0	14	61	222	161	24	3	0	0	0	0	499
12 PM	17	0	0	16	84	201	169	23	5	1	0	0	0	516
13:00	17	1	0	27	91	249	157	24	3	0	0	0	0	569
14:00	34	2	7	34	102	252	153	38	4	2	0	0	0	628
15:00	23	0	5	33	171	288	181	27	6	1	0	0	0	735
16:00	17	0	0	25	110	248	215	54	5	0	0	0	0	674
17:00	16	0	6	22	92	212	233	56	10	1	0	0	0	648
18:00	12	1	1	10	58	173	148	37	6	1	0	0	0	447
19:00	13	0	0	10	91	133	101	32	2	0	0	0	0	382
20:00	6	0	0	6	36	139	119	16	1	2	0	0	0	325
21:00	0	0	0	3	27	103	82	15	4	0	1	0	0	235
22:00	1	0	0	2	13	66	58	18	2	0	0	0	0	160
23:00	1	1	0	1	11	45	51	6	1	1	0	0	0	118
Total	227	6	20	221	1118	2956	2377	502	73	14	2	0	0	7516

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Arnold Road
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Northbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/26/24	0	0	0	1	11	29	23	10	2	0	0	0	0	76
01:00	0	0	0	4	2	14	3	2	1	1	0	0	0	27
02:00	0	0	0	1	3	10	6	2	0	0	0	0	0	22
03:00	0	0	0	0	2	4	5	2	0	0	0	0	0	13
04:00	0	0	0	0	1	8	10	7	0	1	0	0	0	27
05:00	0	0	0	0	5	13	21	13	1	1	0	0	0	54
06:00	8	1	3	0	4	38	69	27	2	0	1	0	0	153
07:00	14	0	2	1	19	74	92	30	2	1	0	0	0	235
08:00	18	0	0	1	19	109	97	20	3	1	0	0	1	269
09:00	9	0	0	5	37	152	117	26	3	0	0	0	0	349
10:00	15	0	0	6	42	160	133	22	3	0	0	0	0	381
11:00	19	1	3	6	57	207	161	29	1	0	0	0	0	484
12 PM	20	0	0	7	60	203	173	29	2	0	0	0	0	494
13:00	21	0	7	36	92	180	157	41	3	1	0	0	0	538
14:00	17	0	4	17	119	242	180	39	9	1	0	0	0	628
15:00	33	1	0	9	95	206	199	53	6	2	1	0	0	605
16:00	21	2	3	10	87	276	271	62	8	2	0	0	0	742
17:00	25	0	0	7	68	203	217	50	8	1	0	0	0	579
18:00	14	0	1	17	70	197	149	36	9	1	1	0	0	495
19:00	10	0	5	14	70	167	147	28	0	0	0	0	0	441
20:00	11	0	0	2	28	160	132	21	1	0	0	0	1	356
21:00	2	0	0	3	79	132	82	8	1	1	0	0	0	308
22:00	1	0	0	15	41	89	43	9	1	2	0	1	0	202
23:00	1	0	0	3	22	70	60	15	4	0	0	0	0	175
Total	259	5	28	165	1033	2943	2547	581	70	16	3	1	2	7653

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Arnold Road
north of Grandview Street
City, State: Coventry, RI
Client: Crossman/P. Bannon
Northbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/27/24	0	0	0	0	8	40	46	9	2	0	0	0	0	105
01:00	0	0	0	1	5	29	19	4	1	0	0	0	0	59
02:00	0	0	0	1	4	16	6	3	1	0	0	0	0	31
03:00	0	0	0	0	1	7	5	1	0	0	0	0	0	14
04:00	0	0	1	0	3	5	2	0	1	0	0	0	0	12
05:00	0	0	1	0	3	10	21	5	2	0	0	0	0	42
06:00	1	0	0	0	5	27	33	13	2	2	0	0	0	83
07:00	6	0	0	3	7	40	70	23	6	0	0	0	0	155
08:00	9	1	0	5	21	96	95	35	6	0	0	0	0	268
09:00	14	0	0	3	37	127	117	30	8	0	0	0	0	336
10:00	16	0	0	10	56	214	134	24	5	0	0	0	0	459
11:00	16	2	11	14	68	166	130	39	7	1	0	0	0	454
12 PM	16	3	7	10	60	171	159	37	8	2	0	0	0	473
13:00	13	0	0	10	76	192	183	50	9	0	0	0	0	533
14:00	18	0	0	5	83	200	137	46	9	0	0	0	0	498
15:00	13	0	0	21	98	189	185	45	13	0	0	1	0	565
16:00	11	1	1	6	64	157	151	47	2	0	0	0	0	440
17:00	7	1	0	2	53	153	169	41	7	0	0	0	0	433
18:00	8	0	5	10	53	167	137	36	10	0	1	0	0	427
19:00	5	0	2	9	66	122	109	14	3	0	0	0	0	330
20:00	4	0	0	5	36	153	120	19	2	2	0	0	0	341
21:00	4	0	0	3	26	107	98	27	3	0	0	0	0	268
22:00	1	0	0	1	17	66	84	14	4	1	0	0	0	188
23:00	1	0	0	1	17	49	66	14	6	0	0	0	0	154
Total	163	8	28	120	867	2503	2276	576	117	8	1	1	0	6668

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Northbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/28/24	1	0	0	0	7	21	33	10	5	1	0	0	0	78
01:00	0	0	0	0	1	23	31	10	3	0	0	0	0	68
02:00	0	0	0	0	3	17	7	3	0	0	0	0	0	30
03:00	0	0	0	0	4	6	9	2	1	1	0	0	0	23
04:00	0	0	0	0	2	7	7	4	0	0	0	0	0	20
05:00	0	0	0	0	2	6	3	3	0	0	0	0	0	14
06:00	1	1	0	0	3	18	15	5	1	0	0	0	0	44
07:00	0	0	0	0	9	43	50	17	5	1	0	0	0	125
08:00	5	0	0	1	7	85	97	20	2	1	0	0	0	218
09:00	7	0	0	3	17	100	124	22	1	2	0	0	0	276
10:00	11	1	0	4	43	134	131	39	7	0	0	0	0	370
11:00	11	0	0	7	66	178	150	43	5	0	0	0	0	460
12 PM	18	2	5	23	54	173	173	41	3	2	0	0	0	494
13:00	24	0	3	24	72	178	158	40	2	0	0	0	0	501
14:00	9	1	0	11	64	177	170	57	7	0	0	0	0	496
15:00	13	0	2	16	56	171	145	63	11	1	0	0	0	478
16:00	7	0	2	17	24	171	174	36	8	2	0	0	1	442
17:00	7	1	0	2	36	158	165	44	4	0	0	0	0	417
18:00	10	0	0	1	37	106	168	36	3	1	1	0	0	363
19:00	5	0	0	1	43	136	111	26	2	1	1	0	0	326
20:00	4	0	0	2	24	74	104	24	3	1	1	0	0	237
21:00	1	0	0	0	20	58	67	16	2	0	0	0	0	164
22:00	1	0	1	0	19	58	47	10	0	0	0	0	0	136
23:00	0	0	0	4	12	22	32	6	2	0	0	0	0	78
Total	135	6	13	116	625	2120	2171	577	77	14	3	0	1	5858
Grand Total	995	30	108	717	4357	13492	11850	2840	423	67	11	3	3	34896

	15th Percentile :	33 MPH
	50th Percentile :	39 MPH
	85th Percentile :	44 MPH
	95th Percentile :	47 MPH
Statistics	Mean Speed(Average) :	39 MPH
	10 MPH Pace Speed :	36-45 MPH
	Number in Pace :	25342
	Percent in Pace :	72.6%
	Number of Vehicles > 35 MPH :	28689
	Percent of Vehicles > 35 MPH :	82.2%

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Arnold Road
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Southbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/24/24	0	0	0	2	6	8	1	2	0	0	0	0	0	19
01:00	0	0	0	0	5	9	6	0	0	0	0	0	0	20
02:00	0	0	0	0	0	11	5	1	0	0	0	0	0	17
03:00	0	0	0	1	3	19	6	2	1	0	0	0	0	32
04:00	0	0	0	0	19	72	50	18	2	0	0	0	0	161
05:00	0	0	0	0	19	110	105	15	1	0	0	0	0	250
06:00	2	0	4	6	55	238	143	10	3	1	0	0	0	462
07:00	9	0	0	12	117	278	165	19	1	0	0	0	0	601
08:00	9	2	2	27	84	308	135	11	1	0	0	0	0	579
09:00	12	1	2	12	95	270	101	11	0	0	0	0	0	504
10:00	6	0	0	6	84	305	81	2	1	0	0	0	1	486
11:00	10	0	0	8	110	281	92	12	0	0	0	0	0	513
12 PM	13	0	1	14	102	241	103	9	0	0	0	0	0	483
13:00	18	0	0	5	108	239	82	2	0	1	0	0	0	455
14:00	19	0	1	13	90	260	91	4	0	0	0	0	0	478
15:00	15	0	1	21	75	211	115	5	0	1	1	0	0	445
16:00	18	6	7	2	48	214	109	18	1	0	0	0	0	423
17:00	16	0	0	3	61	213	116	21	0	0	0	0	0	430
18:00	14	0	0	1	59	184	103	8	2	0	0	0	0	371
19:00	4	0	0	2	33	151	67	8	0	0	0	0	0	265
20:00	2	0	0	5	54	112	34	2	0	0	0	0	0	209
21:00	1	0	0	3	30	82	29	6	1	0	0	0	0	152
22:00	2	0	1	1	17	40	35	6	1	0	0	0	0	103
23:00	0	0	0	2	11	13	14	4	1	0	0	0	0	45
Total	170	9	19	146	1285	3869	1788	196	16	3	1	0	1	7503

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Arnold Road
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Southbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/25/24	0	0	0	1	6	6	2	0	0	0	0	0	0	15
01:00	0	0	0	0	1	10	8	0	0	0	0	0	0	19
02:00	0	0	0	0	2	13	7	1	0	0	0	0	0	23
03:00	0	0	1	1	2	18	23	2	0	0	0	0	0	47
04:00	0	0	0	0	12	65	53	13	3	0	0	0	0	146
05:00	0	0	0	0	35	98	103	9	1	0	0	0	0	246
06:00	7	0	4	1	55	236	142	21	2	0	0	0	0	468
07:00	13	0	0	13	93	298	133	12	0	0	0	0	0	562
08:00	16	0	0	9	107	309	131	13	1	0	0	0	0	586
09:00	12	2	0	19	135	275	66	4	0	0	0	0	0	513
10:00	11	0	4	15	186	296	57	1	0	0	0	0	0	570
11:00	16	0	0	7	103	303	62	7	0	0	0	0	0	498
12 PM	20	0	1	20	105	295	86	6	1	0	0	0	0	534
13:00	18	1	0	13	100	290	94	9	0	2	1	0	0	528
14:00	22	0	4	1	75	262	117	15	2	0	0	0	1	499
15:00	21	1	0	19	129	236	99	13	2	0	0	0	0	520
16:00	23	0	0	14	76	205	139	12	0	0	0	0	0	469
17:00	19	0	2	5	27	201	133	11	4	0	0	0	0	402
18:00	9	0	6	14	60	200	95	12	0	0	1	0	0	397
19:00	2	0	0	1	48	140	70	8	0	0	0	0	0	269
20:00	6	0	0	3	53	125	48	7	1	0	0	0	0	243
21:00	2	0	1	9	40	80	23	6	1	0	0	0	0	162
22:00	1	0	0	1	10	56	28	4	0	0	0	0	0	100
23:00	2	0	0	1	10	29	13	1	0	1	0	0	0	57
Total	220	4	23	167	1470	4046	1732	187	18	3	2	0	1	7873

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Arnold Road
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Southbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/26/24	0	0	0	1	4	17	5	3	0	0	0	0	0	30
01:00	0	0	0	2	7	6	5	1	0	0	0	0	0	21
02:00	0	0	0	0	1	12	5	2	1	0	0	0	0	21
03:00	0	0	0	1	5	17	11	4	1	0	0	0	0	39
04:00	1	0	0	0	13	60	46	16	2	0	0	0	0	138
05:00	3	0	0	1	6	110	89	19	3	0	0	0	0	231
06:00	5	0	0	9	64	213	144	25	5	0	0	0	0	465
07:00	6	0	0	2	94	296	152	19	1	0	0	0	0	570
08:00	16	0	0	5	88	283	166	8	1	0	0	0	0	567
09:00	11	1	0	18	154	296	101	11	0	0	0	0	0	592
10:00	13	0	4	17	143	286	88	6	1	0	0	0	0	558
11:00	20	0	1	8	122	276	93	7	1	0	0	0	0	528
12 PM	18	2	0	17	127	291	96	6	2	1	0	0	0	560
13:00	32	5	1	16	156	228	79	6	0	0	0	0	0	523
14:00	23	3	1	11	97	302	112	11	0	1	0	0	0	561
15:00	25	3	7	6	107	224	99	12	0	0	0	0	0	483
16:00	25	0	1	3	74	252	128	14	2	0	0	0	1	500
17:00	19	0	0	9	89	205	111	8	1	0	0	0	0	442
18:00	13	1	0	11	106	211	97	3	1	0	0	0	0	443
19:00	5	0	0	1	64	167	95	12	0	0	0	0	0	344
20:00	4	0	0	2	54	149	43	8	3	0	0	0	0	263
21:00	4	0	0	9	60	76	21	1	1	0	0	0	0	172
22:00	1	0	0	6	78	40	12	1	0	0	0	0	0	138
23:00	1	0	0	3	11	42	11	6	0	0	0	0	0	74
Total	245	15	15	158	1724	4059	1809	209	26	2	0	0	1	8263

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Southbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/27/24	0	0	0	2	7	24	13	1	1	0	0	0	0	48
01:00	0	0	0	1	7	15	9	3	1	0	0	0	0	36
02:00	0	0	0	2	6	8	7	0	0	0	0	0	0	23
03:00	0	0	0	1	2	10	4	0	0	0	0	0	0	17
04:00	0	0	0	0	7	33	16	5	1	0	0	0	0	62
05:00	0	0	0	1	12	56	33	7	5	1	0	0	0	115
06:00	0	0	1	0	37	99	60	7	3	0	0	1	0	208
07:00	6	0	0	1	26	146	109	15	1	0	0	0	0	304
08:00	11	0	0	16	78	250	129	10	0	0	0	0	0	494
09:00	12	0	0	7	96	328	112	8	0	0	0	0	0	563
10:00	20	0	1	12	103	324	97	8	1	0	0	0	0	566
11:00	16	0	3	5	85	348	107	5	2	1	0	0	0	572
12 PM	24	0	1	22	76	312	112	8	0	0	1	0	0	556
13:00	17	0	1	13	96	310	123	17	1	0	0	0	0	578
14:00	12	0	0	3	89	279	124	10	0	0	0	0	0	517
15:00	14	0	0	4	65	252	135	18	2	0	1	0	0	491
16:00	11	0	1	18	84	236	98	10	1	0	0	0	0	459
17:00	17	0	0	6	58	234	109	7	0	0	0	0	0	431
18:00	9	0	1	3	72	204	107	12	1	0	0	1	0	410
19:00	10	1	0	11	56	165	76	8	0	0	0	0	0	327
20:00	5	0	0	2	54	118	46	11	1	0	0	0	0	237
21:00	1	0	0	3	52	112	33	2	0	0	0	0	0	203
22:00	4	0	0	6	21	72	36	6	0	0	0	0	0	145
23:00	1	0	0	3	18	39	16	4	0	2	0	0	0	83
Total	190	1	9	142	1207	3974	1711	182	21	4	2	2	0	7445

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Southbound

05872Bspeed
Site Code: 2873

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total
07/28/24	0	0	1	2	7	12	7	1	0	0	0	0	0	30
01:00	0	0	0	1	7	12	8	1	1	0	0	0	0	30
02:00	0	0	0	0	5	9	4	3	0	0	0	0	0	21
03:00	0	0	0	1	6	1	2	1	1	0	0	0	0	12
04:00	0	0	0	0	3	9	13	2	0	0	0	0	0	27
05:00	0	0	0	1	9	32	25	2	2	0	0	0	0	71
06:00	0	0	0	0	19	72	41	17	1	0	1	0	0	151
07:00	1	0	0	1	19	117	65	9	2	0	0	0	0	214
08:00	8	0	0	6	67	182	96	10	0	0	0	0	0	369
09:00	10	0	0	1	51	251	89	4	0	0	0	0	0	406
10:00	7	0	0	5	99	329	104	4	1	0	0	0	0	549
11:00	14	0	0	1	67	285	143	17	1	0	0	0	0	528
12 PM	21	1	1	10	119	321	96	4	0	2	0	0	0	575
13:00	14	0	0	7	84	285	97	11	1	0	0	0	0	499
14:00	11	0	0	2	78	249	115	8	0	0	0	0	0	463
15:00	12	0	0	5	93	218	110	11	2	1	0	0	0	452
16:00	20	0	0	9	75	200	103	7	0	1	0	0	0	415
17:00	12	0	0	3	48	203	110	15	0	0	0	1	0	392
18:00	10	0	0	3	63	178	91	8	3	0	0	0	0	356
19:00	3	1	0	7	55	111	65	9	0	0	0	0	0	251
20:00	5	0	0	3	29	79	33	5	2	0	0	0	0	156
21:00	1	0	1	3	27	53	16	5	1	0	0	0	0	107
22:00	0	1	0	8	29	37	12	2	0	0	0	0	0	89
23:00	0	0	0	1	10	16	5	1	1	0	0	0	0	34
Total	149	3	3	80	1069	3261	1450	157	19	4	1	1	0	6197
Grand Total	974	32	69	693	6755	19209	8490	931	100	16	6	3	3	37281

	15th Percentile :	32 MPH
	50th Percentile :	37 MPH
	85th Percentile :	42 MPH
	95th Percentile :	44 MPH
Statistics	Mean Speed(Average) :	38 MPH
	10 MPH Pace Speed :	36-45 MPH
	Number in Pace :	27699
	Percent in Pace :	74.3%
	Number of Vehicles > 35 MPH :	28758
	Percent of Vehicles > 35 MPH :	77.1%

A

Intersection Turning Movement Counts

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road at Dante Boulevard

Arnold Road at New London Turnpike

Arnold Road at Crestwood Drive

Hopkins Hill Road at Centre of New England Boulevard

Transportation Data Corporation

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N/S: Hopkins Hill Road
E: Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824A
Site Code : 2873
Start Date : 6/12/2024

Groups Printed- Cars & Peds

	Hopkins Hill Road From North			Centre of New England Boulevard From East			Hopkins Hill Road From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	128	4	0	2	5	0	6	67	0	212
07:15 AM	132	2	0	3	4	0	11	49	0	201
07:30 AM	103	4	0	1	7	1	10	62	0	188
07:45 AM	109	0	0	0	4	0	5	60	0	178
Total	472	10	0	6	20	1	32	238	0	779
08:00 AM	101	0	0	1	5	0	15	51	0	173
08:15 AM	100	8	0	0	5	0	20	60	0	193
08:30 AM	81	3	0	2	5	1	27	50	0	169
08:45 AM	86	5	0	3	9	0	10	74	0	187
Total	368	16	0	6	24	1	72	235	0	722
Grand Total	840	26	0	12	44	2	104	473	0	1501
Apprch %	97	3	0	20.7	75.9	3.4	18	82	0	
Total %	56	1.7	0	0.8	2.9	0.1	6.9	31.5	0	

	Hopkins Hill Road From North				Centre of New England Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	128	**4**	0	132	2	5	0	7	6	**67**	0	**73**	**212**
07:15 AM	**132**	2	0	**134**	**3**	4	0	7	**11**	49	0	60	201
07:30 AM	103	4	0	107	1	**7**	**1**	**9**	10	62	0	72	188
07:45 AM	109	0	0	109	0	4	0	4	5	60	0	65	178
Total Volume	472	10	0	482	6	20	1	27	32	238	0	270	779
% App. Total	97.9	2.1	0		22.2	74.1	3.7		11.9	88.1	0		
PHF	.894	.625	.000	.899	.500	.714	.250	.750	.727	.888	.000	.925	.919

Transportation Data Corporation

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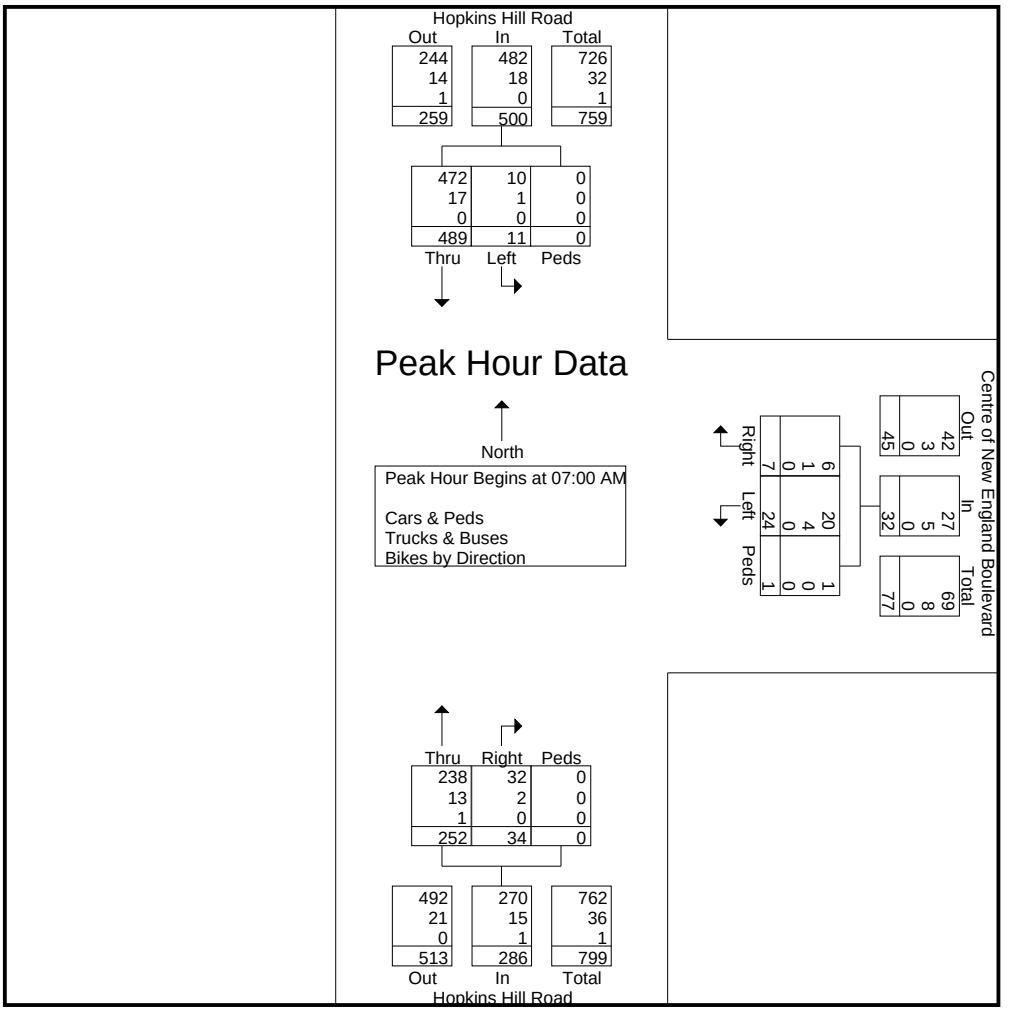
N/S: Hopkins Hill Road
E: Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824A
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North				Centre of New England Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	133	4	0	137	2	6	0	8	7	**71**	0	**78**	**223**
07:15 AM	**139**	2	0	**141**	**3**	4	0	7	**11**	51	0	62	210
07:30 AM	107	**5**	0	112	2	**9**	**1**	**12**	10	66	0	76	200
07:45 AM	110	0	0	110	0	5	0	5	6	64	0	70	185
Total Volume	489	11	0	500	7	24	1	32	34	252	0	286	818
% App. Total	97.8	2.2	0		21.9	75	3.1		11.9	88.1	0		
PHF	.879	.550	.000	.887	.583	.667	.250	.667	.773	.887	.000	.917	.917
Cars & Peds	472	10	0	482	6	20	1	27	32	238	0	270	779
% Cars & Peds	96.5	90.9	0	96.4	85.7	83.3	100	84.4	94.1	94.4	0	94.4	95.2
Trucks & Buses	17	1	0	18	1	4	0	5	2	13	0	15	38
% Trucks & Buses	3.5	9.1	0	3.6	14.3	16.7	0	15.6	5.9	5.2	0	5.2	4.6
Bikes by Direction	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0.4	0	0.3	0.1



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N/S: Hopkins Hill Road
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City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824AA
Site Code : 2873
Start Date : 6/8/2024
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Hopkins Hill Road From North			Centre of New England Boulevard From East			Hopkins Hill Road From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
03:00 PM	85	4	0	6	5	0	3	96	0	199
03:15 PM	92	4	0	5	17	0	5	119	0	242
03:30 PM	82	2	0	6	13	0	7	157	1	268
03:45 PM	72	5	0	9	16	0	9	157	0	268
Total	331	15	0	26	51	0	24	529	1	977
04:00 PM	99	2	0	7	18	0	2	173	0	301
04:15 PM	79	2	0	4	7	0	6	176	0	274
04:30 PM	77	3	0	4	17	0	2	151	0	254
04:45 PM	75	2	0	4	9	1	1	157	0	249
Total	330	9	0	19	51	1	11	657	0	1078
05:00 PM	82	3	0	4	11	0	2	157	0	259
05:15 PM	84	0	0	3	2	0	3	144	0	236
05:30 PM	48	4	0	4	5	0	3	143	0	207
05:45 PM	68	1	0	1	3	0	4	114	0	191
Total	282	8	0	12	21	0	12	558	0	893
Grand Total	943	32	0	57	123	1	47	1744	1	2948
Apprch %	96.7	3.3	0	31.5	68	0.6	2.6	97.3	0.1	
Total %	32	1.1	0	1.9	4.2	0	1.6	59.2	0	
Cars & Peds	935	32	0	55	122	1	43	1731	1	2920
% Cars & Peds	99.2	100	0	96.5	99.2	100	91.5	99.3	100	99.1
Trucks & Buses	7	0	0	2	1	0	4	12	0	26
% Trucks & Buses	0.7	0	0	3.5	0.8	0	8.5	0.7	0	0.9
Bikes by Direction	1	0	0	0	0	0	0	1	0	2
% Bikes by Direction	0.1	0	0	0	0	0	0	0.1	0	0.1

	Hopkins Hill Road From North				Centre of New England Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:30 PM													
03:30 PM	82	2	0	84	6	13	0	19	7	157	**1**	165	268
03:45 PM	72	**5**	0	77	**9**	16	0	**25**	**9**	157	0	166	268
04:00 PM	**99**	2	0	**101**	7	**18**	0	25	2	173	0	175	**301**
04:15 PM	79	2	0	81	4	7	0	11	6	**176**	0	**182**	274
Total Volume	332	11	0	343	26	54	0	80	24	663	1	688	1111
% App. Total	96.8	3.2	0		32.5	67.5	0		3.5	96.4	0.1		
PHF	.838	.550	.000	.849	.722	.750	.000	.800	.667	.942	.250	.945	.923
Cars & Peds	328	11	0	339	25	54	0	79	23	661	1	685	1103
% Cars & Peds	98.8	100	0	98.8	96.2	100	0	98.8	95.8	99.7	100	99.6	99.3
Trucks & Buses	4	0	0	4	1	0	0	1	1	2	0	3	8
% Trucks & Buses	1.2	0	0	1.2	3.8	0	0	1.3	4.2	0.3	0	0.4	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

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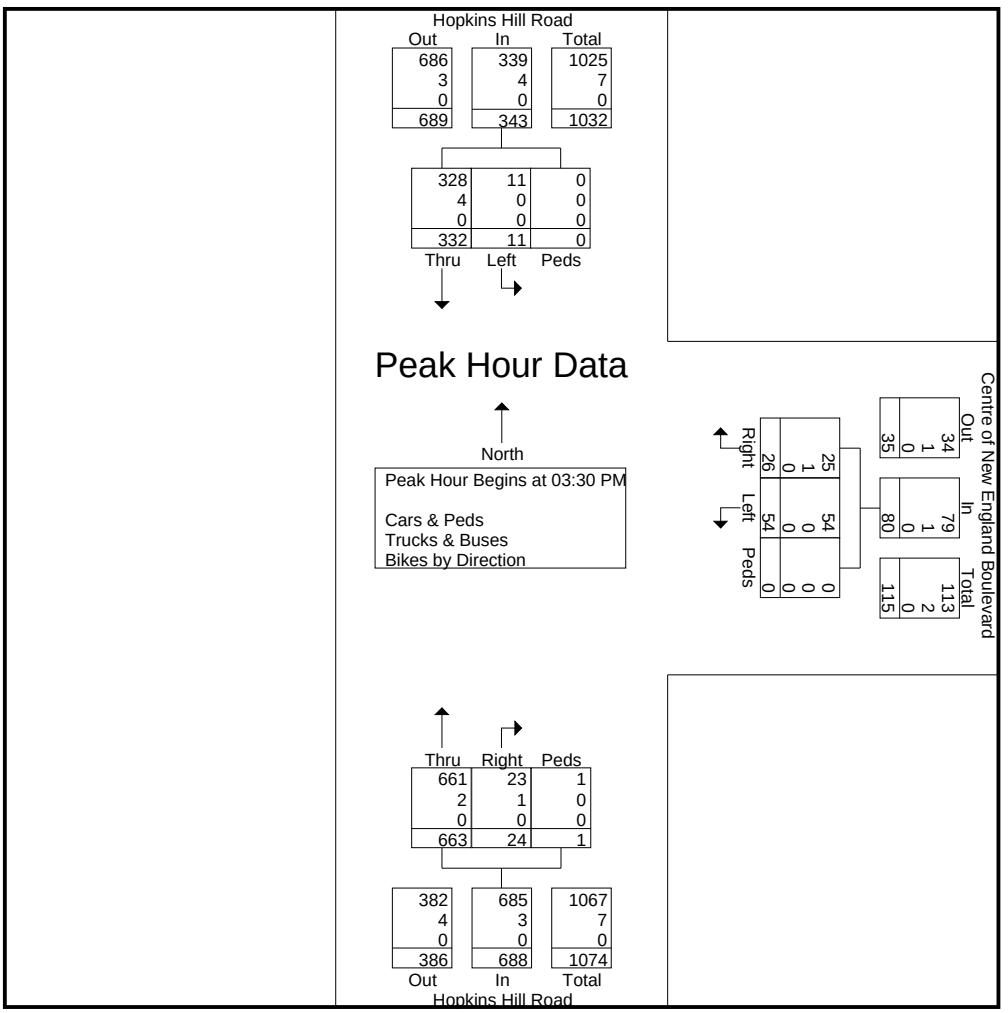
E: Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824AA
Site Code : 2873
Start Date : 6/8/2024
Page No : 1

	Hopkins Hill Road From North				Centre of New England Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:30 PM													
03:30 PM	82	2	0	84	6	13	0	19	7	157	**1**	165	268
03:45 PM	72	**5**	0	77	**9**	16	0	**25**	**9**	157	0	166	268
04:00 PM	**99**	2	0	**101**	7	**18**	0	25	2	173	0	175	**301**
04:15 PM	79	2	0	81	4	7	0	11	6	**176**	0	**182**	274
Total Volume	332	11	0	343	26	54	0	80	24	663	1	688	1111
% App. Total	96.8	3.2	0		32.5	67.5	0		3.5	96.4	0.1		
PHF	.838	.550	.000	.849	.722	.750	.000	.800	.667	.942	.250	.945	.923
Cars & Peds	328	11	0	339	25	54	0	79	23	661	1	685	1103
% Cars & Peds	98.8	100	0	98.8	96.2	100	0	98.8	95.8	99.7	100	99.6	99.3
Trucks & Buses	4	0	0	4	1	0	0	1	1	2	0	3	8
% Trucks & Buses	1.2	0	0	1.2	3.8	0	0	1.3	4.2	0.3	0	0.4	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



Hopkins Hill Road at Dante Boulevard

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E: Dante Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824B
Site Code : 2873
Start Date : 6/12/2024

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Hopkins Hill Road From North			Dante Boulevard From East			Hopkins Hill Road From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	130	1	0	2	1	1	1	66	0	202
07:15 AM	132	1	0	4	4	0	0	61	0	202
07:30 AM	109	0	0	4	3	0	1	64	0	181
07:45 AM	106	1	0	1	2	3	0	71	0	184
Total	477	3	0	11	10	4	2	262	0	769
08:00 AM	97	2	0	3	7	0	0	54	0	163
08:15 AM	96	1	0	1	3	1	2	65	0	169
08:30 AM	78	1	0	1	6	0	0	63	0	149
08:45 AM	85	2	0	4	3	0	1	77	0	172
Total	356	6	0	9	19	1	3	259	0	653
Grand Total	833	9	0	20	29	5	5	521	0	1422
Apprch %	98.9	1.1	0	37	53.7	9.3	1	99	0	
Total %	58.6	0.6	0	1.4	2	0.4	0.4	36.6	0	
Cars & Peds	811	9	0	20	28	5	4	493	0	1370
% Cars & Peds	97.4	100	0	100	96.6	100	80	94.6	0	96.3
Trucks & Buses	22	0	0	0	0	0	0	27	0	49
% Trucks & Buses	2.6	0	0	0	0	0	0	5.2	0	3.4
Bikes by Direction	0	0	0	0	1	0	1	1	0	3
% Bikes by Direction	0	0	0	0	3.4	0	20	0.2	0	0.2

	Hopkins Hill Road From North				Dante Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	130	**1**	0	131	2	1	1	4	**1**	66	0	67	**202**
07:15 AM	**132**	1	0	**133**	**4**	**4**	0	**8**	0	61	0	61	202
07:30 AM	109	0	0	109	4	3	0	7	1	64	0	65	181
07:45 AM	106	1	0	107	1	2	**3**	6	0	**71**	0	**71**	184
Total Volume	477	3	0	480	11	10	4	25	2	262	0	264	769
% App. Total	99.4	0.6	0		44	40	16		0.8	99.2	0		
PHF	.903	.750	.000	.902	.688	.625	.333	.781	.500	.923	.000	.930	.952
Cars & Peds	465	3	0	468	11	10	4	25	2	249	0	251	744
% Cars & Peds	97.5	100	0	97.5	100	100	100	100	100	95.0	0	95.1	96.7
Trucks & Buses	12	0	0	12	0	0	0	0	0	13	0	13	25
% Trucks & Buses	2.5	0	0	2.5	0	0	0	0	0	5.0	0	4.9	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

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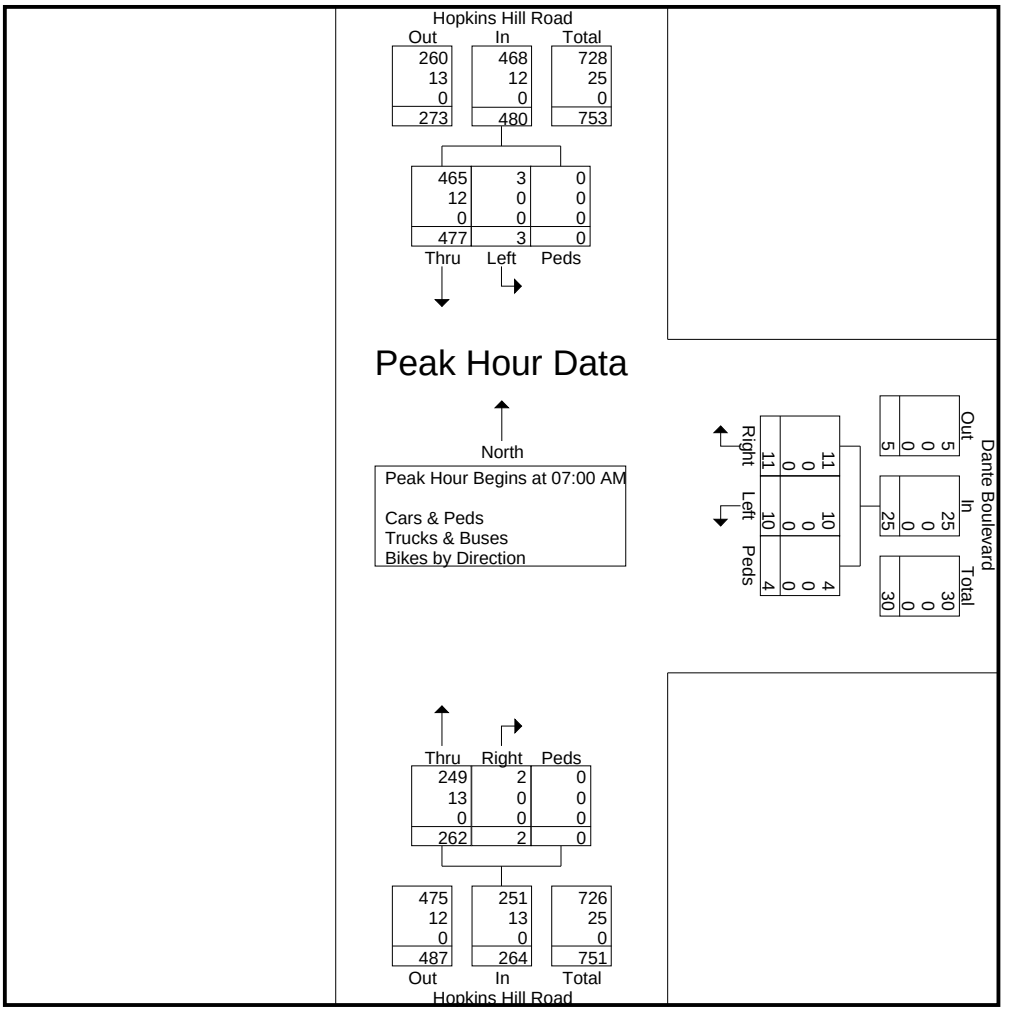
N/S: Hopkins Hill Road
E: Dante Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824B
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North				Dante Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	130	**1**	0	131	2	1	1	4	**1**	66	0	67	**202**
07:15 AM	**132**	1	0	**133**	**4**	**4**	0	**8**	0	61	0	61	202
07:30 AM	109	0	0	109	4	3	0	7	1	64	0	65	181
07:45 AM	106	1	0	107	1	2	**3**	6	0	**71**	0	**71**	184
Total Volume	477	3	0	480	11	10	4	25	2	262	0	264	769
% App. Total	99.4	0.6	0		44	40	16		0.8	99.2	0		
PHF	.903	.750	.000	.902	.688	.625	.333	.781	.500	.923	.000	.930	.952
Cars & Peds	465	3	0	468	11	10	4	25	2	249	0	251	744
% Cars & Peds	97.5	100	0	97.5	100	100	100	100	100	95.0	0	95.1	96.7
Trucks & Buses	12	0	0	12	0	0	0	0	0	13	0	13	25
% Trucks & Buses	2.5	0	0	2.5	0	0	0	0	0	5.0	0	4.9	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



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N/S: Hopkins Hill Road
E: Dante Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824BB
Site Code : 2873
Start Date : 6/12/2024

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Hopkins Hill Road From North			Dante Boulevard From East			Hopkins Hill Road From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
03:00 PM	93	4	0	4	3	0	6	103	0	213
03:15 PM	78	8	0	6	6	0	6	112	0	216
03:30 PM	89	8	0	8	2	0	6	150	0	263
03:45 PM	78	5	0	5	0	0	2	159	0	249
Total	338	25	0	23	11	0	20	524	0	941
04:00 PM	101	4	0	4	2	0	5	172	0	288
04:15 PM	77	7	0	3	2	0	6	161	0	256
04:30 PM	86	2	0	5	1	0	2	154	0	250
04:45 PM	81	6	0	3	3	2	3	156	0	254
Total	345	19	0	15	8	2	16	643	0	1048
05:00 PM	84	2	0	3	2	0	1	150	0	242
05:15 PM	76	5	0	5	2	0	5	140	0	233
05:30 PM	63	1	0	2	2	0	5	138	0	211
05:45 PM	71	6	0	2	2	0	3	104	0	188
Total	294	14	0	12	8	0	14	532	0	874
Grand Total	977	58	0	50	27	2	50	1699	0	2863
Apprch %	94.4	5.6	0	63.3	34.2	2.5	2.9	97.1	0	
Total %	34.1	2	0	1.7	0.9	0.1	1.7	59.3	0	
Cars & Peds	968	58	0	50	27	2	50	1686	0	2841
% Cars & Peds	99.1	100	0	100	100	100	100	99.2	0	99.2
Trucks & Buses	8	0	0	0	0	0	0	12	0	20
% Trucks & Buses	0.8	0	0	0	0	0	0	0.7	0	0.7
Bikes by Direction	1	0	0	0	0	0	0	1	0	2
% Bikes by Direction	0.1	0	0	0	0	0	0	0.1	0	0.1

	Hopkins Hill Road From North				Dante Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:30 PM													
03:30 PM	89	**8**	0	97	**8**	**2**	0	**10**	**6**	150	0	156	263
03:45 PM	78	5	0	83	5	0	0	5	2	159	0	161	249
04:00 PM	**101**	4	0	**105**	4	2	0	6	5	**172**	0	**177**	**288**
04:15 PM	77	7	0	84	3	2	0	5	6	161	0	167	256
Total Volume	345	24	0	369	20	6	0	26	19	642	0	661	1056
% App. Total	93.5	6.5	0		76.9	23.1	0		2.9	97.1	0		
PHF	.854	.750	.000	.879	.625	.750	.000	.650	.792	.933	.000	.934	.917
Cars & Peds	341	24	0	365	20	6	0	26	19	641	0	660	1051
% Cars & Peds	98.8	100	0	98.9	100	100	0	100	100	99.8	0	99.8	99.5
Trucks & Buses	4	0	0	4	0	0	0	0	0	1	0	1	5
% Trucks & Buses	1.2	0	0	1.1	0	0	0	0	0	0.2	0	0.2	0.5
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

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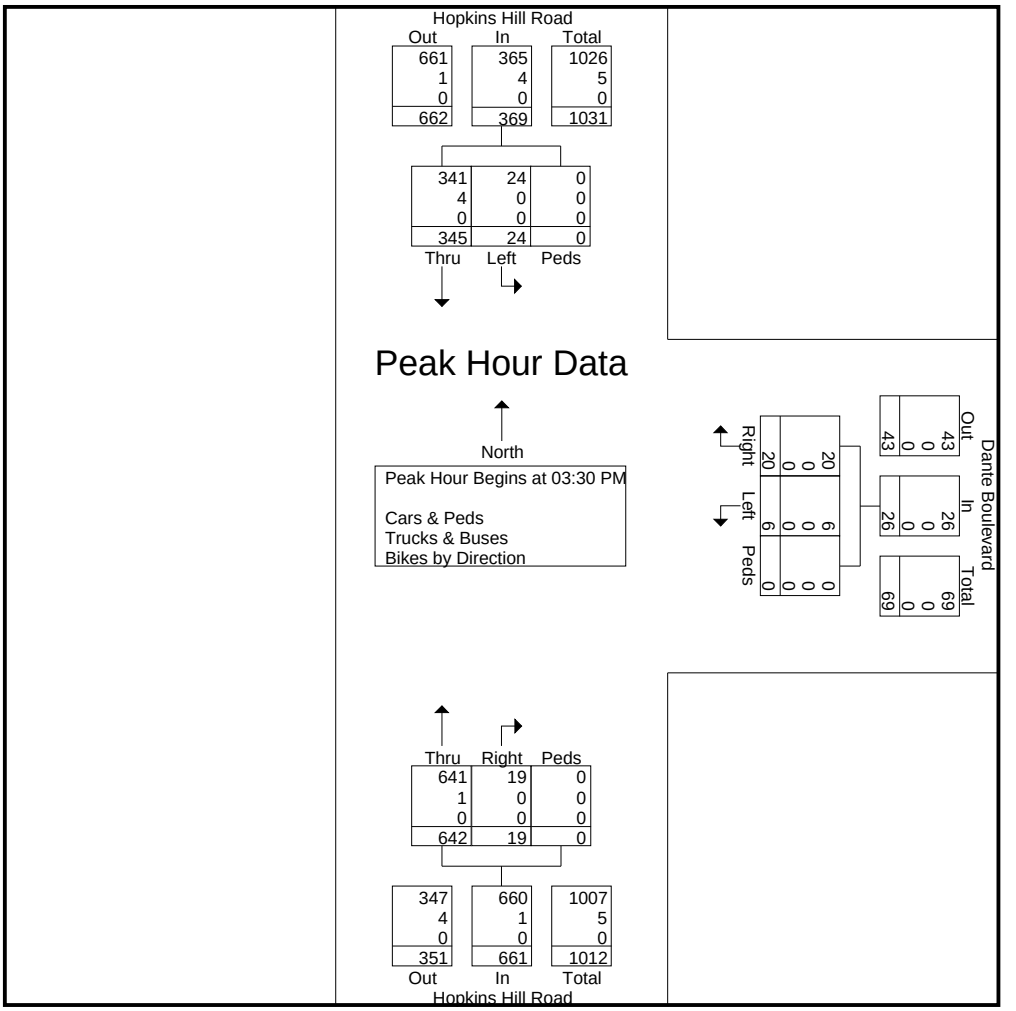
Client: Crossman/P. Bannon

File Name : 05824BB
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North				Dante Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:30 PM													
03:30 PM	89	**8**	0	97	**8**	**2**	0	**10**	**6**	150	0	156	263
03:45 PM	78	5	0	83	5	0	0	5	2	159	0	161	249
04:00 PM	**101**	4	0	**105**	4	2	0	6	5	**172**	0	**177**	**288**
04:15 PM	77	7	0	84	3	2	0	5	6	161	0	167	256
Total Volume	345	24	0	369	20	6	0	26	19	642	0	661	1056
% App. Total	93.5	6.5	0		76.9	23.1	0		2.9	97.1	0		
PHF	.854	.750	.000	.879	.625	.750	.000	.650	.792	.933	.000	.934	.917
Cars & Peds	341	24	0	365	20	6	0	26	19	641	0	660	1051
% Cars & Peds	98.8	100	0	98.9	100	100	0	100	100	99.8	0	99.8	99.5
Trucks & Buses	4	0	0	4	0	0	0	0	0	1	0	1	5
% Trucks & Buses	1.2	0	0	1.1	0	0	0	0	0	0.2	0	0.2	0.5
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



Arnold Road at New London Turnpike

Transportation Data Corporation

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

N/S: Arnold Road
E/W: New London Turnpike
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05872A
Site Code : 2873
Start Date : 7/17/2024
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Arnold Road From North				New London Turnpike From East				Arnold Road From South				New London Turnpike From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	86	29	11	0	7	85	9	0	4	10	7	0	5	22	26	0	301
07:15 AM	79	39	15	0	7	67	14	0	3	12	3	0	8	25	51	0	323
07:30 AM	100	65	12	0	8	68	8	0	1	12	10	0	11	27	42	0	364
07:45 AM	94	68	14	0	7	84	14	0	4	18	6	0	8	36	41	0	394
Total	359	201	52	0	29	304	45	0	12	52	26	0	32	110	160	0	1382
08:00 AM	92	50	12	0	4	76	19	0	9	11	15	0	9	37	45	0	379
08:15 AM	81	47	13	0	14	93	16	0	8	17	10	2	9	34	35	0	379
08:30 AM	95	54	11	0	13	60	17	0	3	20	14	0	8	39	43	0	377
08:45 AM	84	37	12	0	15	63	11	0	4	12	10	0	14	44	44	0	350
Total	352	188	48	0	46	292	63	0	24	60	49	2	40	154	167	0	1485
Grand Total	711	389	100	0	75	596	108	0	36	112	75	2	72	264	327	0	2867
Apprch %	59.2	32.4	8.3	0	9.6	76.5	13.9	0	16	49.8	33.3	0.9	10.9	39.8	49.3	0	
Total %	24.8	13.6	3.5	0	2.6	20.8	3.8	0	1.3	3.9	2.6	0.1	2.5	9.2	11.4	0	
Cars & Peds	685	386	96	0	75	590	107	0	36	108	74	2	70	260	303	0	2792
% Cars & Peds	96.3	99.2	96	0	100	99	99.1	0	100	96.4	98.7	100	97.2	98.5	92.7	0	97.4
Trucks & Buses	26	3	4	0	0	6	1	0	0	4	1	0	2	4	24	0	75
% Trucks & Buses	3.7	0.8	4	0	0	1	0.9	0	0	3.6	1.3	0	2.8	1.5	7.3	0	2.6
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

	Arnold Road From North					New London Turnpike From East					Arnold Road From South					New London Turnpike 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 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	94	**68**	**14**	0	**176**	7	84	14	0	105	4	18	6	0	28	8	36	41	0	85	**394**
08:00 AM	92	50	12	0	154	4	76	**19**	0	99	**9**	11	**15**	0	35	**9**	37	**45**	0	**91**	379
08:15 AM	81	47	13	0	141	**14**	**93**	16	0	**123**	8	17	10	**2**	**37**	9	34	35	0	78	379
08:30 AM	**95**	54	11	0	160	13	60	17	0	90	3	**20**	14	0	37	8	**39**	43	0	90	377
Total Volume	362	219	50	0	631	38	313	66	0	417	24	66	45	2	137	34	146	164	0	344	1529
% App. Total	57.4	34.7	7.9	0		9.1	75.1	15.8	0		17.5	48.2	32.8	1.5		9.9	42.4	47.7	0		
PHF	.953	.805	.893	.000	.896	.679	.841	.868	.000	.848	.667	.825	.750	.250	.926	.944	.936	.911	.000	.945	.970
Cars & Peds	346	217	49	0	612	38	308	66	0	412	24	63	45	2	134	33	145	153	0	331	1489
% Cars & Peds	95.6	99.1	98.0	0	97.0	100	98.4	100	0	98.8	100	95.5	100	100	97.8	97.1	99.3	93.3	0	96.2	97.4
Trucks & Buses	16	2	1	0	19	0	5	0	0	5	0	3	0	0	3	1	1	11	0	13	40
% Trucks & Buses	4.4	0.9	2.0	0	3.0	0	1.6	0	0	1.2	0	4.5	0	0	2.2	2.9	0.7	6.7	0	3.8	2.6
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

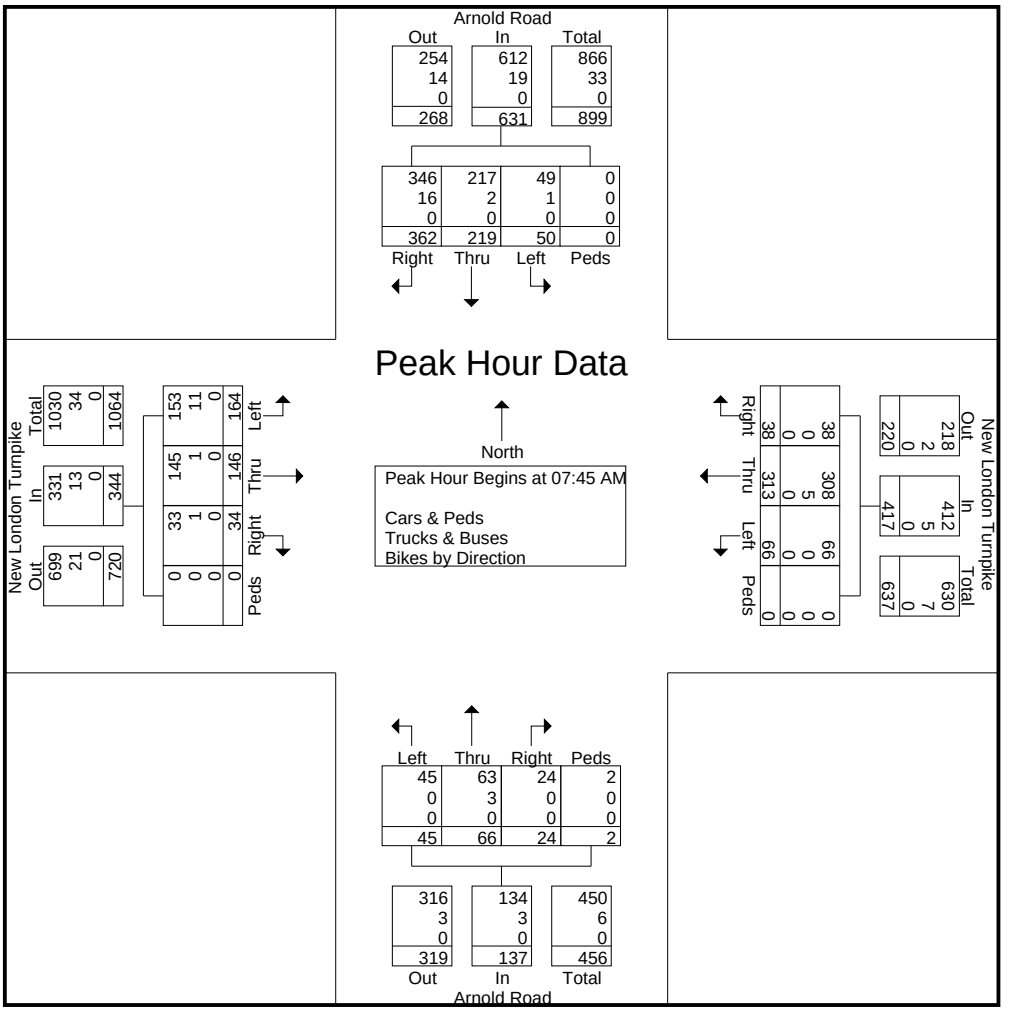
Transportation Data Corporation

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

N/S: Arnold Road
E/W: New London Turnpike
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05872A
Site Code : 2873
Start Date : 7/17/2024
Page No : 1

	Arnold Road From North					New London Turnpike From East					Arnold Road From South					New London Turnpike 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 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	94	**68**	**14**	0	**176**	7	84	14	0	105	4	18	6	0	28	8	36	41	0	85	**394**
08:00 AM	92	50	12	0	154	4	76	**19**	0	99	**9**	11	**15**	0	35	**9**	37	**45**	0	**91**	379
08:15 AM	81	47	13	0	141	**14**	**93**	16	0	**123**	8	17	10	**2**	**37**	9	34	35	0	78	379
08:30 AM	**95**	54	11	0	160	13	60	17	0	90	3	**20**	14	0	37	8	**39**	43	0	90	377
Total Volume	362	219	50	0	631	38	313	66	0	417	24	66	45	2	137	34	146	164	0	344	1529
% App. Total	57.4	34.7	7.9	0		9.1	75.1	15.8	0		17.5	48.2	32.8	1.5		9.9	42.4	47.7	0		
PHF	.953	.805	.893	.000	.896	.679	.841	.868	.000	.848	.667	.825	.750	.250	.926	.944	.936	.911	.000	.945	.970
Cars & Peds	346	217	49	0	612	38	308	66	0	412	24	63	45	2	134	33	145	153	0	331	1489
% Cars & Peds	95.6	99.1	98.0	0	97.0	100	98.4	100	0	98.8	100	95.5	100	100	97.8	97.1	99.3	93.3	0	96.2	97.4
Trucks & Buses	16	2	1	0	19	0	5	0	0	5	0	3	0	0	3	1	1	11	0	13	40
% Trucks & Buses	4.4	0.9	2.0	0	3.0	0	1.6	0	0	1.2	0	4.5	0	0	2.2	2.9	0.7	6.7	0	3.8	2.6
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



Transportation Data Corporation

Mario Perone, mperone1@verizon.net
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N/S: Arnold Road
E/W: New London Turnpike
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05872AA
Site Code : 2873
Start Date : 7/17/2024
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Arnold Road From North				New London Turnpike From East				Arnold Road From South				New London Turnpike From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
03:00 PM	60	24	10	0	18	53	5	0	19	60	26	0	9	76	98	0	458
03:15 PM	79	16	14	0	9	68	6	0	17	68	29	0	8	72	105	0	491
03:30 PM	84	26	20	0	10	55	7	0	23	77	33	0	12	82	116	0	545
03:45 PM	74	28	18	0	10	63	11	0	13	46	23	0	13	110	113	0	522
Total	297	94	62	0	47	239	29	0	72	251	111	0	42	340	432	0	2016
04:00 PM	82	32	13	0	11	65	6	0	30	67	24	0	14	81	95	0	520
04:15 PM	75	20	17	0	9	81	5	0	27	60	28	0	15	93	99	0	529
04:30 PM	64	32	16	0	13	59	8	0	20	79	32	0	11	97	111	0	542
04:45 PM	83	25	19	0	11	59	8	0	14	66	30	0	12	93	111	1	532
Total	304	109	65	0	44	264	27	0	91	272	114	0	52	364	416	1	2123
05:00 PM	74	18	22	0	16	77	10	0	22	53	16	0	11	91	85	0	495
05:15 PM	66	22	13	0	20	71	9	0	15	58	24	1	8	99	100	1	507
05:30 PM	83	22	18	0	21	63	5	0	20	61	23	0	8	82	78	0	484
05:45 PM	66	17	18	0	14	90	6	0	11	38	19	0	11	88	78	0	456
Total	289	79	71	0	71	301	30	0	68	210	82	1	38	360	341	1	1942
Grand Total	890	282	198	0	162	804	86	0	231	733	307	1	132	1064	1189	2	6081
Apprch %	65	20.6	14.5	0	15.4	76.4	8.2	0	18.2	57.6	24.1	0.1	5.5	44.6	49.8	0.1	
Total %	14.6	4.6	3.3	0	2.7	13.2	1.4	0	3.8	12.1	5	0	2.2	17.5	19.6	0	
Cars & Peds	876	279	197	0	154	799	84	0	231	731	304	1	131	1056	1170	2	6015
% Cars & Peds	98.4	98.9	99.5	0	95.1	99.4	97.7	0	100	99.7	99	100	99.2	99.2	98.4	100	98.9
Trucks & Buses	14	3	1	0	8	5	2	0	0	2	3	0	1	8	19	0	66
% Trucks & Buses	1.6	1.1	0.5	0	4.9	0.6	2.3	0	0	0.3	1	0	0.8	0.8	1.6	0	1.1
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

	Arnold Road From North					New London Turnpike From East					Arnold Road From South					New London Turnpike 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 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	82	**32**	13	0	**127**	11	65	6	0	82	**30**	67	24	0	121	14	81	95	0	190	520
04:15 PM	75	20	17	0	112	9	**81**	5	0	**95**	27	60	28	0	115	**15**	93	99	0	207	529
04:30 PM	64	32	16	0	112	**13**	59	**8**	0	80	20	**79**	**32**	0	**131**	11	**97**	**111**	0	**219**	**542**
04:45 PM	**83**	25	**19**	0	127	11	59	8	0	78	14	66	30	0	110	12	93	111	**1**	217	532
Total Volume	304	109	65	0	478	44	264	27	0	335	91	272	114	0	477	52	364	416	1	833	2123
% App. Total	63.6	22.8	13.6	0		13.1	78.8	8.1	0		19.1	57	23.9	0		6.2	43.7	49.9	0.1		
PHF	.916	.852	.855	.000	.941	.846	.815	.844	.000	.882	.758	.861	.891	.000	.910	.867	.938	.937	.250	.951	.979
Cars & Peds	301	108	65	0	474	43	263	26	0	332	91	271	113	0	475	52	362	412	1	827	2108
% Cars & Peds	99.0	99.1	100	0	99.2	97.7	99.6	96.3	0	99.1	100	99.6	99.1	0	99.6	100	99.5	99.0	100	99.3	99.3
Trucks & Buses	3	1	0	0	4	1	1	1	0	3	0	1	1	0	2	0	2	4	0	6	15
% Trucks & Buses	1.0	0.9	0	0	0.8	2.3	0.4	3.7	0	0.9	0	0.4	0.9	0	0.4	0	0.5	1.0	0	0.7	0.7
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

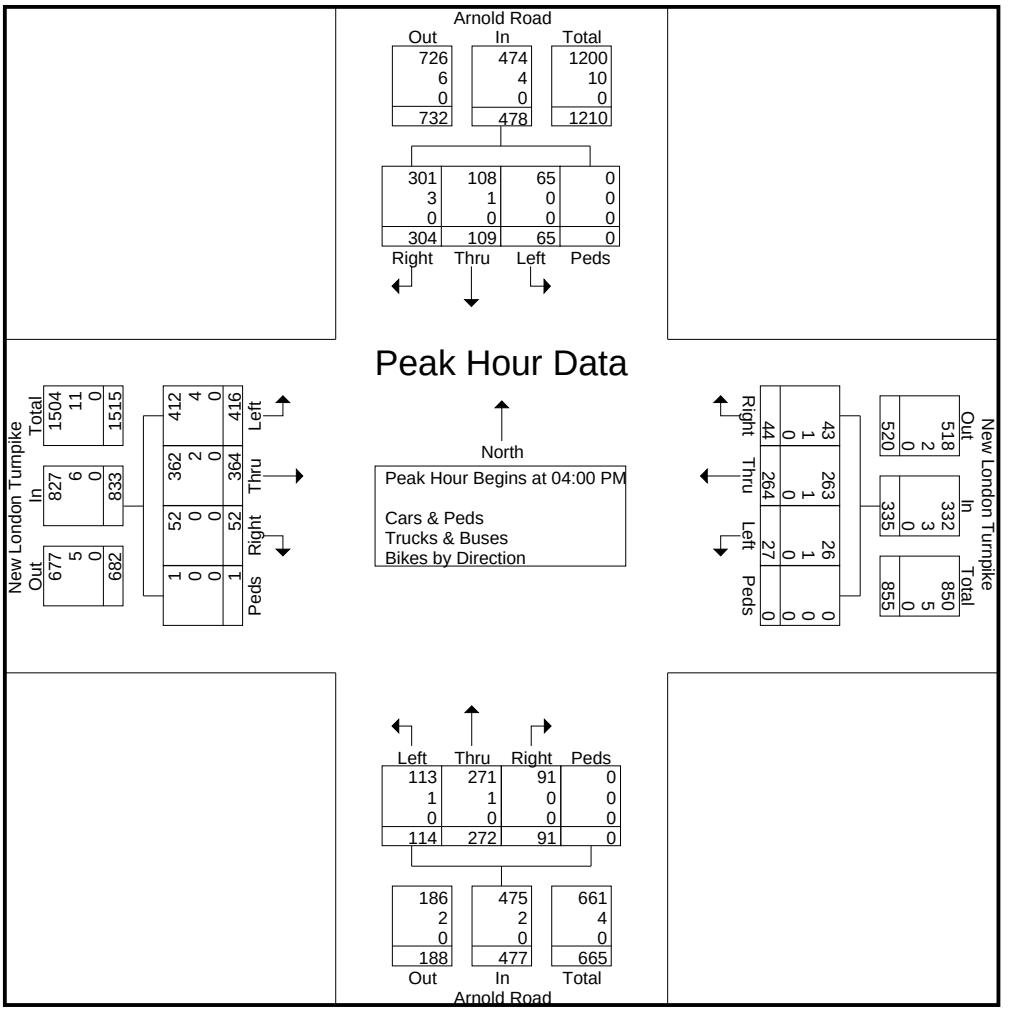
Transportation Data Corporation

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

N/S: Arnold Road
E/W: New London Turnpike
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05872AA
Site Code : 2873
Start Date : 7/17/2024
Page No : 1

	Arnold Road From North					New London Turnpike From East					Arnold Road From South					New London Turnpike 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 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	82	**32**	13	0	**127**	11	65	6	0	82	**30**	67	24	0	121	14	81	95	0	190	520
04:15 PM	75	20	17	0	112	9	**81**	5	0	**95**	27	60	28	0	115	**15**	93	99	0	207	529
04:30 PM	64	32	16	0	112	**13**	59	**8**	0	80	20	**79**	**32**	0	**131**	11	**97**	**111**	0	**219**	**542**
04:45 PM	**83**	25	**19**	0	127	11	59	8	0	78	14	66	30	0	110	12	93	111	**1**	217	532
Total Volume	304	109	65	0	478	44	264	27	0	335	91	272	114	0	477	52	364	416	1	833	2123
% App. Total	63.6	22.8	13.6	0		13.1	78.8	8.1	0		19.1	57	23.9	0		6.2	43.7	49.9	0.1		
PHF	.916	.852	.855	.000	.941	.846	.815	.844	.000	.882	.758	.861	.891	.000	.910	.867	.938	.937	.250	.951	.979
Cars & Peds	301	108	65	0	474	43	263	26	0	332	91	271	113	0	475	52	362	412	1	827	2108
% Cars & Peds	99.0	99.1	100	0	99.2	97.7	99.6	96.3	0	99.1	100	99.6	99.1	0	99.6	100	99.5	99.0	100	99.3	99.3
Trucks & Buses	3	1	0	0	4	1	1	1	0	3	0	1	1	0	2	0	2	4	0	6	15
% Trucks & Buses	1.0	0.9	0	0	0.8	2.3	0.4	3.7	0	0.9	0	0.4	0.9	0	0.4	0	0.5	1.0	0	0.7	0.7
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



BETA Group, Inc.
6 Blackstone Valley Place
Lincoln, R.I. 02865

Project: Cromptom Meadows
Town/City: Coventry, RI
Intersection: New London Tpke. at Arnold
Weather: Sunny/30's

File Name : New London Tpke. at Arnold Rd.
Site Code : 545301
Start Date : 3/2/2017
Page No : 1

Groups Printed- Cars - Trailers

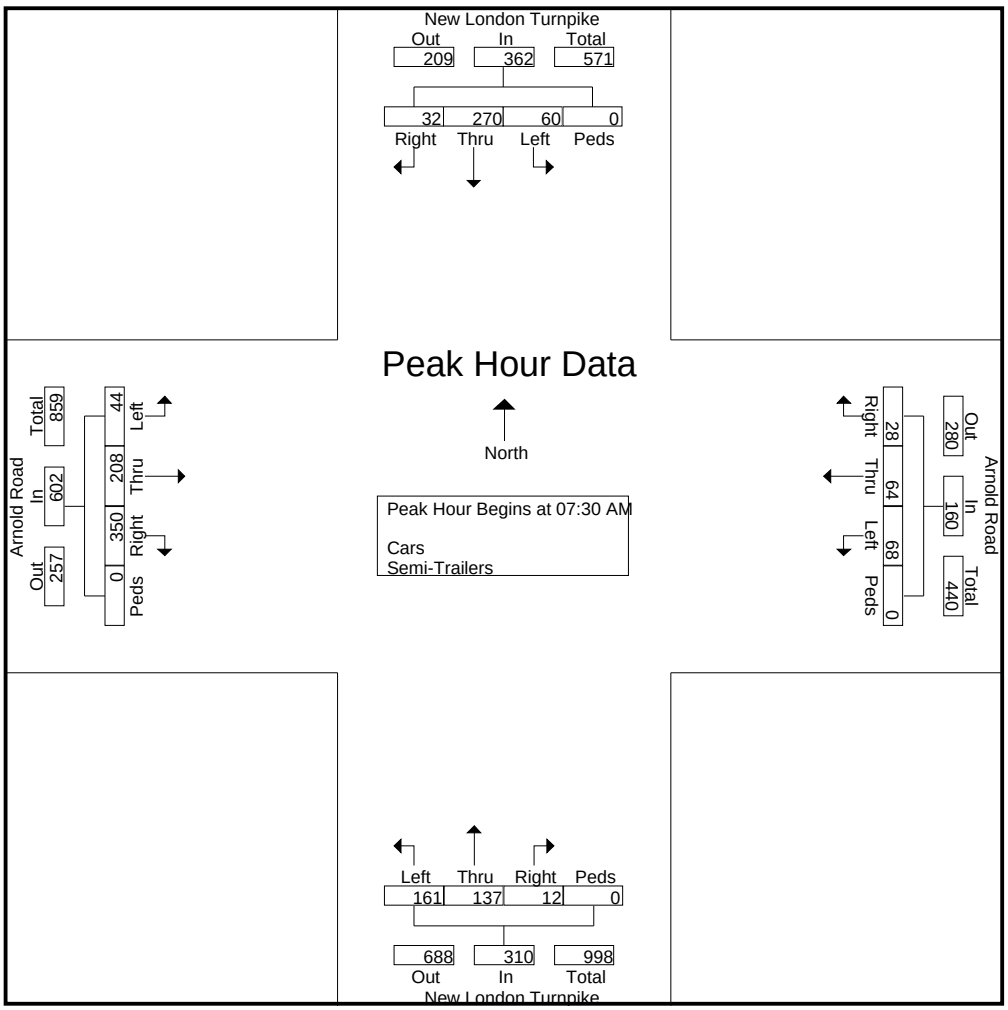
	New London Turnpike Southbound					Arnold Road Westbound					New London Turnpike Northbound					Arnold Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	15	72	9	0	96	3	9	13	0	25	6	36	32	1	75	79	36	10	0	125	321
07:15 AM	10	62	11	0	83	6	16	11	0	33	5	37	37	0	79	78	55	9	0	142	337
07:30 AM	9	75	20	0	104	6	15	16	0	37	4	29	39	0	72	99	63	14	0	176	389
07:45 AM	10	61	10	0	81	9	18	13	0	40	4	27	44	0	75	87	55	13	0	155	351
Total	44	270	50	0	364	24	58	53	0	135	19	129	152	1	301	343	209	46	0	598	1398
08:00 AM	6	67	17	0	90	5	14	15	0	34	1	43	43	0	87	97	37	6	0	140	351
08:15 AM	7	67	13	0	87	8	17	24	0	49	3	38	35	0	76	67	53	11	0	131	343
08:30 AM	18	56	9	0	83	6	14	13	1	34	8	29	48	0	85	104	43	10	0	157	359
08:45 AM	6	53	12	0	71	12	17	16	0	45	8	37	53	0	98	83	45	12	0	140	354
Total	37	243	51	0	331	31	62	68	1	162	20	147	179	0	346	351	178	39	0	568	1407
*** BREAK ***																					
04:00 PM	13	57	8	0	78	19	46	27	0	92	6	86	95	0	187	81	26	19	0	126	483
04:15 PM	11	63	8	0	82	24	46	30	0	100	12	92	114	0	218	50	22	11	0	83	483
04:30 PM	12	50	5	0	67	15	59	18	0	92	8	81	101	0	190	63	33	15	0	111	460
04:45 PM	13	63	9	0	85	19	63	24	0	106	7	76	98	0	181	79	29	27	0	135	507
Total	49	233	30	0	312	77	214	99	0	390	33	335	408	0	776	273	110	72	0	455	1933
05:00 PM	15	49	7	0	71	21	58	26	0	105	10	68	96	0	174	70	20	19	0	109	459
05:15 PM	12	68	9	0	89	23	54	18	0	95	8	85	112	0	205	72	25	22	0	119	508
05:30 PM	18	65	15	0	98	32	74	25	0	131	6	81	97	0	184	48	21	21	0	90	503
05:45 PM	19	63	10	0	92	18	62	24	0	104	5	82	104	0	191	65	23	13	0	101	488
Total	64	245	41	0	350	94	248	93	0	435	29	316	409	0	754	255	89	75	0	419	1958
Grand Total	194	991	172	0	1357	226	582	313	1	1122	101	927	1148	1	2177	1222	586	232	0	2040	6696
Apprch %	14.3	73	12.7	0		20.1	51.9	27.9	0.1		4.6	42.6	52.7	0		59.9	28.7	11.4	0		
Total %	2.9	14.8	2.6	0	20.3	3.4	8.7	4.7	0	16.8	1.5	13.8	17.1	0	32.5	18.2	8.8	3.5	0	30.5	
Cars	194	989	172	0	1355	226	582	313	1	1122	100	925	1139	1	2165	1216	586	231	0	2033	6675
% Cars	100	99.8	100	0	99.9	100	100	100	100	100	99	99.8	99.2	100	99.4	99.5	100	99.6	0	99.7	99.7
Semi-Trailers																					
% Semi-Trailers	0	0.2	0	0	0.1	0	0	0	0	0	1	0.2	0.8	0	0.6	0.5	0	0.4	0	0.3	0.3

BETA Group, Inc.
6 Blackstone Valley Place
Lincoln, R.I. 02865

Project: Cromptom Meadows
Town/City: Coventry, RI
Intersection: New London Tpke. at Arnold
Weather: Sunny/30's

File Name : New London Tpke. at Arnold Rd.
Site Code : 545301
Start Date : 3/2/2017

	New London Turnpike Southbound					Arnold Road Westbound					New London Turnpike Northbound					Arnold Road Eastbound					
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 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	9	**75**	**20**	0	**104**	6	15	16	0	37	**4**	29	39	0	72	**99**	**63**	**14**	0	**176**	**389**
07:45 AM	**10**	61	10	0	81	**9**	**18**	13	0	40	4	27	**44**	0	75	87	55	13	0	155	351
08:00 AM	6	67	17	0	90	5	14	15	0	34	1	**43**	43	0	**87**	97	37	6	0	140	351
08:15 AM	7	67	13	0	87	8	17	**24**	0	**49**	3	38	35	0	76	67	53	11	0	131	343
Total Volume	32	270	60	0	362	28	64	68	0	160	12	137	161	0	310	350	208	44	0	602	1434
% App. Total	8.8	74.6	16.6	0		17.5	40	42.5	0		3.9	44.2	51.9	0		58.1	34.6	7.3	0		
PHF	.800	.900	.750	.000	.870	.778	.889	.708	.000	.816	.750	.797	.915	.000	.891	.884	.825	.786	.000	.855	.922

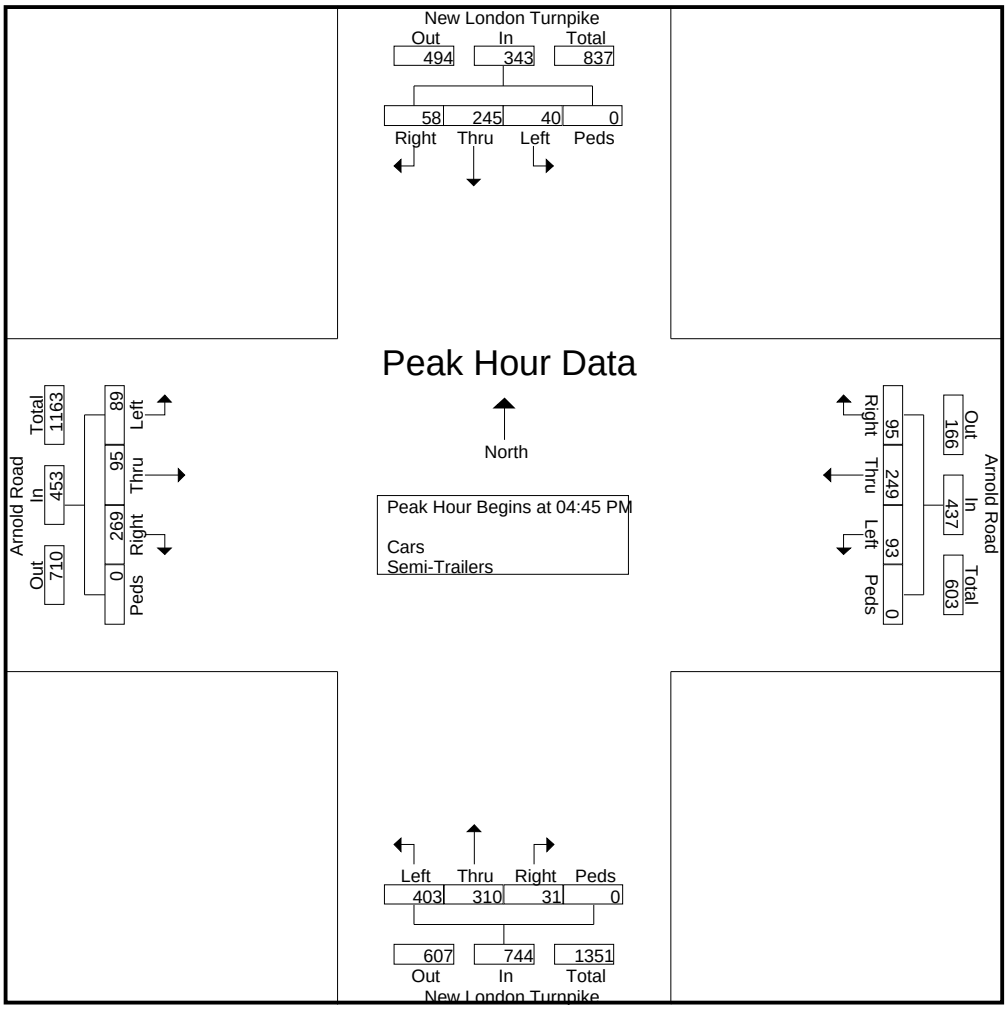


BETA Group, Inc.
6 Blackstone Valley Place
Lincoln, R.I. 02865

Project: Cromptom Meadows
Town/City: Coventry, RI
Intersection: New London Tpke. at Arnold
Weather: Sunny/30's

File Name : New London Tpke. at Arnold Rd.
Site Code : 545301
Start Date : 3/2/2017

	New London Turnpike Southbound					Arnold Road Westbound					New London Turnpike Northbound					Arnold Road Eastbound					
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 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	13	63	9	0	85	19	63	24	0	106	7	76	98	0	181	**79**	**29**	**27**	0	**135**	507
05:00 PM	15	49	7	0	71	21	58	**26**	0	105	**10**	68	96	0	174	70	20	19	0	109	459
05:15 PM	12	**68**	9	0	89	23	54	18	0	95	8	**85**	**112**	0	**205**	72	25	22	0	119	**508**
05:30 PM	**18**	65	**15**	0	**98**	**32**	**74**	25	0	**131**	6	81	97	0	184	48	21	21	0	90	503
Total Volume	58	245	40	0	343	95	249	93	0	437	31	310	403	0	744	269	95	89	0	453	1977
% App. Total	16.9	71.4	11.7	0		21.7	57	21.3	0		4.2	41.7	54.2	0		59.4	21	19.6	0		
PHF	.806	.901	.667	.000	.875	.742	.841	.894	.000	.834	.775	.912	.900	.000	.907	.851	.819	.824	.000	.839	.973



Arnold Road at Crestwood Drive

Intersection Turning Movement Count

Project: Centre of New England
Community: Coventry
Intersection: Arnold at Crestwood
Weather Conditions: Sunny/Hot

File Name : Arnold
Site Code : 00011111
Start Date : 8/1/2024
Page No : 1

Groups Printed- Unshifted - Semi

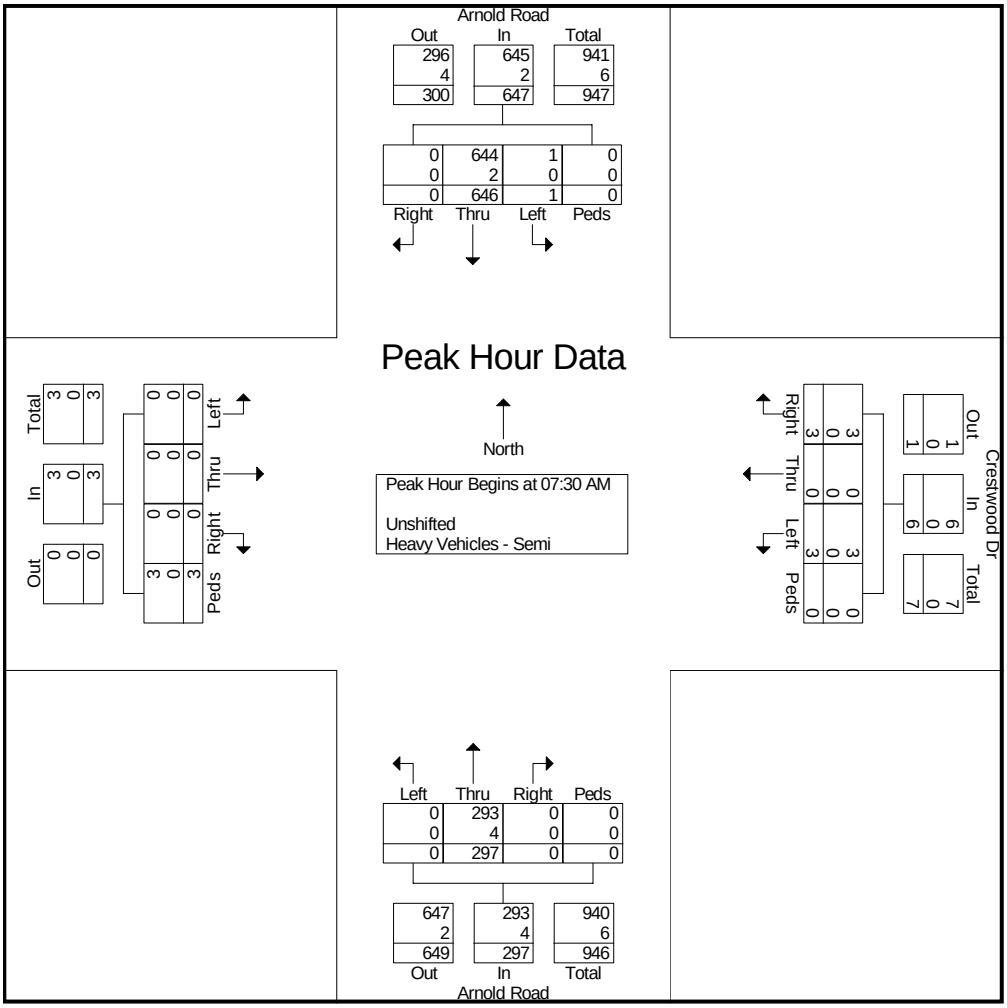
	Arnold Road Southbound					Crestwood Dr Westbound					Arnold Road Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	150	0	0	150	1	0	0	0	1	0	44	0	0	44	0	0	0	0	0	195
07:15 AM	0	158	0	0	158	2	0	1	0	3	0	67	0	0	67	0	0	0	0	0	228
07:30 AM	0	171	0	0	171	0	0	1	0	1	0	67	0	0	67	0	0	0	0	0	239
07:45 AM	1	178	0	0	179	1	0	0	0	1	0	69	0	0	69	0	0	0	0	0	249
Total	1	657	0	0	658	4	0	2	0	6	0	247	0	0	247	0	0	0	0	0	911
08:00 AM	0	139	0	0	139	1	0	0	0	1	0	71	0	0	71	0	0	0	2	2	213
08:15 AM	0	158	0	0	158	1	0	2	0	3	0	90	0	0	90	0	0	0	1	1	252
*** BREAK ***																					
Total	0	297	0	0	297	2	0	2	0	4	0	161	0	0	161	0	0	0	3	3	465
*** BREAK ***																					
03:30 PM	1	139	0	0	140	1	0	0	0	1	0	177	1	0	178	0	0	0	0	0	319
03:45 PM	1	118	0	0	119	1	0	0	0	1	0	170	2	0	172	0	0	0	0	0	292
Total	2	257	0	0	259	2	0	0	0	2	0	347	3	0	350	0	0	0	0	0	611
04:00 PM	2	135	0	0	137	3	0	2	0	5	0	182	2	0	184	0	0	0	0	0	326
04:15 PM	2	121	0	0	123	1	0	2	0	3	0	191	2	0	193	0	0	0	0	0	319
04:30 PM	1	128	0	0	129	1	0	1	0	2	0	183	1	0	184	0	0	0	0	0	315
04:45 PM	0	133	0	0	133	1	0	0	0	1	0	201	2	0	203	0	0	0	0	0	337
Total	5	517	0	0	522	6	0	5	0	11	0	757	7	0	764	0	0	0	0	0	1297
Grand Total	8	1728	0	0	1736	14	0	9	0	23	0	1512	10	0	1522	0	0	0	3	3	3284
Apprch %	0.5	99.5	0	0		60.9	0	39.1	0		0	99.3	0.7	0		0	0	0	100		
Total %	0.2	52.6	0	0	52.9	0.4	0	0.3	0	0.7	0	46	0.3	0	46.3	0	0	0	0.1	0.1	
Unshifted	8	1723	0	0	1731	14	0	9	0	23	0	1506	10	0	1516	0	0	0	3	3	3273
% Unshifted	100	99.7	0	0	99.7	100	0	100	0	100	0	99.6	100	0	99.6	0	0	0	100	100	99.7
Heavy Vehicles - Semi	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	11
% Heavy Vehicles - Semi	0	0.3	0	0	0.3	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0.3

Intersection Turning Movement Count

Project: Centre of New England
Community: Coventry
Intersection: Arnold at Crestwood
Weather Conditions: Sunny/Hot

File Name : Arnold
Site Code : 00011111
Start Date : 8/1/2024
Page No : 3

	Arnold Road Southbound					Crestwood Dr Westbound					Arnold Road Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	171	0	0	171	0	0	1	0	1	0	67	0	0	67	0	0	0	0	0	239
07:45 AM	**1**	**178**	0	0	**179**	**1**	0	0	0	1	0	69	0	0	69	0	0	0	0	0	249
08:00 AM	0	139	0	0	139	1	0	0	0	1	0	71	0	0	71	0	0	0	**2**	**2**	213
08:15 AM	0	158	0	0	158	1	0	**2**	0	**3**	0	**90**	0	0	**90**	0	0	0	1	1	**252**
Total Volume	1	646	0	0	647	3	0	3	0	6	0	297	0	0	297	0	0	0	3	3	953
% App. Total	0.2	99.8	0	0		50	0	50	0		0	100	0	0		0	0	0	100		
PHF	.250	.907	.000	.000	.904	.750	.000	.375	.000	.500	.000	.825	.000	.000	.825	.000	.000	.000	.375	.375	.945
Unshifted	1	644	0	0	645	3	0	3	0	6	0	293	0	0	293	0	0	0	3	3	947
% Unshifted	100	99.7	0	0	99.7	100	0	100	0	100	0	98.7	0	0	98.7	0	0	0	100	100	99.4
Heavy Vehicles - Semi	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
% Heavy Vehicles - Semi	0	0.3	0	0	0.3	0	0	0	0	0	0	1.3	0	0	1.3	0	0	0	0	0	0.6

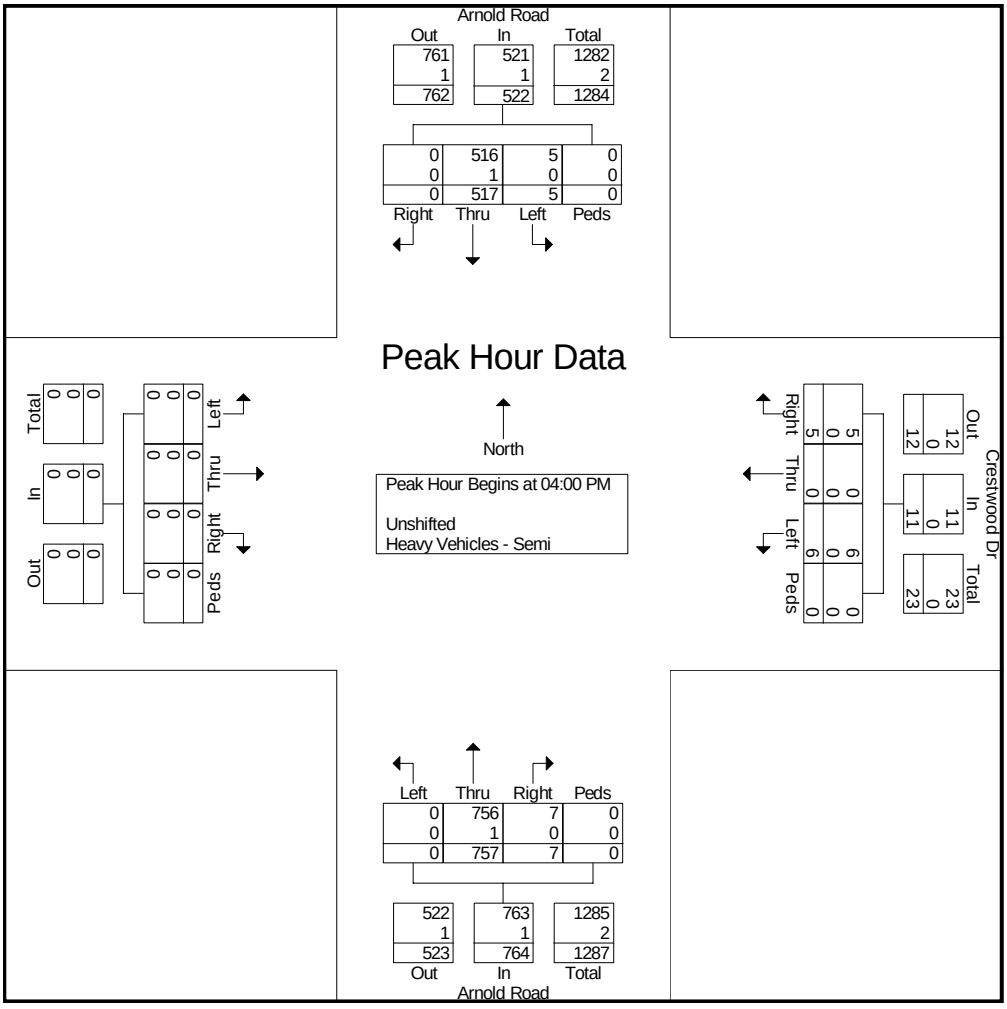


Intersection Turning Movement Count

Project: Centre of New England
Community: Coventry
Intersection: Arnold at Crestwood
Weather Conditions: Sunny/Hot

File Name : Arnold
Site Code : 00011111
Start Date : 8/1/2024
Page No : 4

	Arnold Road Southbound					Crestwood Dr Westbound					Arnold Road Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 04:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**2**	**135**	0	0	**137**	**3**	0	**2**	0	**5**	0	182	**2**	0	184	0	0	0	0	0	326
04:15 PM	2	121	0	0	123	1	0	2	0	3	0	191	2	0	193	0	0	0	0	0	319
04:30 PM	1	128	0	0	129	1	0	1	0	2	0	183	1	0	184	0	0	0	0	0	315
04:45 PM	0	133	0	0	133	1	0	0	0	1	0	**201**	2	0	**203**	0	0	0	0	0	**337**
Total Volume	5	517	0	0	522	6	0	5	0	11	0	757	7	0	764	0	0	0	0	0	1297
% App. Total	1	99	0	0		54.5	0	45.5	0		0	99.1	0.9	0		0	0	0	0		
PHF	.625	.957	.000	.000	.953	.500	.000	.625	.000	.550	.000	.942	.875	.000	.941	.000	.000	.000	.000	.000	.962
Unshifted	5	516	0	0	521	6	0	5	0	11	0	756	7	0	763	0	0	0	0	0	1295
% Unshifted	100	99.8	0	0	99.8	100	0	100	0	100	0	99.9	100	0	99.9	0	0	0	0	0	99.8
Heavy Vehicles - Semi	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Heavy Vehicles - Semi	0	0.2	0	0	0.2	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.2



APPENDIX B – Traffic Crash Data

January through December 2019 and January 2022 through December 2023

Crash Data Summary

Centre of New England, Coventry, Rhode Island

Date	Major Street	Intersecting Street	Type	Direction	Severity	Contributing Factor
Year - 2019						
2/22/2019	Arbor Drive	n/a	Head-On	EB/WB	I	Mechanical Failure
2/26/2019	Hopkins Hill Road	n/a	Angle	NB	PP	Deer
6/3/2019	Hopkins Hill Road	Arbor Drive	Angle	NB	PP	Deer
11/18/2019	Hopkins Hill Road	Clark Mill Street	Angle	NB/EB	I	Failure to Yield/Driver Error
11/26/2019	Hopkins Hill Road	Arbor Drive	Rearend	NB/NB	I	Driver Error
Year - 2022						
8/2/2022	Hopkins Hill Road	n/a	Broadside	NB	PP	Deer
9/13/2022	Hopkins Hill Road	Arbor Drive	Rearend	NB	PP	Driver Error
10/21/2022	Hopkins Hill Road	Mishnock Road	Rearend	NB	PP	Driver Error
Year - 2023						

CRASH DATA LISTING

ACCIDENT No.	DATE	WEATHER	ROAD COND	ACC TYPE	TRAFF CONT	COLL INVOL	COLL TYPE	VEHICLE 1			VEHICLE 2		VEHICLE 3		KABCO
								DIR	VEH ACT	COLL WITH	DIR	VEH ACT	DIR	VEH ACT	
1	2/22/2019	Clear	Dry	Injury	None	Veh/Veh	Head-On	WB	Straight	Veh	EB	Straight			C
2	2/26/2019	Clear	Dry	Property	None	Veh/Deer	Angle	NB	Straight	Deer					O
3	6/3/2019	Clear	Dry	Property	None	Veh/Deer	Angle	NB	Straight	Deer					O
4	11/18/2019	Clear	Dry	Injury	Stop	Veh/Veh	Angle	SB	Straight	Veh	EB	Left			C
5	11/26/2019	Clear	Dry	Property	None	Veh/Veh	Rearend	NB	Straight	Veh	NB	Stopped			C
6	8/2/2022	Clear	Dry	Property	None	Veh/Deer	Broadside	NB	Straight	Deer					O
7	9/13/2022	Clear	Dry	Property	None	Veh/Veh	Rearend	NB	Stopped	Veh	NB	Straight			O
8	10/21/2022	Clear	Dry	Property	None	Veh/Veh	Rearend	NB	Straight	Veh	NB	Stopped			O

Crash Severity

K = Fatal Injury
A = Suspected Serious Injury
B = Suspected Minor Injury
C = Possible Injury
O = No Apparent Injury

Crash Analysis

All Intersections and Segments

			2019	2022	2023	Total	Percent
Collision Type							
	Intersection		2	2		4	
	Non-Intersection		3	1		4	
		Rear End	1	2		3	38%
		Angle	3			3	38%
		Head On	1			1	13%
		Single Vehicle Crash				0	0%
		Sideswipe, Same Direction				0	0%
		Sideswipe, Opposite Direction				0	0%
		Broadside		1		1	13%
		Unknown/Other				0	0%
		Total	5	3	0	8	100%
Accident Severity							
		Property Damage Only	2	3		5	63%
		Injury	3			3	38%
		Fatal				0	0%
		Not Reported				0	0%
Light Condition							
		Day	4	1		5	63%
		Night				0	0%
		Dusk/Dawn		1		1	13%
		Dark, Lighted Roadway	1	1		2	25%
		Dark, Roadway Not Lighted				0	0%
		Not Reported				0	0%
Road Condition							
		Dry	5	3		8	100%
		Wet				0	0%
		Snow				0	0%
		Ice				0	0%
		Not Reported				0	0%
Hour of Day							
		6:00 AM -9:00 AM				0	0%
		9:00 AM -3:00 PM	3	1		4	50%
		3:00 PM -6:00 PM	1	1		2	25%
		6:00 PM -6:00 AM	1	1		2	25%
		Total Accidents:	5	3	0	8	

APPENDIX C – Trip Generation

ITE Trip Generation Summary

Site Trip Distribution

ITE Land Use Codes

- ITE Land Use Code 151 – Mini-Warehouse
- ITE Land Use Code 215 – Single-Family Attached Housing
- ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

C

Trip Generation Summary

Trip Generation Summary

Project Specific Trips

	Description	Enter	Exit	Total
DAILY				
ITE Land Use Code 215	Single Family Attached	1,303	1,303	2,606
ITE Land Use Code 221	Multifamily (Mid-Rise)	795	795	1,590
	TOTAL	2,098	2,098	4,196
AM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	54	120	174
ITE Land Use Code 221	Multifamily (Mid-Rise)	30	100	130
	TOTAL	84	220	304
PM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	117	89	206
ITE Land Use Code 221	Multifamily (Mid-Rise)	84	53	137
	TOTAL	201	142	343

Calculations – Project Specific;

ITE Land Use Code 215 – Single Family Attached

Independent Variable (X) = Dwelling Units

X = 166 Units (Lot 2)
X = 196 Units (Lot 3)
X = 362 Units

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 7.2 (X)
T = 7.2 (362)
T = 2,606

Enter:	1,303
Exit:	1,303
Total	2,606

AM Peak *Directional Distribution 31% Entering, 69% Exiting*

T = 0.48 (X)
T = 0.48 (362)
T = 174

Enter:	54
Exit:	120
Total	174

PM Peak *Directional Distribution 57% Entering, 43% Exiting*

T = 0.57 (X)
T = 0.57 (362)
T = 206

Enter:	117
Exit:	89
Total	206

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

Independent Variable (X) = Dwelling Units X = 350 (Lot 4) Arnold Road

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 4.54 (X)	Enter:	795
T = 4.54 (350)	Exit:	795
T = 1,590	Total	1,590

AM Peak *Directional Distribution 23% Entering, 77% Exiting*

T = 0.37 (X)	Enter:	30
T = 0.37 (350)	Exit:	100
T = 130	Total	130

PM Peak *Directional Distribution 61% Entering, 39% Exiting*

T = 0.39 (X)	Enter:	84
T = 0.39 (350)	Exit:	53
T = 137	Total	137

Trip Generation Summary

Background Trips

	Description	Enter	Exit	Total
DAILY				
ITE Land Use Code 151	Mini-Warehouse	76	76	152
ITE Land Use Code 215	Single Family Attached	234	234	468
ITE Land Use Code 221	Multifamily (Mid-Rise)	908	908	1,816
	TOTAL	1,218	1,218	2,436
AM PEAK HOUR				
ITE Land Use Code 151	Mini-Warehouse	6	4	10
ITE Land Use Code 215	Single Family Attached	10	21	31
ITE Land Use Code 221	Multifamily (Mid-Rise)	34	114	148
	TOTAL	50	139	189
PM PEAK HOUR				
ITE Land Use Code 151	Mini-Warehouse	7	9	16
ITE Land Use Code 215	Single Family Attached	21	16	37
ITE Land Use Code 221	Multifamily (Mid-Rise)	95	61	156
	TOTAL	123	86	209

Calculations – Background Trips;

ITE Land Use Code 151 – Mini-Warehouse

Independent Variable (X) = 1,000 Square Feet X = 105,000 SF

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 1.45 (X)	Enter:	76
T = 1.45 (105)	Exit:	76
T = 152	Total	152

AM Peak *Directional Distribution 59% Entering, 41% Exiting*

T = 0.09 (X)	Enter:	6
T = 0.09 (105)	Exit:	4
T = 10	Total	10

PM Peak *Directional Distribution 47% Entering, 53% Exiting*

T = 0.15 (X)	Enter:	7
T = 0.15 (105)	Exit:	9
T = 16	Total	16

ITE Land Use Code 215 – Single Family Attached

Independent Variable (X) = Dwelling Units X = 65 Units (Highlands Undeveloped)

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 7.2 (X)	Enter:	234
T = 7.2 (65)	Exit:	234
T = 468	Total	468

AM Peak *Directional Distribution 31% Entering, 69% Exiting*

T = 0.48 (X)	Enter:	10
T = 0.48 (65)	Exit:	21
T = 31	Total	31

PM Peak *Directional Distribution 57% Entering, 43% Exiting*

T = 0.57 (X)	Enter:	21
T = 0.57 (65)	Exit:	16
T = 37	Total	37

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

Independent Variable (X) = Dwelling Units X = 400 (Lot 8) Hopkins Hill Road

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 4.54 (X)	Enter: 908
T = 4.54 (400)	Exit: 908
T = 1,816	Total 1,816

AM Peak *Directional Distribution 23% Entering, 77% Exiting*

T = 0.37 (X)	Enter: 34
T = 0.37 (400)	Exit: 114
T = 148	Total 148

PM Peak *Directional Distribution 61% Entering, 39% Exiting*

T = 0.39 (X)	Enter: 95
T = 0.39 (400)	Exit: 61
T = 156	Total 156

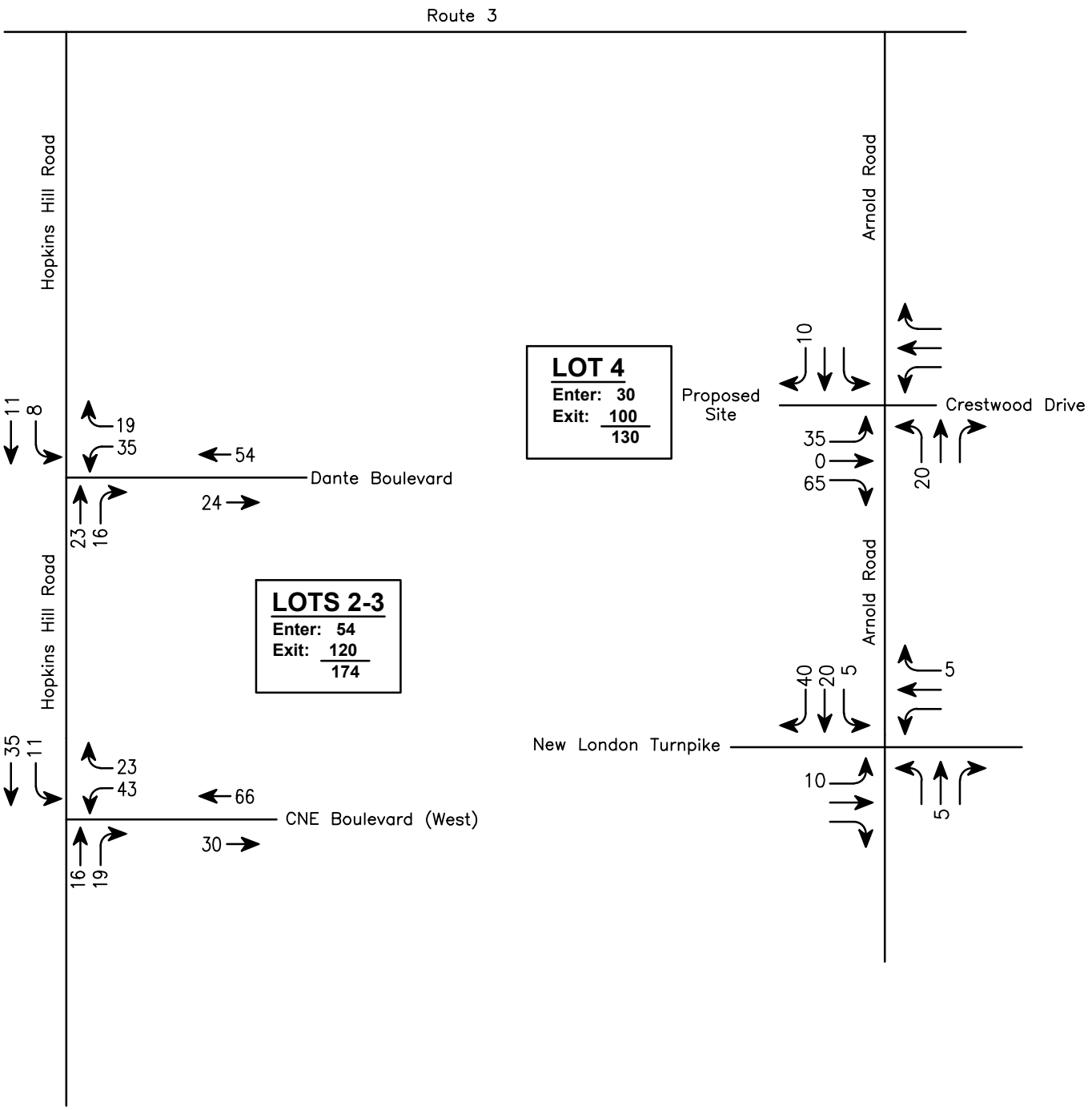
Trip Generation Summary

Total Trips

	Description	Enter	Exit	Total
DAILY				
ITE Land Use Code 151	Mini-Warehouse	76	76	152
ITE Land Use Code 215	Single Family Attached	1,537	1,537	3,074
ITE Land Use Code 221	Multifamily (Mid-Rise)	1,703	1,703	3,406
	TOTAL	3,316	3,316	6,632
AM PEAK HOUR				
ITE Land Use Code 151	Mini-Warehouse	6	4	10
ITE Land Use Code 215	Single Family Attached	64	141	205
ITE Land Use Code 221	Multifamily (Mid-Rise)	64	214	278
	TOTAL	134	359	493
PM PEAK HOUR				
ITE Land Use Code 151	Mini-Warehouse	7	9	16
ITE Land Use Code 215	Single Family Attached	138	105	243
ITE Land Use Code 221	Multifamily (Mid-Rise)	179	114	293
	TOTAL	324	228	552

C

Site Distribution

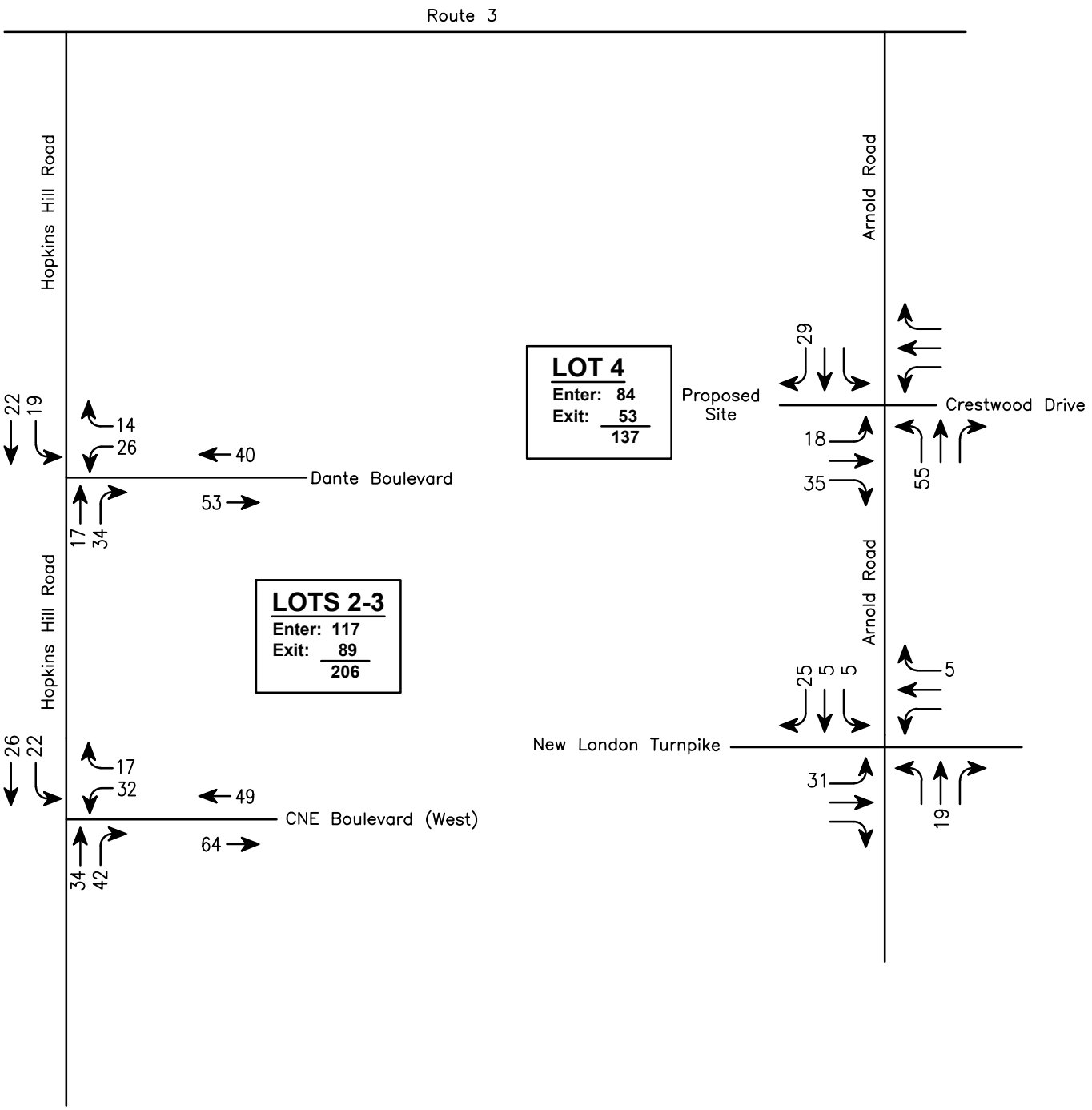


CROSSMAN ENGINEERING

100 Jefferson Blvd., Suite 200 | Warwick, RI 02888
1 George Leven Drive, Suite 200 | N. Attleboro, MA 02760

SITE TRIP DISTRIBUTION
WEEKDAY AM PEAK HOUR

THE CENTRE OF NEW ENGLAND
COVENTRY, RHODE ISLAND



CROSSMAN ENGINEERING
100 Jefferson Blvd., Suite 200 | Warwick, RI 02888
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SITE TRIP DISTRIBUTION
WEEKDAY PM PEAK HOUR

THE CENTRE OF NEW ENGLAND
COVENTRY, RHODE ISLAND

C

ITE Land Use Code

ITE Land Use Code 151 – Mini-Warehouse

ITE Land Use Code 215 – Single-Family Attached Housing

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

ITE Land Use Code 151 – Mini-Warehouse

Land Use: 151
Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Colorado, Massachusetts, Minnesota, Nevada, New Jersey, Texas, and Utah.

Source Numbers

212, 403, 551, 568, 642, 708, 724, 850, 868, 876, 1024, 1035

Mini-Warehouse
(151)

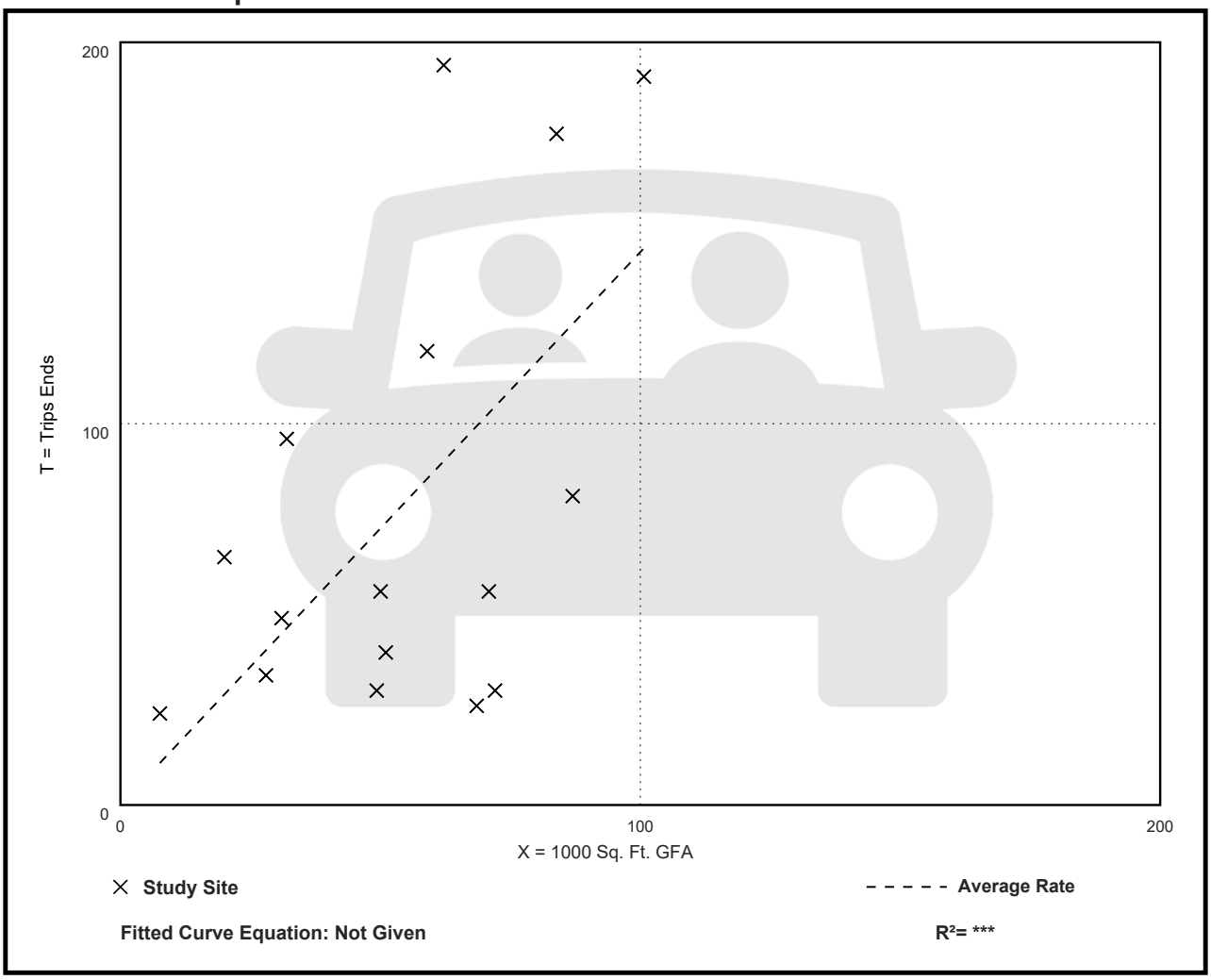
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 55
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

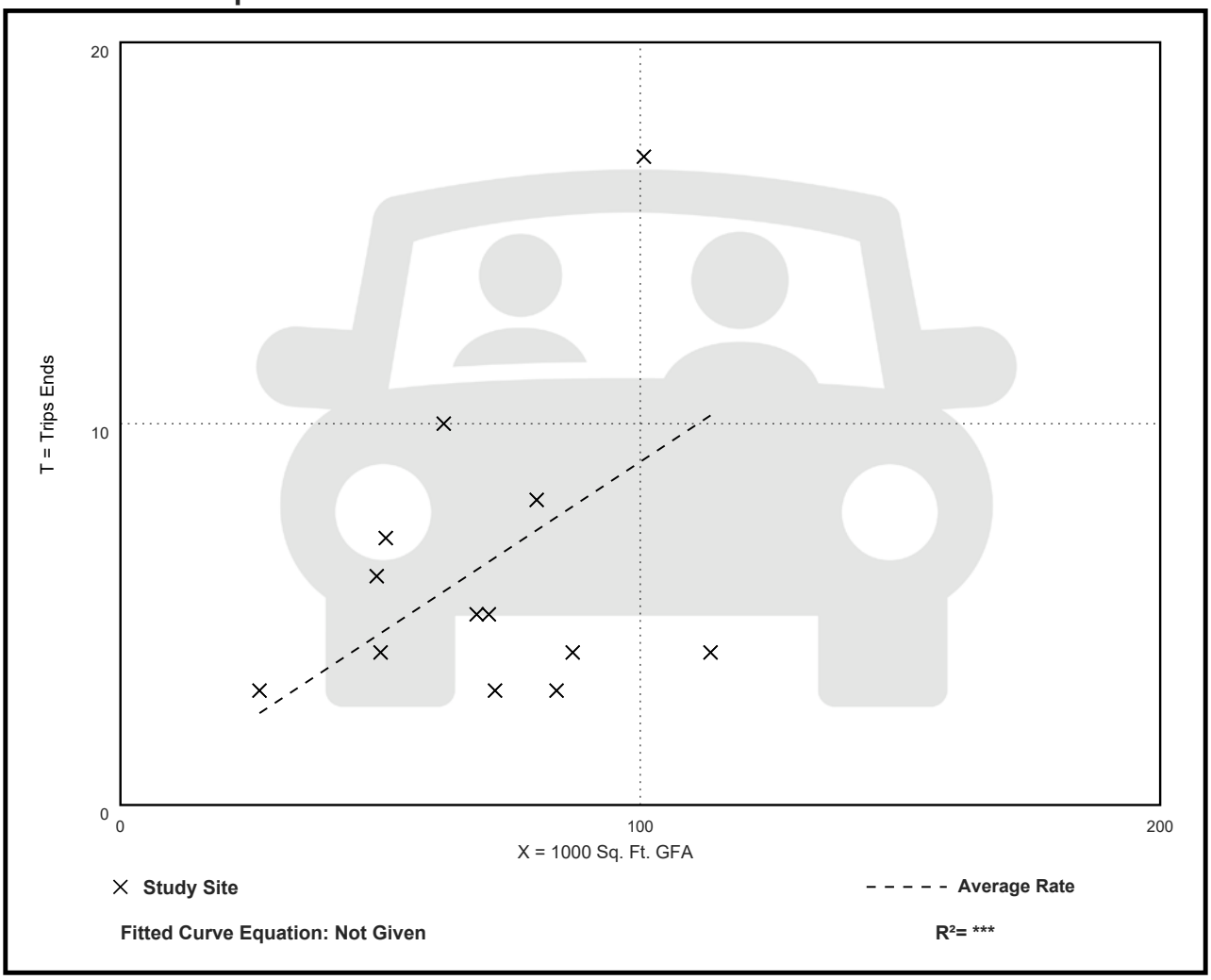
Mini-Warehouse
(151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 13
Avg. 1000 Sq. Ft. GFA: 70
Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.09	0.04 - 0.17	0.05

Data Plot and Equation



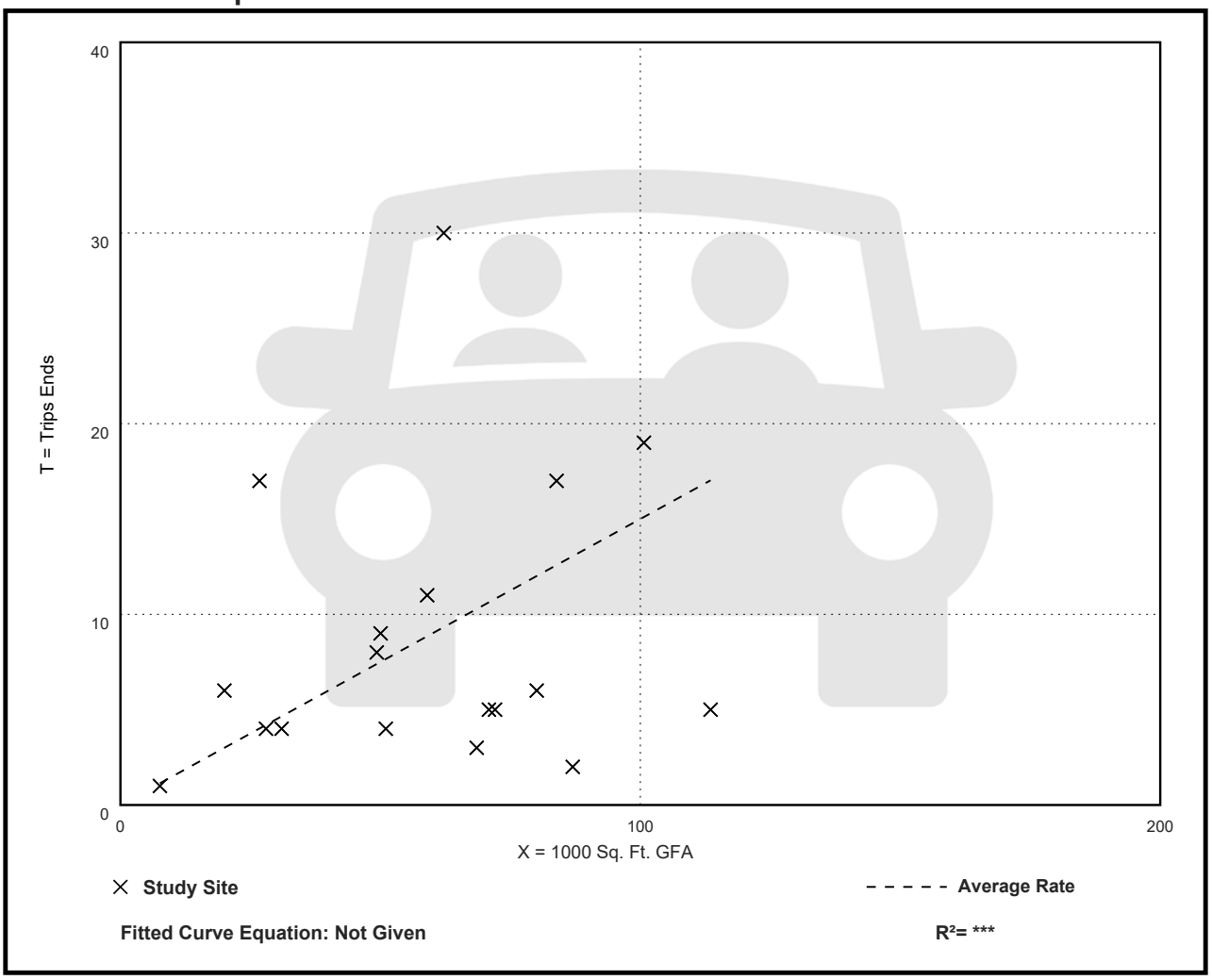
Mini-Warehouse
(151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. 1000 Sq. Ft. GFA: 59
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.02 - 0.64	0.14

Data Plot and Equation



ITE Land Use Code 215 – Single-Family Attached Housing

Land Use: 215
Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Single-Family Attached Housing
(215)

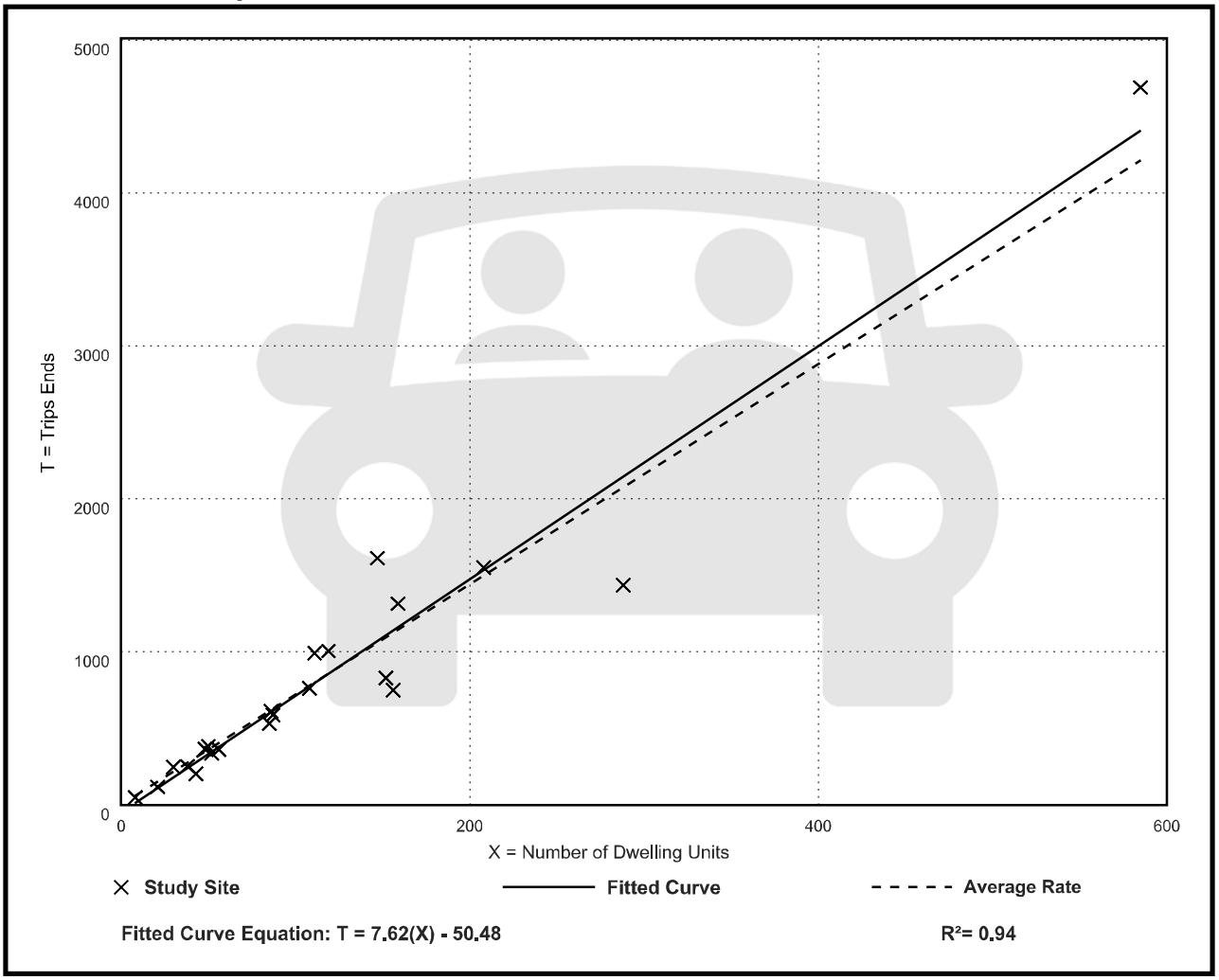
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Fitted Curve Equation: T = 7.62(X) - 50.48

R^2= 0.94

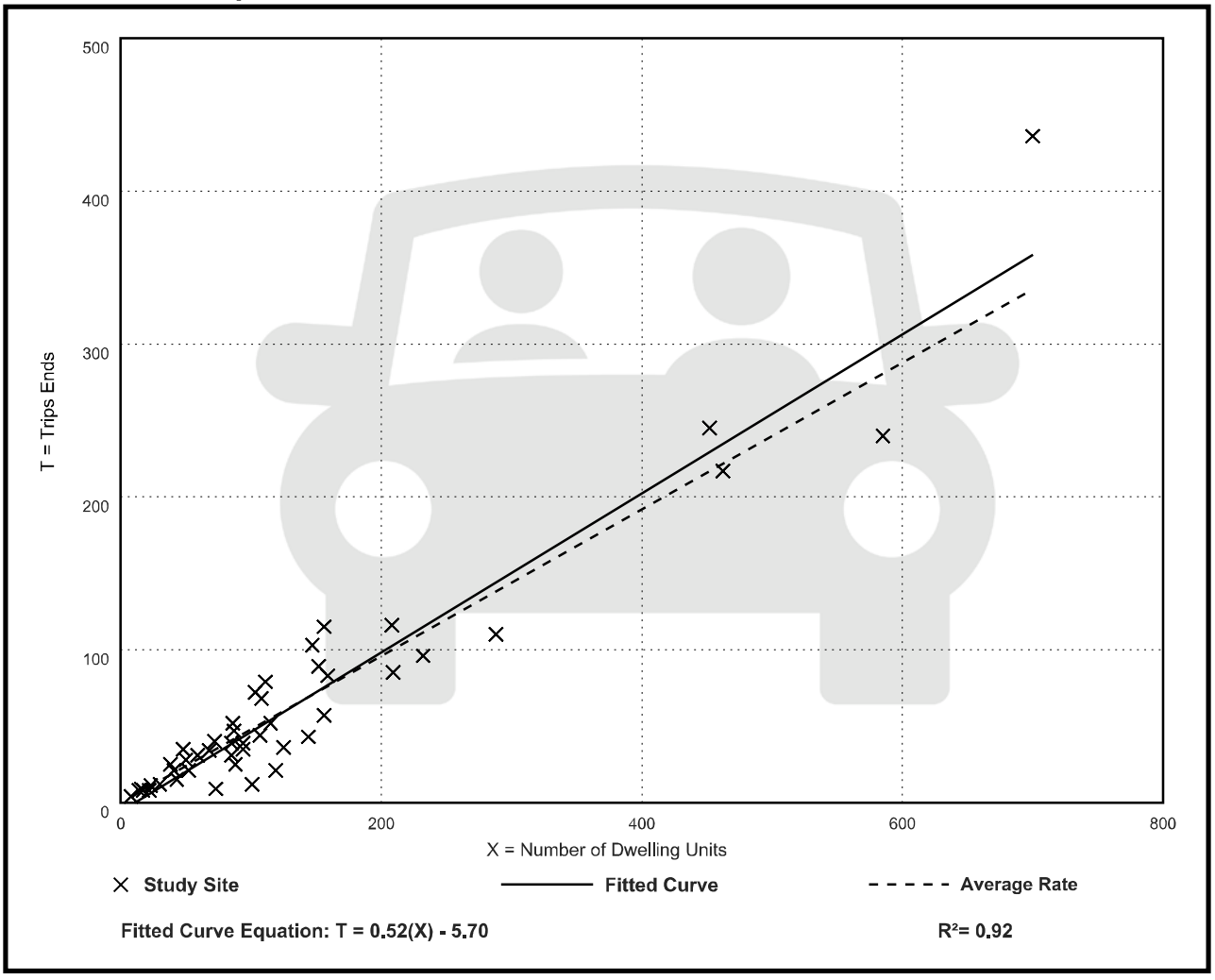
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 46
Avg. Num. of Dwelling Units: 135
Directional Distribution: 31% entering, 69% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



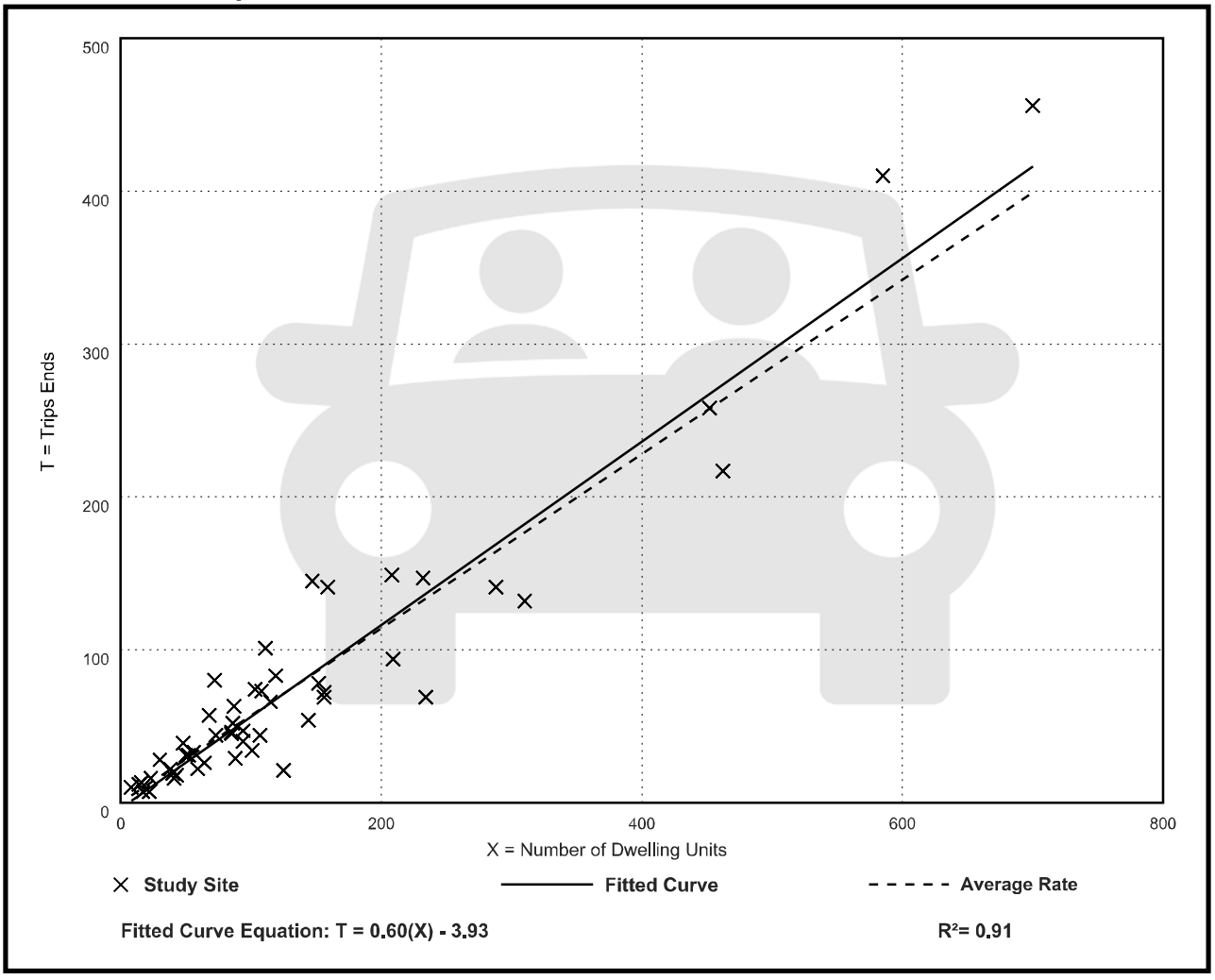
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 51
Avg. Num. of Dwelling Units: 136
Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

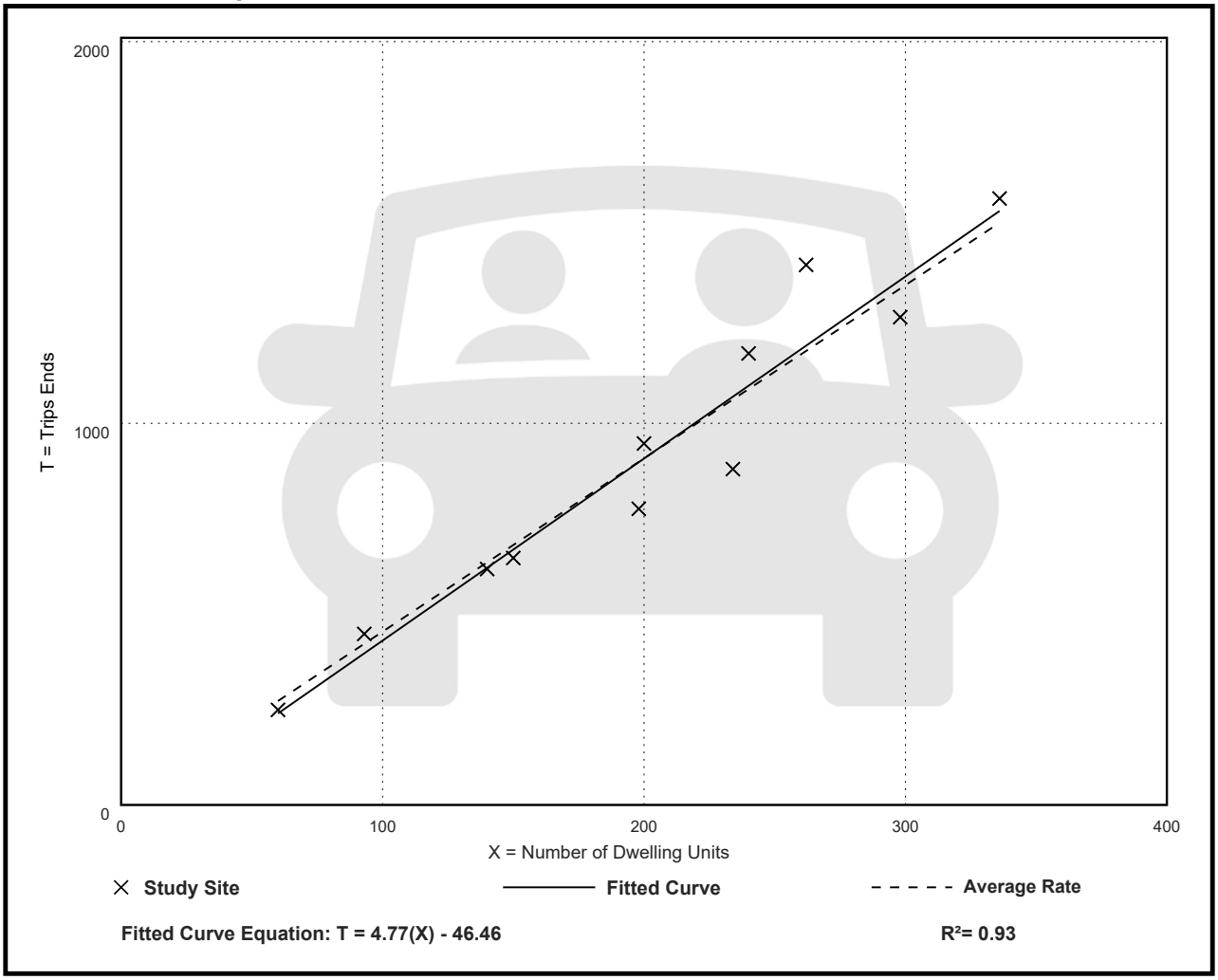
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



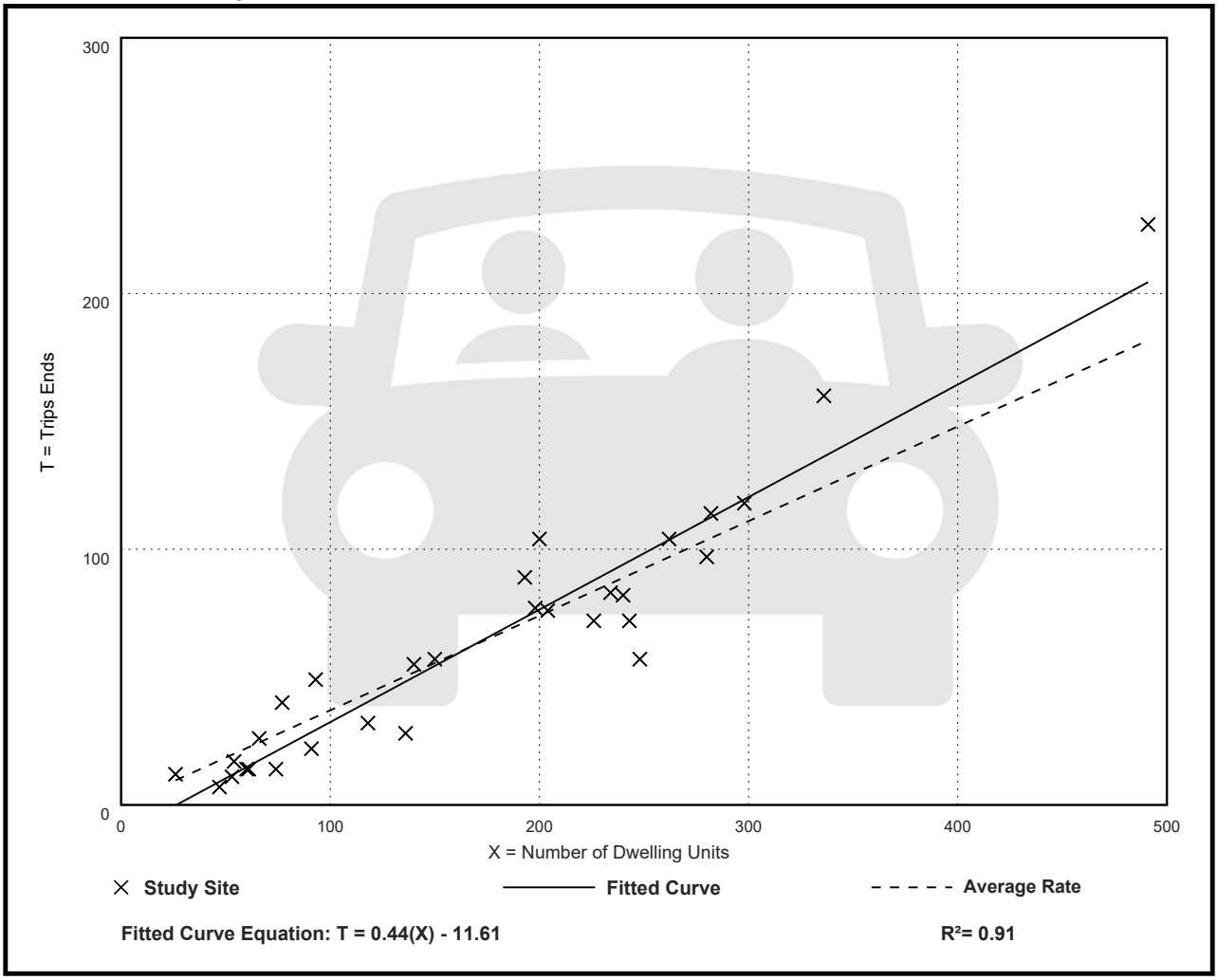
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Fitted Curve Equation: T = 0.44(X) - 11.61

R^2= 0.91

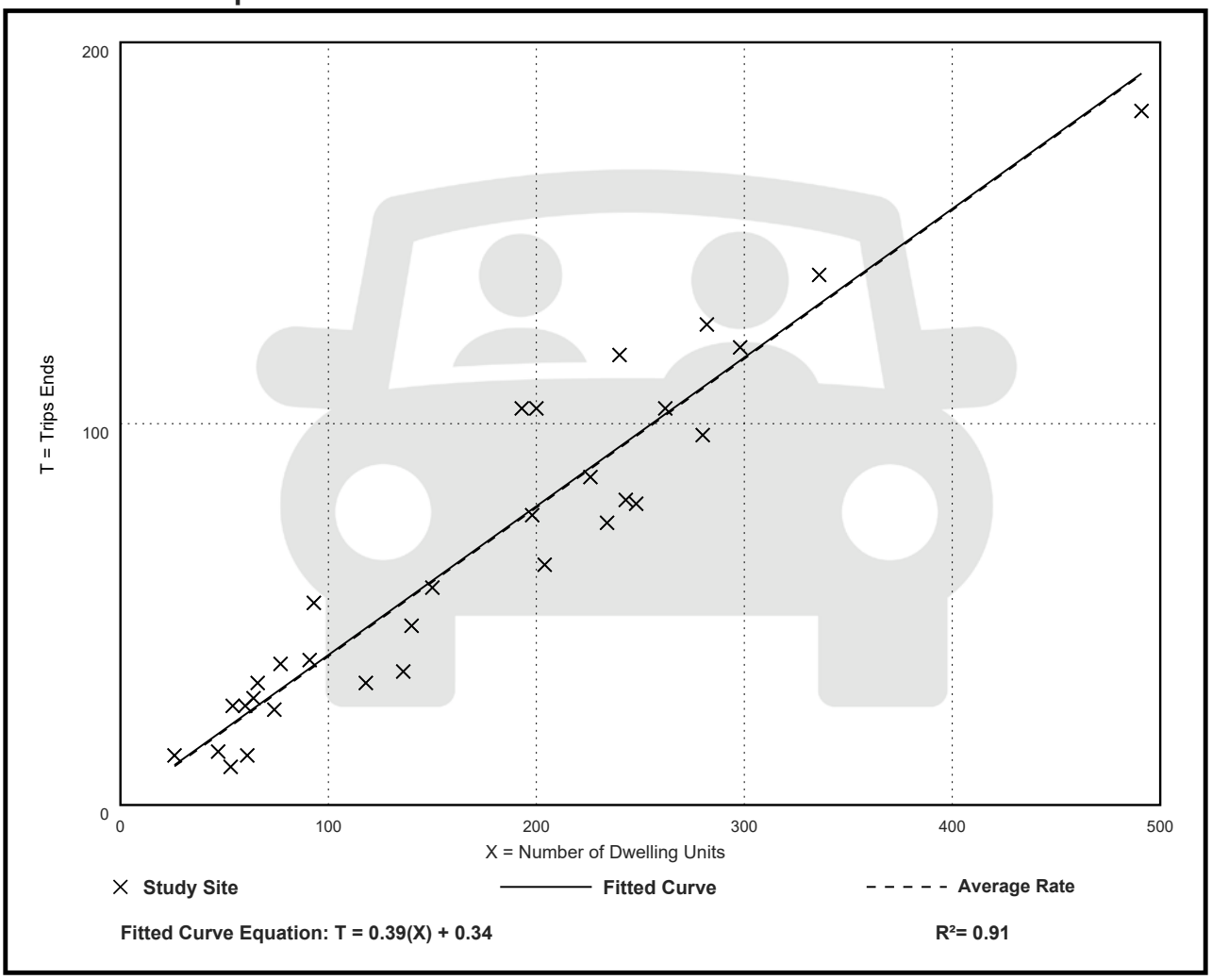
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



APPENDIX D – Operational Analysis

Existing Conditions

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road at Dante Boulevard

Arnold Road at New London Turnpike

Arnold Road at Crestwood Drive

Build Conditions

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road at Dante Boulevard

Arnold Road at New London Turnpike

Arnold Road at Site Access Road/Crestwood Drive

D

Existing Weekday AM / PM Peak Hour

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road at Dante Boulevard

Arnold Road at New London Turnpike

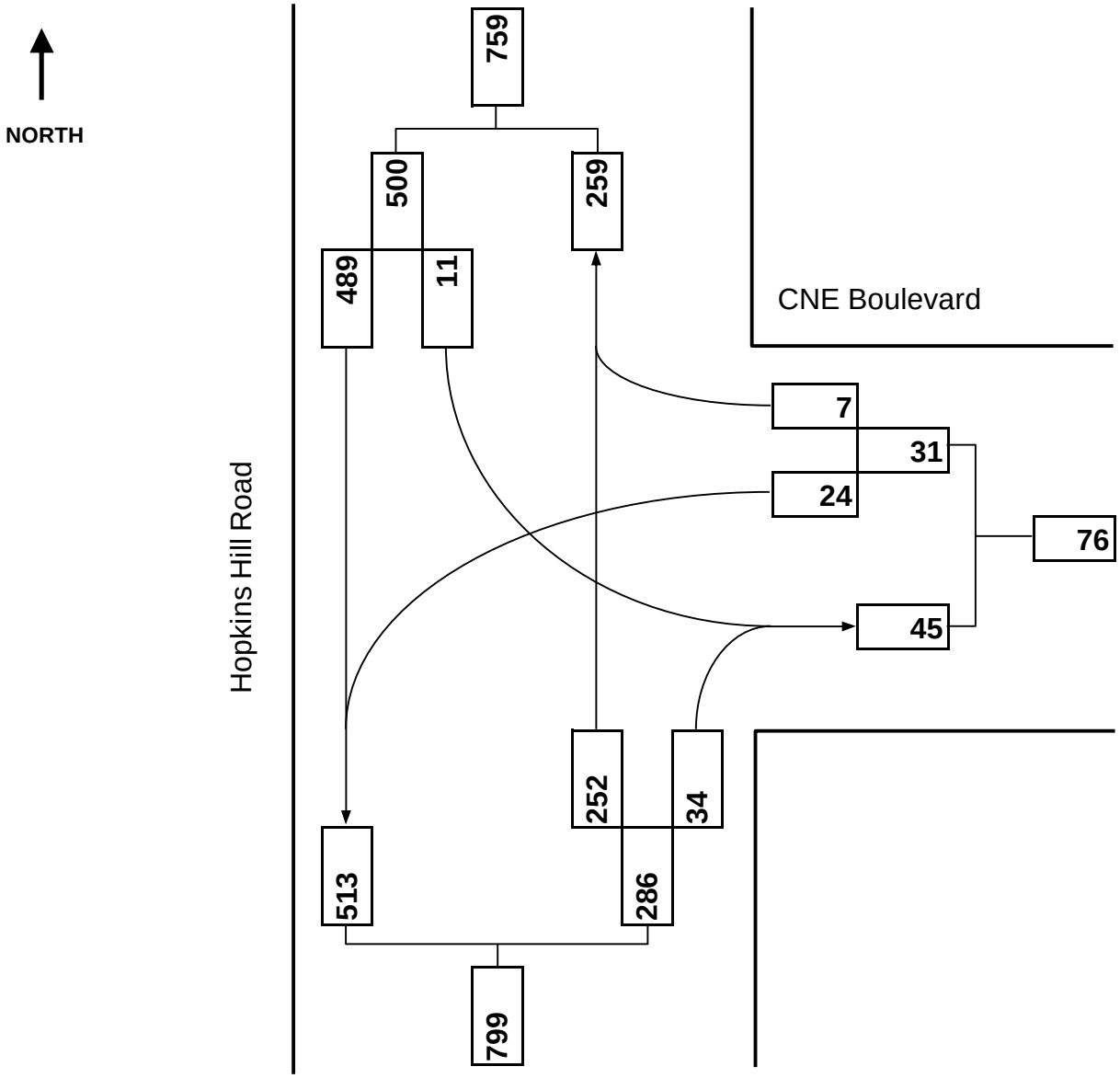
Arnold Road at Crestwood Drive

Hopkins Hill Road at Centre of New England Boulevard

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	CNE Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	7:00 - 8:00 AM
Existing:	AM Peak	**Future**:	n/a



Intersection	
Int Delay, s/veh	0.7

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	24	7	252	34	11	489
Future Vol, veh/h	24	7	252	34	11	489
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	0	-	-	225	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	26	8	274	37	12	532

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	848	155	0	0	311	0
Stage 1	292	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Critical Hdwy	6.615	6.915	-	-	4.115	-
Critical Hdwy Stg 1	5.815	-	-	-	-	-
Critical Hdwy Stg 2	5.415	-	-	-	-	-
Follow-up Hdwy	3.5095	3.3095	-	-	2.2095	-
Pot Cap-1 Maneuver	317	866	-	-	1254	-
Stage 1	735	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	314	866	-	-	1254	-
Mov Cap-2 Maneuver	314	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	571	-	-	-	-	-

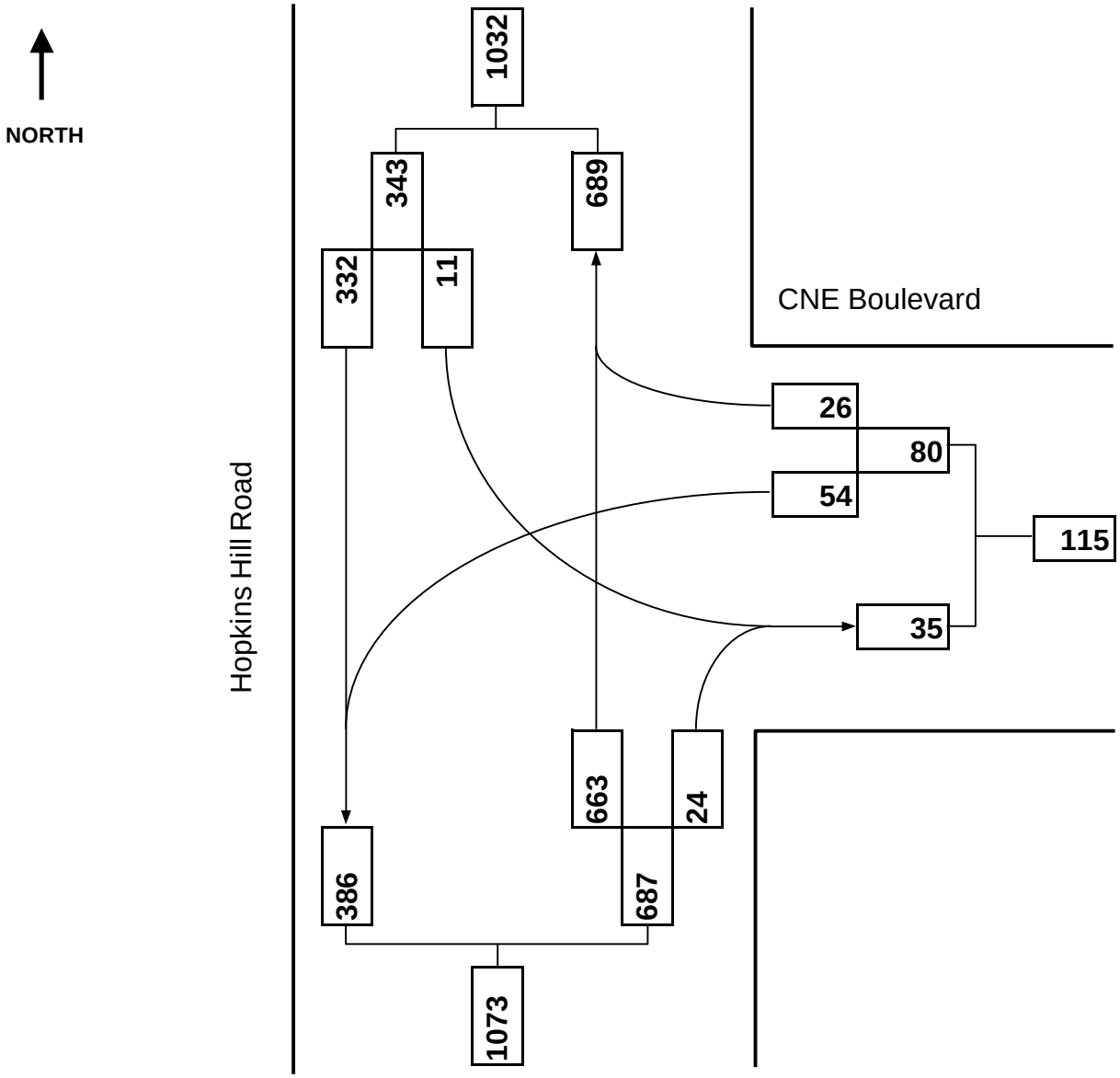
Approach	NW	NE	SW
HCM Control Delay, s/v	15.61	0	0.17
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	NWLn2	SWL	SWT
Capacity (veh/h)	-	-	314	866	1254	-
HCM Lane V/C Ratio	-	-	0.083	0.009	0.01	-
HCM Control Delay (s/veh)	-	-	17.5	9.2	7.9	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	CNE Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	4:00 - 5:00 PM
Existing:	PM Peak	**Future**:	n/a



Intersection	
Int Delay, s/veh	1.7

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	54	26	663	24	11	332
Future Vol, veh/h	54	26	663	24	11	332
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	0	-	-	225	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	59	28	721	26	12	361

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1118	373	0	0	747	0
Stage 1	734	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Critical Hdwy	6.615	6.915	-	-	4.115	-
Critical Hdwy Stg 1	5.815	-	-	-	-	-
Critical Hdwy Stg 2	5.415	-	-	-	-	-
Follow-up Hdwy	3.5095	3.3095	-	-	2.2095	-
Pot Cap-1 Maneuver	216	627	-	-	865	-
Stage 1	439	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	213	627	-	-	865	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	680	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	22.64	0	0.3
HCM LOS	C		

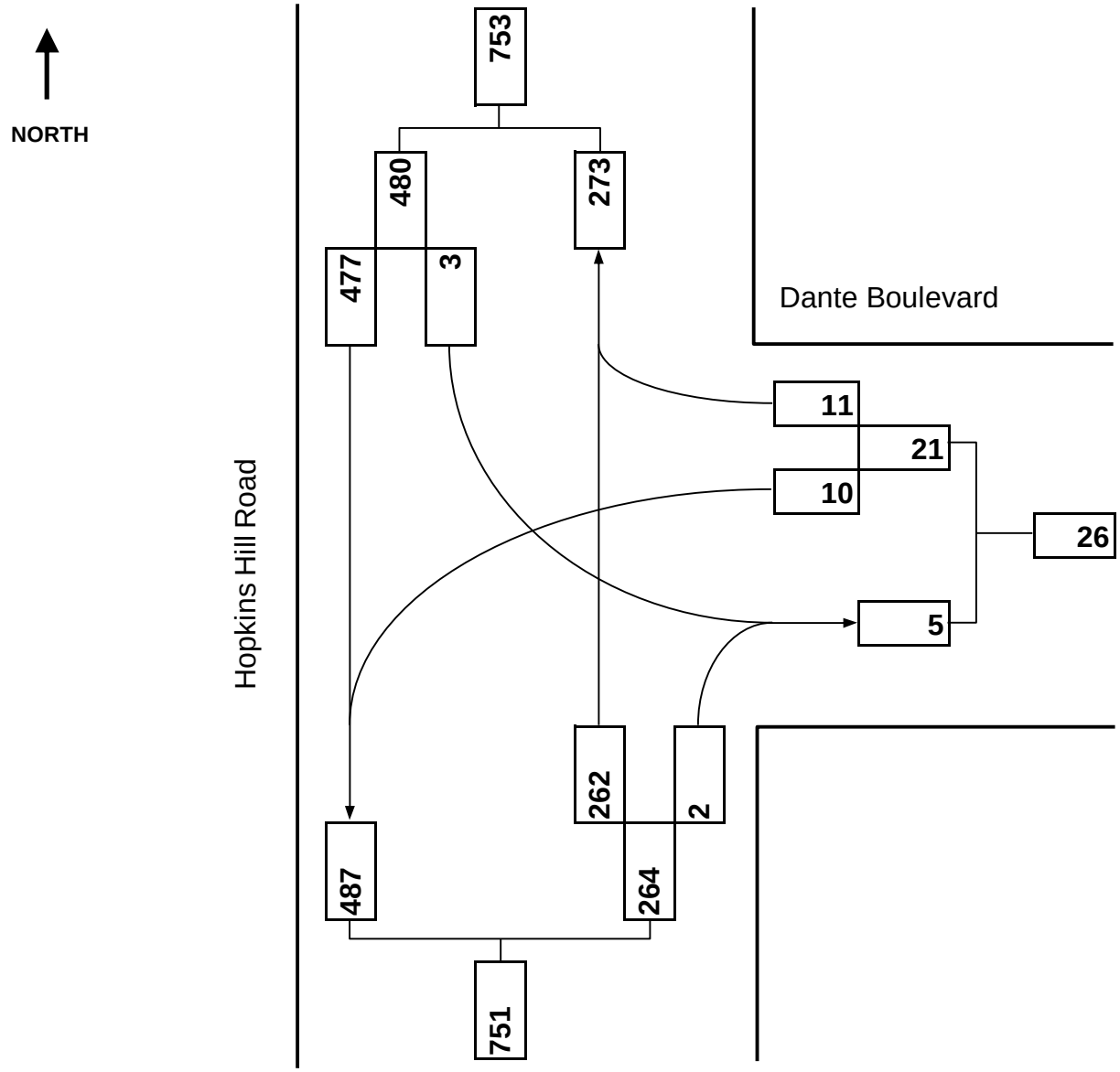
Minor Lane/Major Mvmt	NET	NER	NWLn1	NWLn2	SWL	SWT
Capacity (veh/h)	-	-	213	627	865	-
HCM Lane V/C Ratio	-	-	0.276	0.045	0.014	-
HCM Control Delay (s/veh)	-	-	28.2	11	9.2	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.1	0	-

Hopkins Hill Road at Dante Boulevard

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	Dante Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	7:00 - 8:00 AM
Existing:	AM Peak	**Future**:	n/a



Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	11	262	2	3	477
Future Vol, veh/h	10	11	262	2	3	477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	11	12	285	2	3	518

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	811	286	0	0	287	0
Stage 1	286	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	350	756	-	-	1281	-
Stage 1	765	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	349	756	-	-	1281	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	593	-	-	-	-	-

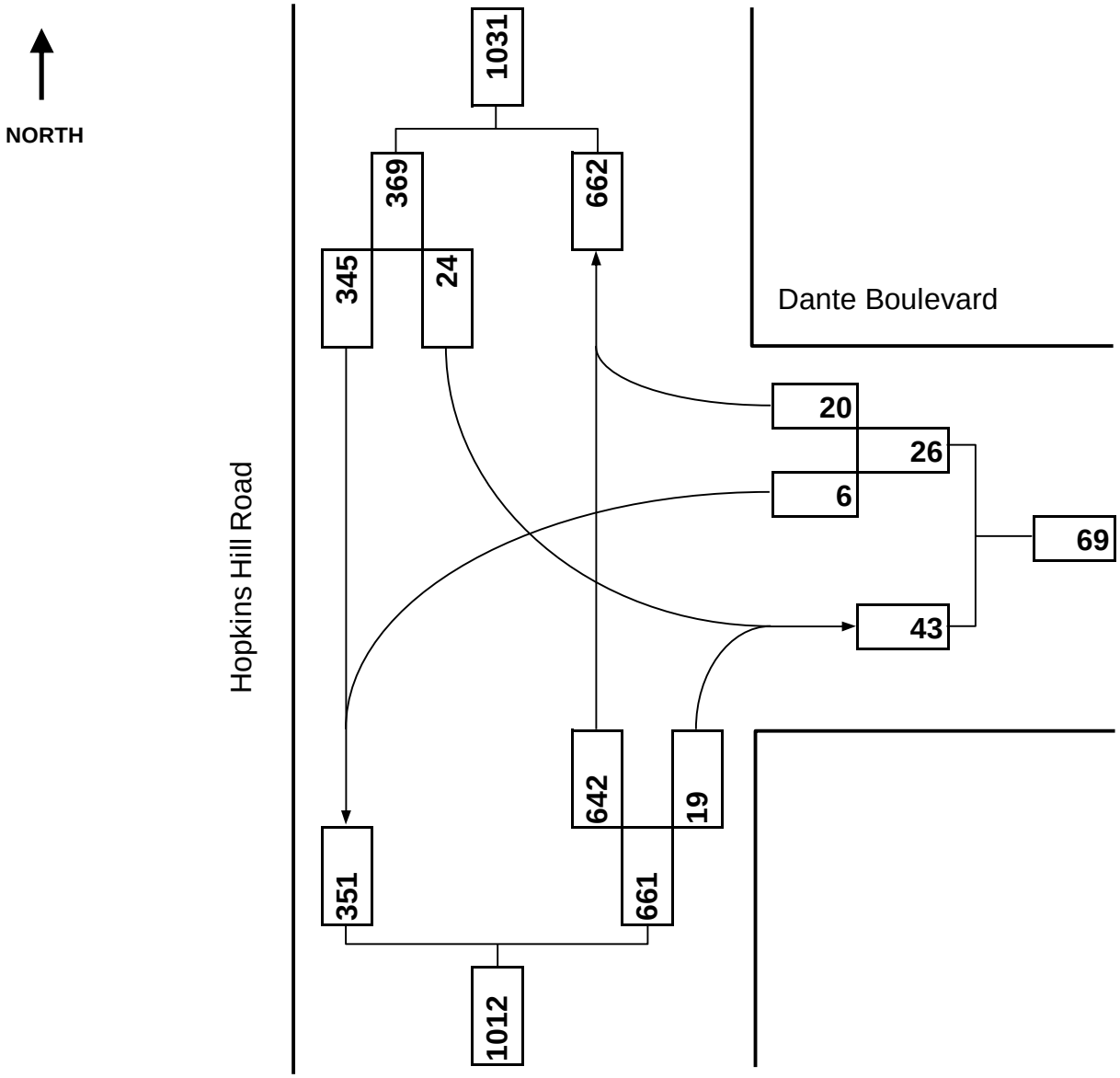
Approach	WB	NB	SB
HCM Control Delay, s/v	12.77	0	0.05
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	486	11	-
HCM Lane V/C Ratio	-	-	0.047	0.003	-
HCM Control Delay (s/veh)	-	-	12.8	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	Dante Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	4:00 - 5:00 PM
Existing:	PM Peak	**Future**:	n/a



Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	20	642	19	24	345
Future Vol, veh/h	6	20	642	19	24	345
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	7	22	698	21	26	375

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1135	708	0	0	718	0
Stage 1	708	-	-	-	-	-
Stage 2	427	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	225	436	-	-	887	-
Stage 1	490	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	216	436	-	-	887	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.07	0	0.6
HCM LOS	C		

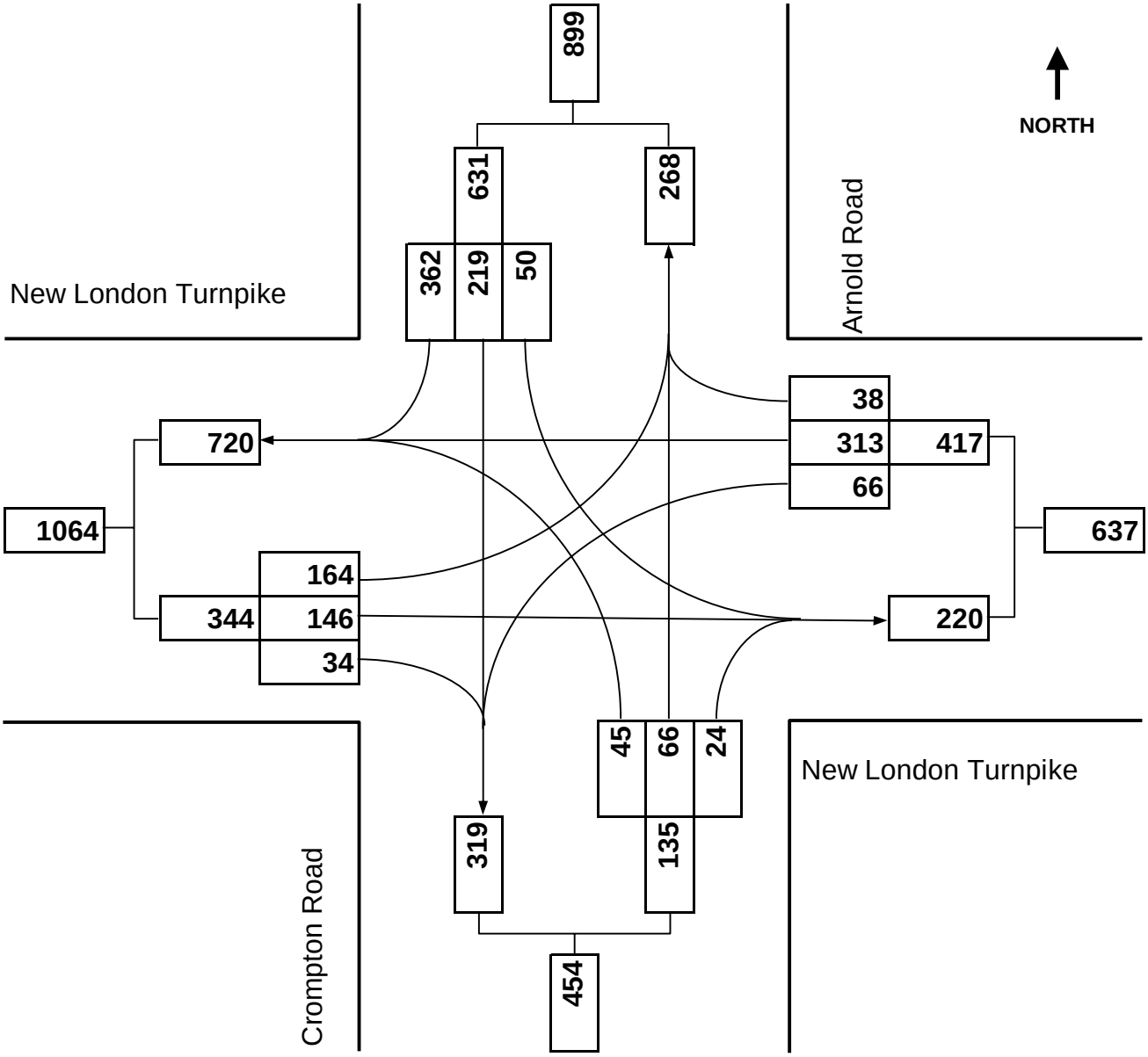
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	353	117	-
HCM Lane V/C Ratio	-	-	0.08	0.029	-
HCM Control Delay (s/veh)	-	-	16.1	9.2	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Arnold Road at New London Turnpike

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	New London Turnpike
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	7:00 AM - 8:00 AM
Existing:	AM Peak Hour	**Future**:	n/a

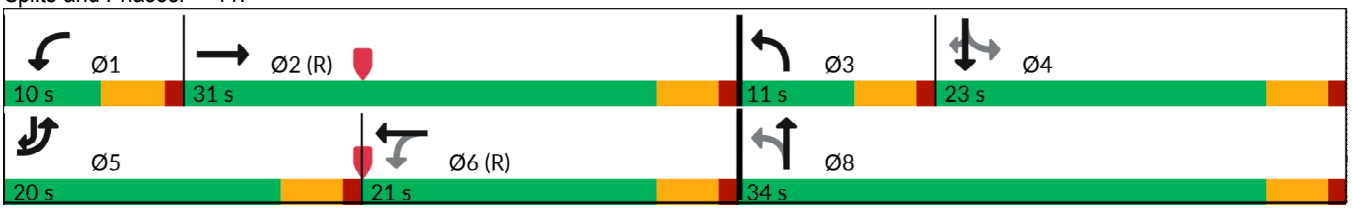


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	146	34	66	313	38	45	66	24	50	219	362
Future Volume (vph)	164	146	34	66	313	38	45	66	24	50	219	362
Adj. Flow (vph)	178	159	37	72	340	41	49	72	26	54	238	393
Lane Group Flow (vph)	178	196	0	72	381	0	49	98	0	0	292	393
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6		3	8			4	5
Permitted Phases				6			8			4		4
Detector Phase	5	2		1	6		3	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		22.5	22.5	9.5
Total Split (s)	20.0	31.0		10.0	21.0		11.0	34.0		23.0	23.0	20.0
Total Split (%)	26.7%	41.3%		13.3%	28.0%		14.7%	45.3%		30.7%	30.7%	26.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes				Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
v/c Ratio	0.41	0.22		0.11	0.52		0.18	0.17			0.77	0.47
Control Delay (s/veh)	32.6	15.1		10.8	24.5		17.1	12.8			42.3	5.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	32.6	15.1		10.8	24.5		17.1	12.8			42.3	5.1
Queue Length 50th (ft)	40	59		17	148		14	21			125	21
Queue Length 95th (ft)	65	107		38	#296		34	49			#212	66
Internal Link Dist (ft)		325			629			507			827	
Turn Bay Length (ft)	400			75			125					200
Base Capacity (vph)	716	859		602	726		263	726			427	937
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.25	0.23		0.12	0.52		0.19	0.13			0.68	0.42

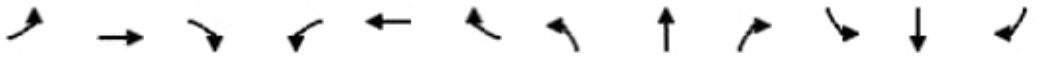
Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11:



Existing Conditions Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	146	34	66	313	38	45	66	24	50	219	362
Future Volume (veh/h)	164	146	34	66	313	38	45	66	24	50	219	362
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	178	159	37	72	340	41	49	72	26	54	238	393
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	276	620	144	606	646	78	254	462	167	115	382	521
Arrive On Green	0.08	0.42	0.42	0.05	0.39	0.39	0.04	0.35	0.35	0.25	0.25	0.25
Sat Flow, veh/h	3483	1479	344	1795	1650	199	1795	1322	477	234	1548	1598
Grp Volume(v), veh/h	178	0	196	72	0	381	49	0	98	292	0	393
Grp Sat Flow(s),veh/h/ln	1742	0	1823	1795	0	1849	1795	0	1799	1782	0	1598
Q Serve(g_s), s	3.7	0.0	5.2	1.7	0.0	11.8	1.4	0.0	2.8	5.8	0.0	16.5
Cycle Q Clear(g_c), s	3.7	0.0	5.2	1.7	0.0	11.8	1.4	0.0	2.8	10.9	0.0	16.5
Prop In Lane	1.00		0.19	1.00		0.11	1.00		0.27	0.18		1.00
Lane Grp Cap(c), veh/h	276	0	764	606	0	724	254	0	628	496	0	521
V/C Ratio(X)	0.64	0.00	0.26	0.12	0.00	0.53	0.19	0.00	0.16	0.59	0.00	0.75
Avail Cap(c_a), veh/h	720	0	764	645	0	724	333	0	708	496	0	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	14.2	12.2	0.0	17.5	19.2	0.0	16.8	25.3	0.0	22.6
Incr Delay (d2), s/veh	2.5	0.0	0.8	0.1	0.0	2.7	0.4	0.0	0.1	1.8	0.0	6.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	2.2	0.7	0.0	5.2	0.6	0.0	1.1	4.7	0.0	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.0	0.0	15.0	12.3	0.0	20.2	19.6	0.0	16.9	27.1	0.0	28.8
LnGrp LOS	D		B	B		C	B		B	C		C
Approach Vol, veh/h		374			453			147			685	
Approach Delay, s/veh		25.0			19.0			17.8			28.1	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	35.9	7.7	23.0	10.4	33.9		30.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	26.5	6.5	18.5	15.5	16.5		29.5				
Max Q Clear Time (g_c+I1), s	3.7	7.2	3.4	18.5	5.7	13.8		4.8				
Green Ext Time (p_c), s	0.0	1.0	0.0	0.0	0.4	0.6		0.5				

Intersection Summary			
HCM 7th Control Delay, s/veh		24.0	
HCM 7th LOS		C	

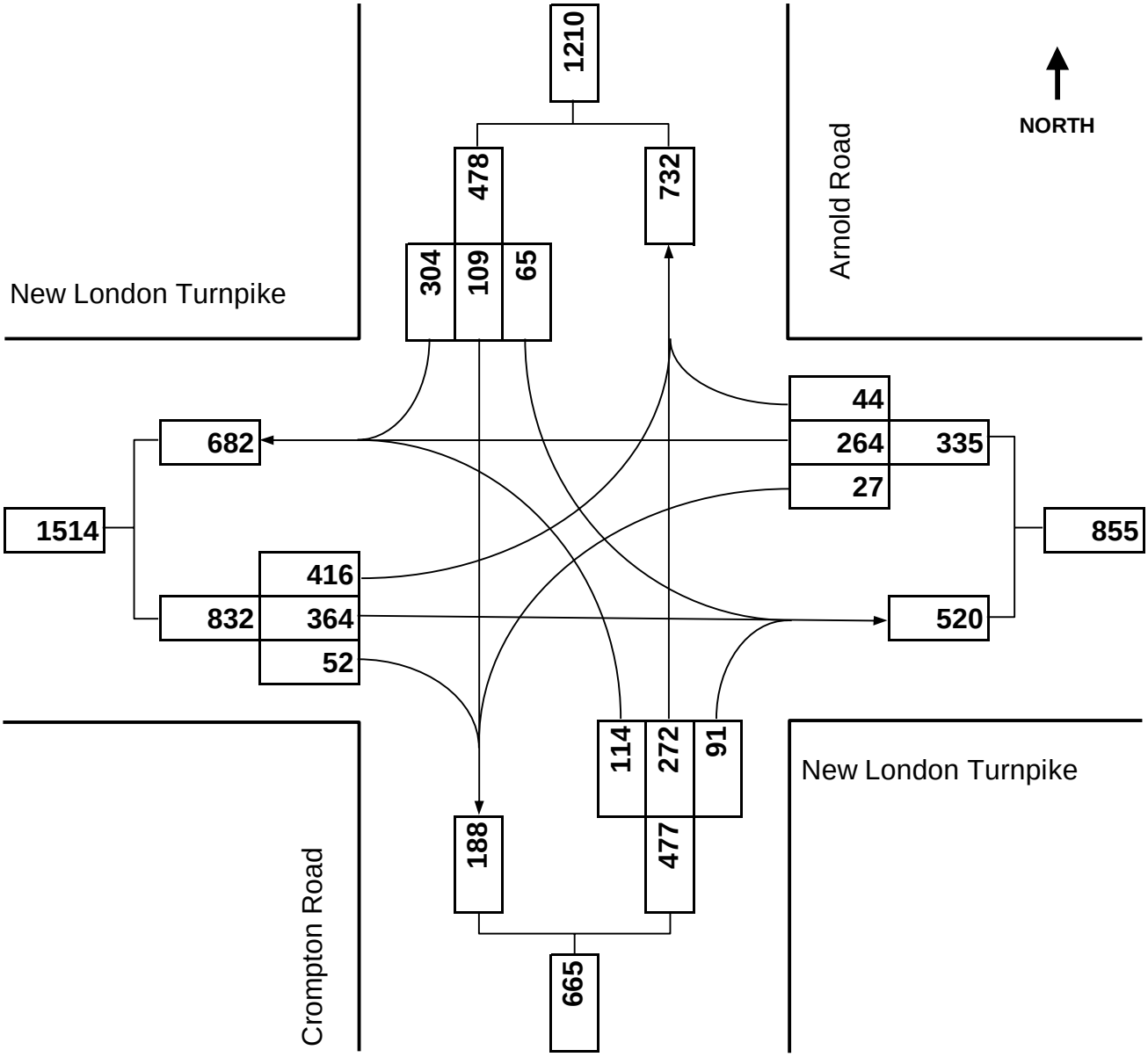
Notes

User approved pedestrian interval to be less than phase max green.

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	New London Turnpike
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	4:00 PM - 5:00 PM
Existing:	PM Peak Hour	**Future**:	n/a

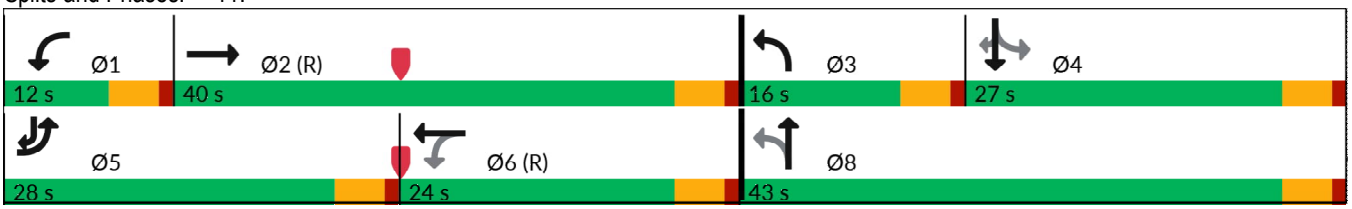


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	416	364	52	27	264	44	114	272	91	65	109	304
Future Volume (vph)	416	364	52	27	264	44	114	272	91	65	109	304
Adj. Flow (vph)	452	396	57	29	287	48	124	296	99	71	118	330
Lane Group Flow (vph)	452	453	0	29	335	0	124	395	0	0	189	330
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6		3	8			4	5
Permitted Phases				6			8			4		4
Detector Phase	5	2		1	6		3	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		22.5	22.5	9.5
Total Split (s)	28.0	40.0		12.0	24.0		16.0	43.0		27.0	27.0	28.0
Total Split (%)	29.5%	42.1%		12.6%	25.3%		16.8%	45.3%		28.4%	28.4%	29.5%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes				Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
v/c Ratio	0.68	0.48		0.06	0.54		0.35	0.63			0.75	0.38
Control Delay (s/veh)	40.7	20.7		13.3	32.9		23.9	29.4			55.2	3.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	40.7	20.7		13.3	32.9		23.9	29.4			55.2	3.2
Queue Length 50th (ft)	131	189		7	163		52	186			108	5
Queue Length 95th (ft)	170	326		23	#347		85	256			174	44
Internal Link Dist (ft)		325			629			507			827	
Turn Bay Length (ft)	400			75			125					200
Base Capacity (vph)	857	926		453	616		367	746			320	930
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.53	0.49		0.06	0.54		0.34	0.53			0.59	0.35

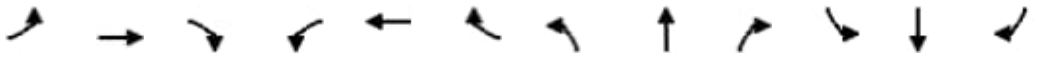
Intersection Summary

Cycle Length: 95
Actuated Cycle Length: 95
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11:



Existing Conditions Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	416	364	52	27	264	44	114	272	91	65	109	304
Future Volume (veh/h)	416	364	52	27	264	44	114	272	91	65	109	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	452	396	57	29	287	48	124	296	99	71	118	330
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	554	824	119	459	599	100	240	431	144	120	167	573
Arrive On Green	0.16	0.51	0.51	0.03	0.38	0.38	0.07	0.32	0.32	0.20	0.20	0.20
Sat Flow, veh/h	3483	1611	232	1795	1574	263	1795	1352	452	339	838	1598
Grp Volume(v), veh/h	452	0	453	29	0	335	124	0	395	189	0	330
Grp Sat Flow(s),veh/h/ln	1742	0	1843	1795	0	1838	1795	0	1804	1177	0	1598
Q Serve(g_s), s	11.9	0.0	15.1	0.9	0.0	13.1	5.0	0.0	18.2	8.6	0.0	15.9
Cycle Q Clear(g_c), s	11.9	0.0	15.1	0.9	0.0	13.1	5.0	0.0	18.2	15.4	0.0	15.9
Prop In Lane	1.00		0.13	1.00		0.14	1.00		0.25	0.38		1.00
Lane Grp Cap(c), veh/h	554	0	942	459	0	699	240	0	575	287	0	573
V/C Ratio(X)	0.82	0.00	0.48	0.06	0.00	0.48	0.52	0.00	0.69	0.66	0.00	0.58
Avail Cap(c_a), veh/h	862	0	942	550	0	699	329	0	731	340	0	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.6	0.0	15.0	16.9	0.0	22.3	27.4	0.0	28.2	37.1	0.0	24.6
Incr Delay (d2), s/veh	3.5	0.0	1.8	0.1	0.0	2.3	1.7	0.0	1.9	3.6	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	6.5	0.4	0.0	6.0	2.2	0.0	7.9	4.5	0.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.1	0.0	16.8	17.0	0.0	24.7	29.1	0.0	30.1	40.7	0.0	25.7
LnGrp LOS	D		B	B		C	C		C	D		C
Approach Vol, veh/h		905			364			519			519	
Approach Delay, s/veh		29.4			24.1			29.9			31.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	53.1	11.3	23.4	19.6	40.6		34.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	35.5	11.5	22.5	23.5	19.5		38.5				
Max Q Clear Time (g_c+I1), s	2.9	17.1	7.0	17.9	13.9	15.1		20.2				
Green Ext Time (p_c), s	0.0	2.7	0.1	1.1	1.2	0.8		2.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			29.1									
HCM 7th LOS			C									

Notes

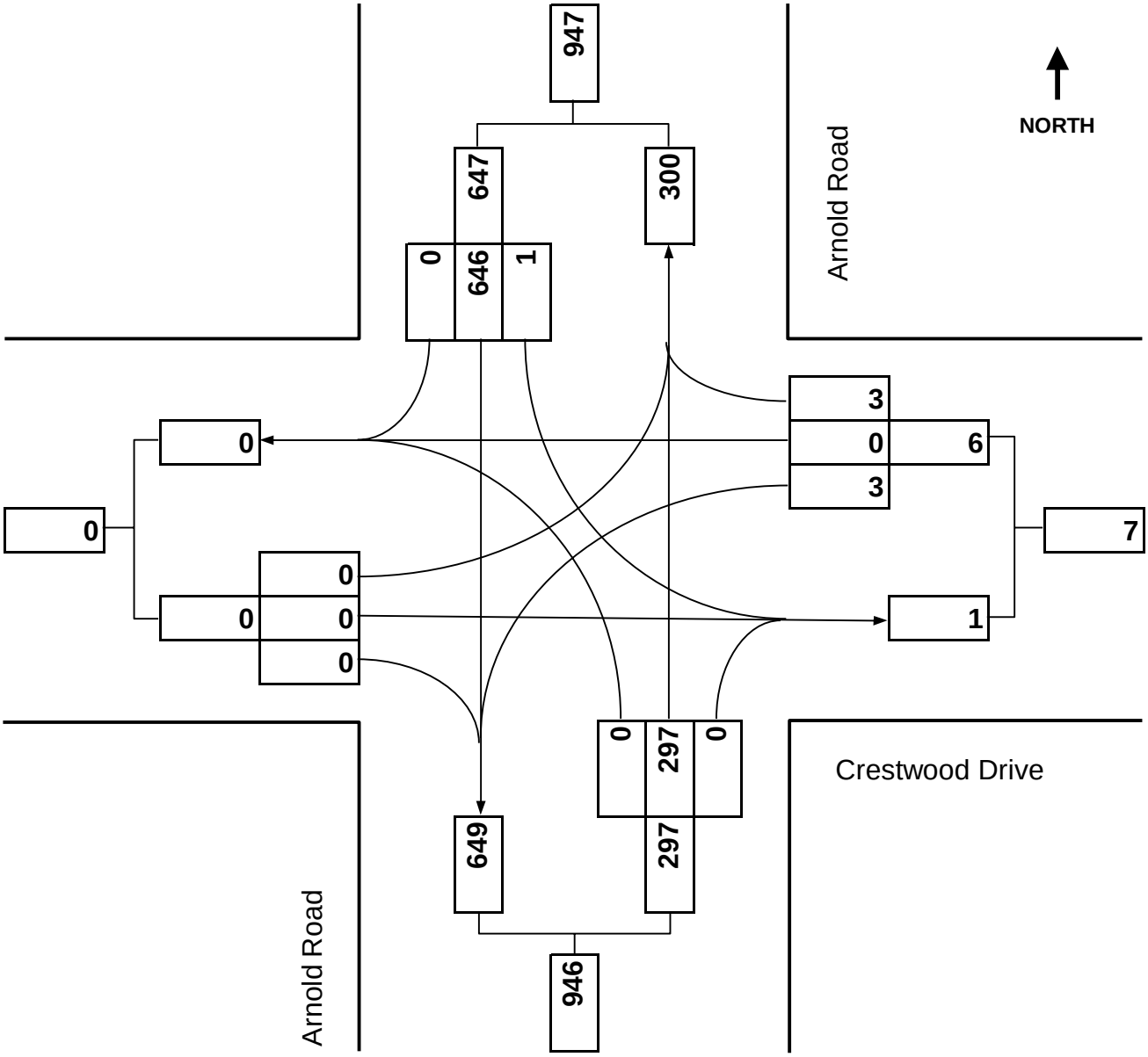
User approved pedestrian interval to be less than phase max green.

Arnold Road at Crestwood Drive

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	Crestwood Drive
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	7:00 AM - 8:00 AM
Existing:	AM Peak Hour	**Future**:	n/a



Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	3	297	0	1	646
Future Vol, veh/h	3	3	297	0	1	646
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	3	3	323	0	1	702

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1027	323	0	0	323	0
Stage 1	323	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	261	720	-	-	1243	-
Stage 1	736	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	261	720	-	-	1243	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	492	-	-	-	-	-

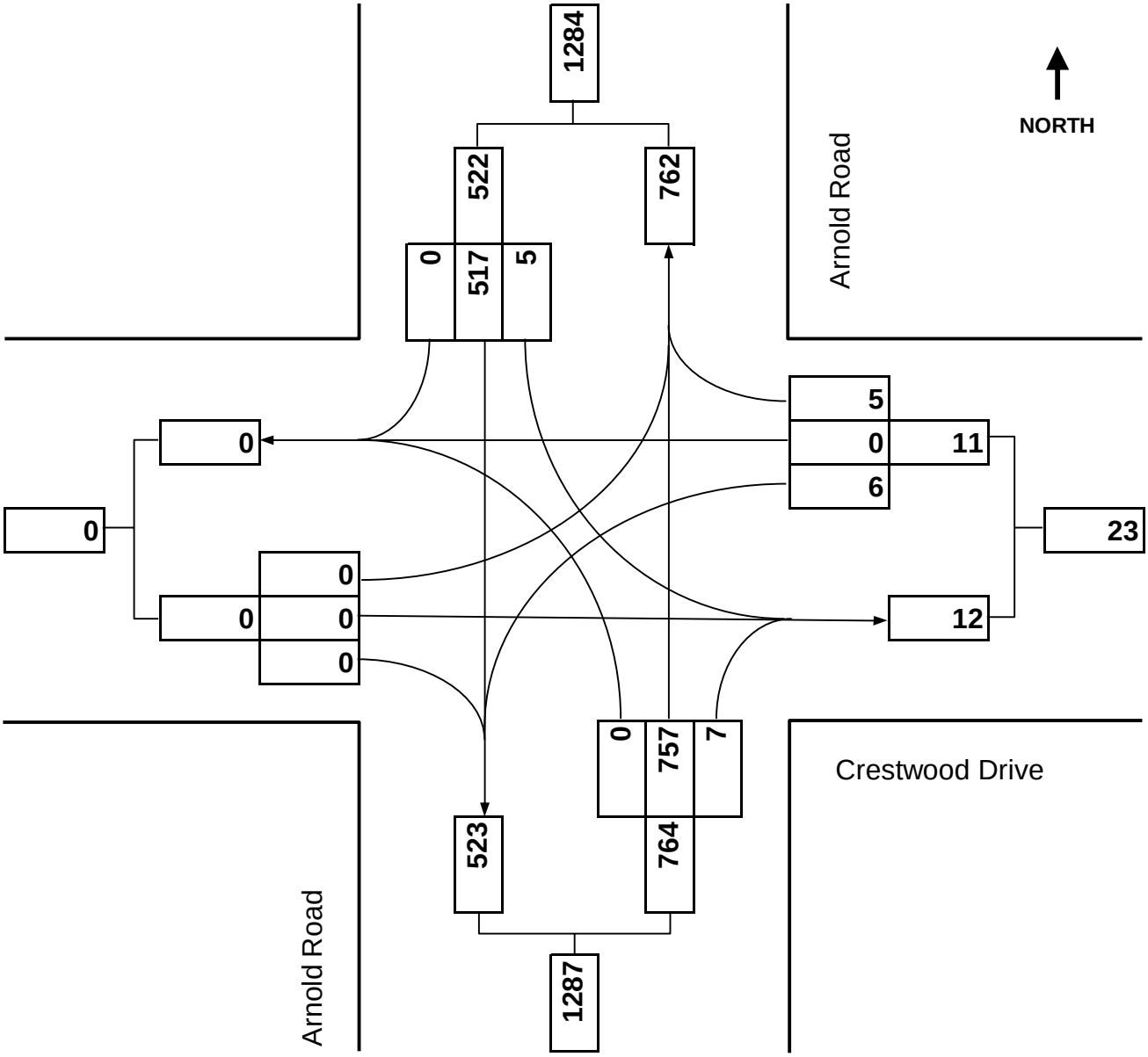
Approach	WB	NB	SB
HCM Control Delay, s/v	14.57	0	0.01
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	383	1243	-
HCM Lane V/C Ratio	-	-	0.017	0.001	-
HCM Control Delay (s/veh)	-	-	14.6	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	Crestwood Drive
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	4:00 PM - 5:00 PM
Existing:	PM Peak Hour	**Future**:	n/a



Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	5	757	7	5	517
Future Vol, veh/h	6	5	757	7	5	517
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	7	5	823	8	5	562

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1399	827	0	0	830	0
Stage 1	827	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	156	373	-	-	806	-
Stage 1	431	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	155	373	-	-	806	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	562	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23.12	0	0.09
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	211	806	-
HCM Lane V/C Ratio	-	-	0.057	0.007	-
HCM Control Delay (s/veh)	-	-	23.1	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

D

Future Build Weekday AM / PM Peak Hour

Hopkins Hill Road at Centre of New England Boulevard

Hopkins Hill Road at Dante Boulevard

Arnold Road at New London Turnpike

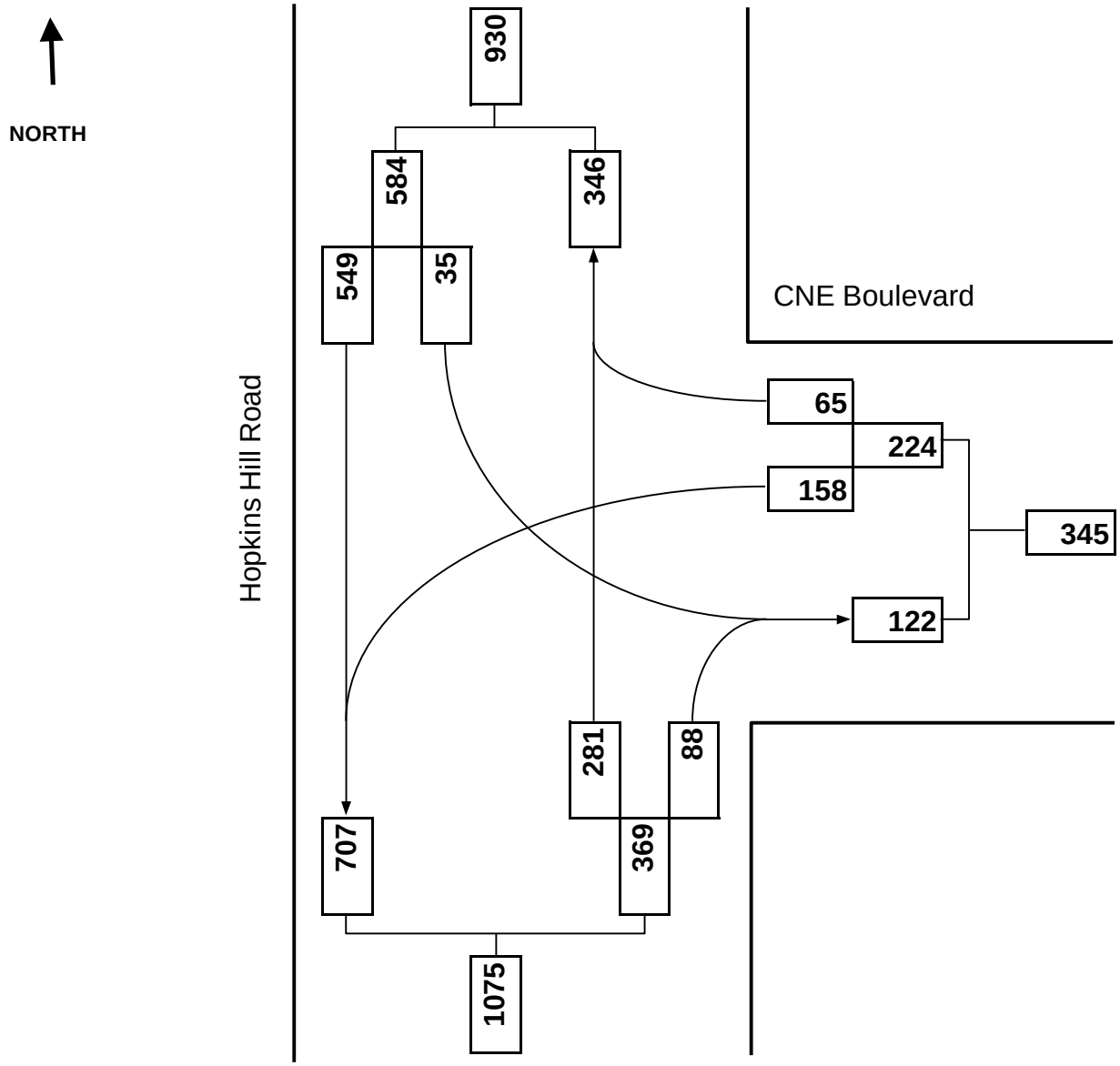
Arnold Road at Site Access Road/Crestwood Drive

Hopkins Hill Road at Centre of New England Boulevard

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	CNE Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



Intersection	
Int Delay, s/veh	7.7

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	158	65	281	88	35	549
Future Vol, veh/h	158	65	281	88	35	549
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	0	-	-	225	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	172	71	305	96	38	597

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1026	201	0	0	401	0
Stage 1	353	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Critical Hdwy	6.615	6.915	-	-	4.115	-
Critical Hdwy Stg 1	5.815	-	-	-	-	-
Critical Hdwy Stg 2	5.415	-	-	-	-	-
Follow-up Hdwy	3.5095	3.3095	-	-	2.2095	-
Pot Cap-1 Maneuver	246	810	-	-	1162	-
Stage 1	685	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	238	810	-	-	1162	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	685	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	39.26	0	0.49
HCM LOS	E		

Minor Lane/Major Mvmt	NET	NER	NWLn1	NWLn2	SWL	SWT
Capacity (veh/h)	-	-	238	810	1162	-
HCM Lane V/C Ratio	-	-	0.721	0.087	0.033	-
HCM Control Delay (s/veh)	-	-	51.4	9.9	8.2	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.9	0.3	0.1	-

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	158	65	281	88	35	549
Future Volume (vph)	158	65	281	88	35	549
Adj. Flow (vph)	172	71	305	96	38	597
Lane Group Flow (vph)	172	71	401	0	38	597
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Detector Phase	8	8	2		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	22.5	22.5	22.5		22.5	22.5
Total Split (s)	24.0	24.0	41.0		41.0	41.0
Total Split (%)	36.9%	36.9%	63.1%		63.1%	63.1%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)	4.5	4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min		Min	Min
v/c Ratio	0.39	0.15	0.18		0.06	0.50
Control Delay (s/veh)	16.6	5.6	4.0		5.4	8.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	16.6	5.6	4.0		5.4	8.3
Queue Length 50th (ft)	28	0	14		3	73
Queue Length 95th (ft)	88	24	37		15	182
Internal Link Dist (ft)	407		88			291
Turn Bay Length (ft)					225	
Base Capacity (vph)	943	877	3230		908	1759
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	0.18	0.08	0.12		0.04	0.34

Intersection Summary

Cycle Length: 65
Actuated Cycle Length: 38.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 7:

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	158	65	281	88	35	549
Future Volume (veh/h)	158	65	281	88	35	549
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	172	71	305	96	38	597
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	287	255	1324	409	701	926
Arrive On Green	0.16	0.16	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1795	1598	2788	832	992	1885
Grp Volume(v), veh/h	172	71	201	200	38	597
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1735	992	1885
Q Serve(g_s), s	2.3	1.0	1.7	1.7	0.6	6.1
Cycle Q Clear(g_c), s	2.3	1.0	1.7	1.7	2.3	6.1
Prop In Lane	1.00	1.00		0.48	1.00	
Lane Grp Cap(c), veh/h	287	255	880	853	701	926
V/C Ratio(X)	0.60	0.28	0.23	0.23	0.05	0.64
Avail Cap(c_a), veh/h	1357	1207	2533	2455	1616	2667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	9.5	3.8	3.8	4.4	4.9
Incr Delay (d2), s/veh	2.0	0.6	0.1	0.1	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	0.2	0.2	0.1	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.1	10.1	3.9	3.9	4.5	5.6
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	243		401			635
Approach Delay, s/veh	11.5		3.9			5.6
Approach LOS	B		A			A

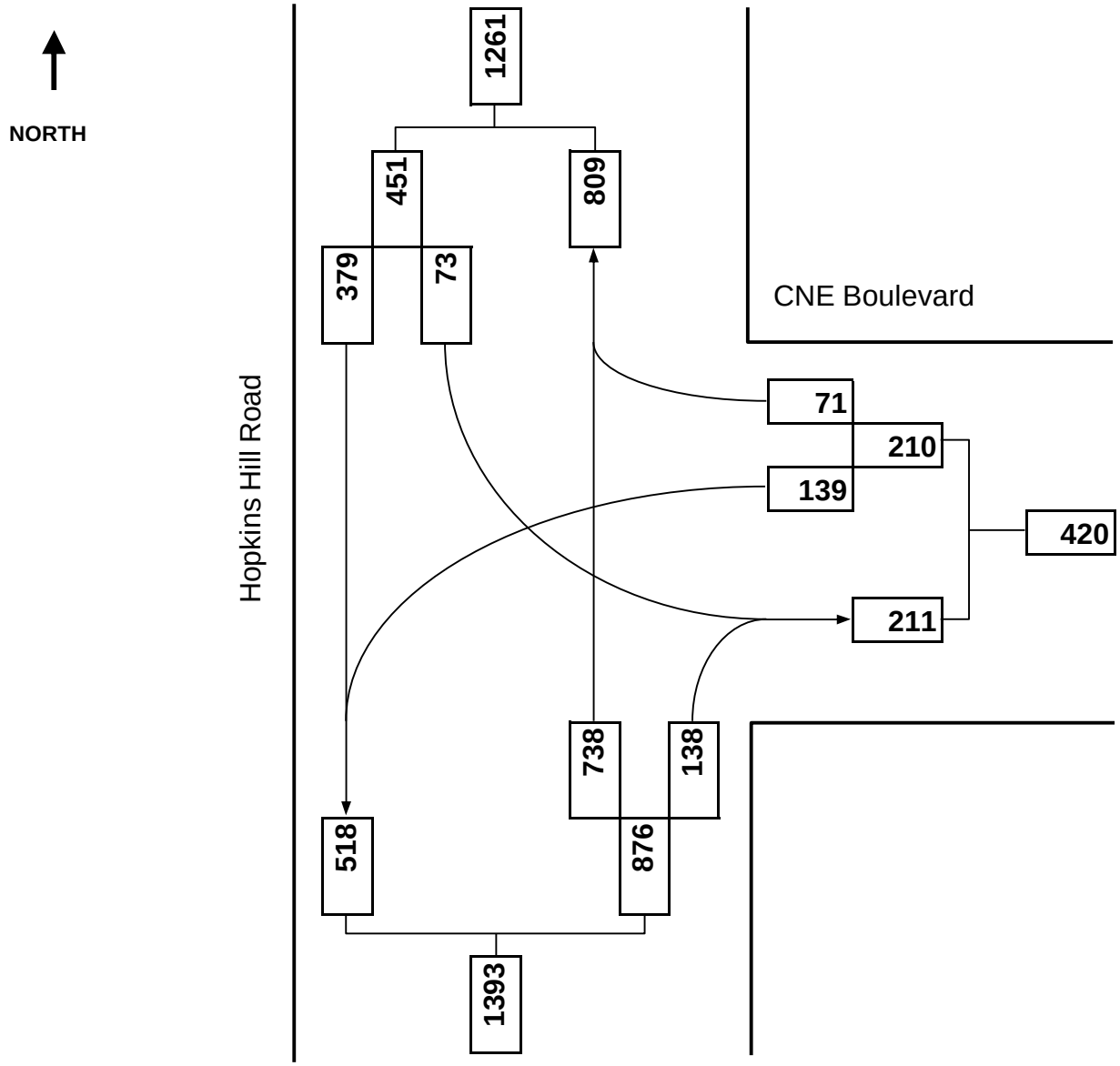
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	17.2				17.2	8.6
Change Period (Y+Rc), s	4.5				4.5	4.5
Max Green Setting (Gmax), s	36.5				36.5	19.5
Max Q Clear Time (g_c+I1), s	3.7				8.1	4.3
Green Ext Time (p_c), s	2.6				4.6	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	6.2
HCM 7th LOS	A

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	CNE Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



Intersection	
Int Delay, s/veh	22.8

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	139	71	738	138	73	379
Future Vol, veh/h	139	71	738	138	73	379
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	0	-	-	225	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	151	77	802	150	79	412

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1448	476	0	0	952	0
Stage 1	877	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Critical Hdwy	6.615	6.915	-	-	4.115	-
Critical Hdwy Stg 1	5.815	-	-	-	-	-
Critical Hdwy Stg 2	5.415	-	-	-	-	-
Follow-up Hdwy	3.5095	3.3095	-	-	2.2095	-
Pot Cap-1 Maneuver	~ 134	538	-	-	725	-
Stage 1	370	-	-	-	-	-
Stage 2	567	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 119	538	-	-	725	-
Mov Cap-2 Maneuver	~ 119	-	-	-	-	-
Stage 1	370	-	-	-	-	-
Stage 2	505	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/veh	63.01	0	1.71
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	NWLn1	NWLn2	SWL	SWT
Capacity (veh/h)	-	-	119	538	725	-
HCM Lane V/C Ratio	-	-	1.267	0.143	0.11	-
HCM Control Delay (s/veh)	-	-	239.7	12.8	10.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	9.8	0.5	0.4	-

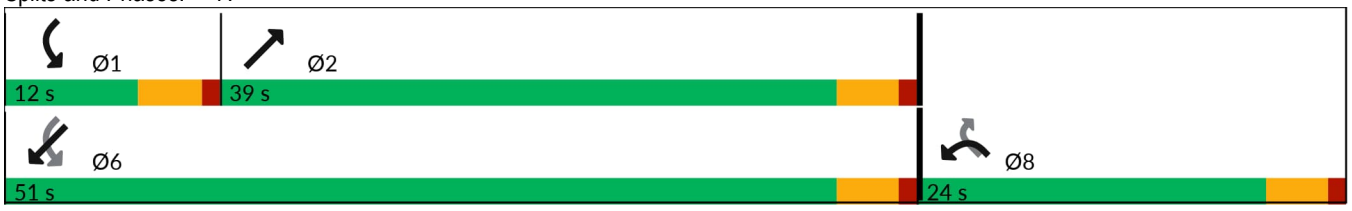
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	139	71	738	138	73	379
Future Volume (vph)	139	71	738	138	73	379
Adj. Flow (vph)	151	77	802	150	79	412
Lane Group Flow (vph)	151	77	952	0	79	412
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	22.5	22.5	22.5		9.5	22.5
Total Split (s)	24.0	24.0	39.0		12.0	51.0
Total Split (%)	32.0%	32.0%	52.0%		16.0%	68.0%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)	4.5	4.5	4.5		4.5	4.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min
v/c Ratio	0.40	0.19	0.46		0.17	0.31
Control Delay (s/veh)	23.7	7.5	10.5		5.0	5.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	23.7	7.5	10.5		5.0	5.4
Queue Length 50th (ft)	41	0	108		7	47
Queue Length 95th (ft)	104	30	191		24	109
Internal Link Dist (ft)	407		88			291
Turn Bay Length (ft)					225	
Base Capacity (vph)	778	740	2561		493	1648
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	0.19	0.10	0.37		0.16	0.25

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 49.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 7:



Movement	NWL	NWR	NET	NER	SWL	SWT	
Lane Configurations							
Traffic Volume (veh/h)	139	71	738	138	73	379	
Future Volume (veh/h)	139	71	738	138	73	379	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No		No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	
Adj Flow Rate, veh/h	151	77	802	150	79	412	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	1	1	1	1	1	1	
Cap, veh/h	240	213	1317	246	461	1187	
Arrive On Green	0.13	0.13	0.44	0.44	0.07	0.63	
Sat Flow, veh/h	1795	1598	3106	563	1795	1885	
Grp Volume(v), veh/h	151	77	477	475	79	412	
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1784	1795	1885	
Q Serve(g_s), s	3.0	1.7	7.8	7.8	0.8	3.9	
Cycle Q Clear(g_c), s	3.0	1.7	7.8	7.8	0.8	3.9	
Prop In Lane	1.00	1.00		0.32	1.00		
Lane Grp Cap(c), veh/h	240	213	783	780	461	1187	
V/C Ratio(X)	0.63	0.36	0.61	0.61	0.17	0.35	
Avail Cap(c_a), veh/h	920	819	1624	1618	682	2304	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	15.6	15.0	8.2	8.2	5.2	3.3	
Incr Delay (d2), s/veh	2.7	1.0	0.8	0.8	0.2	0.2	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	1.2	0.6	2.2	2.2	0.2	0.6	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	18.3	16.0	9.0	9.0	5.4	3.5	
LnGrp LOS	B	B	A	A	A	A	
Approach Vol, veh/h	228		952			491	
Approach Delay, s/veh	17.5		9.0			3.8	
Approach LOS	B		A			A	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.3	21.1				28.5	9.6
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	7.5	34.5				46.5	19.5
Max Q Clear Time (g_c+I1), s	2.8	9.8				5.9	5.0
Green Ext Time (p_c), s	0.1	6.9				2.8	0.6

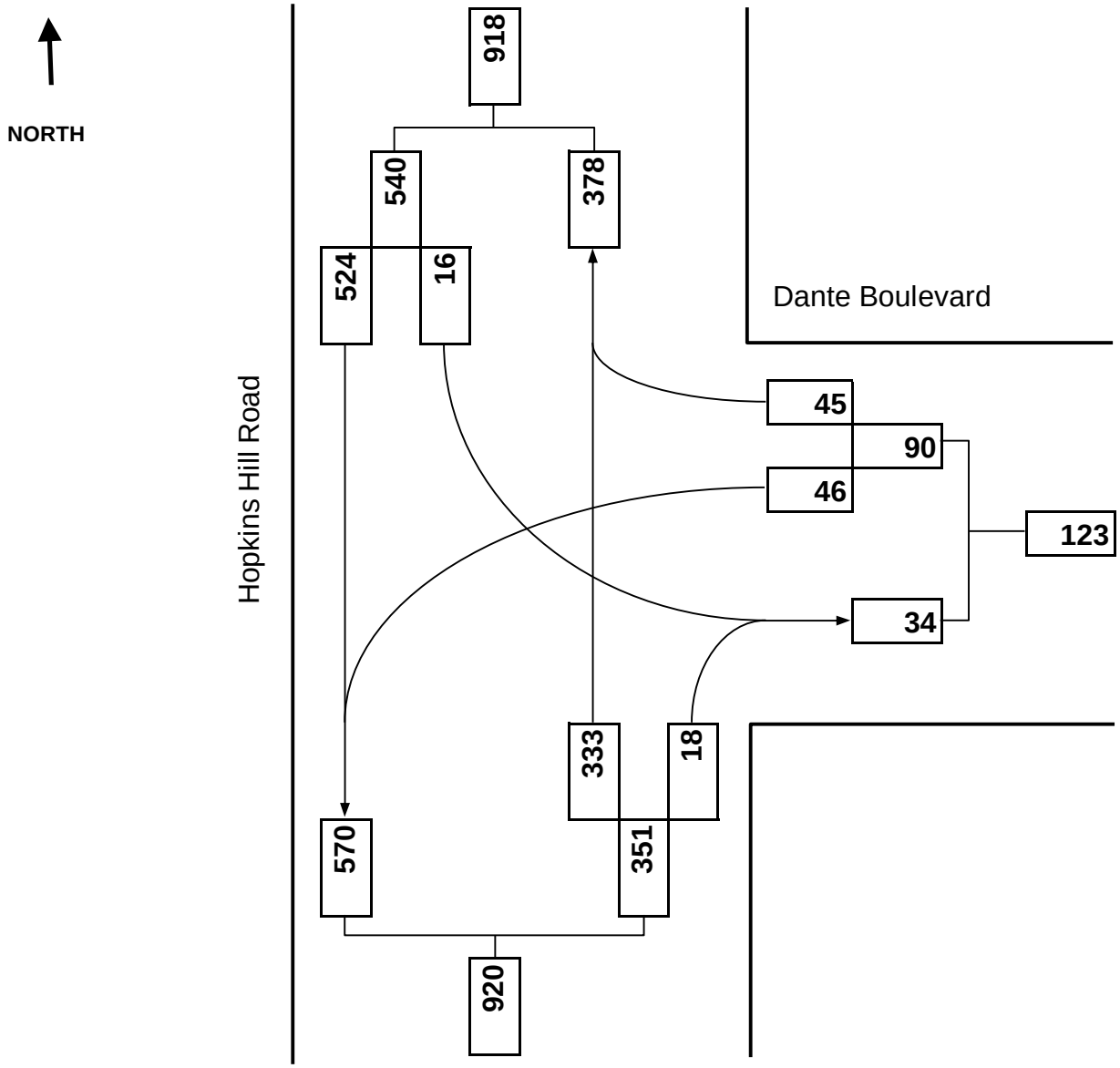
Intersection Summary		
HCM 7th Control Delay, s/veh	8.6	
HCM 7th LOS	A	

Hopkins Hill Road at Dante Boulevard

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	Dante Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	45	333	18	16	524
Future Vol, veh/h	46	45	333	18	16	524
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	50	49	362	20	17	570

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	976	372	0	0	382	0
Stage 1	372	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	280	676	-	-	1182	-
Stage 1	700	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	274	676	-	-	1182	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	536	-	-	-	-	-

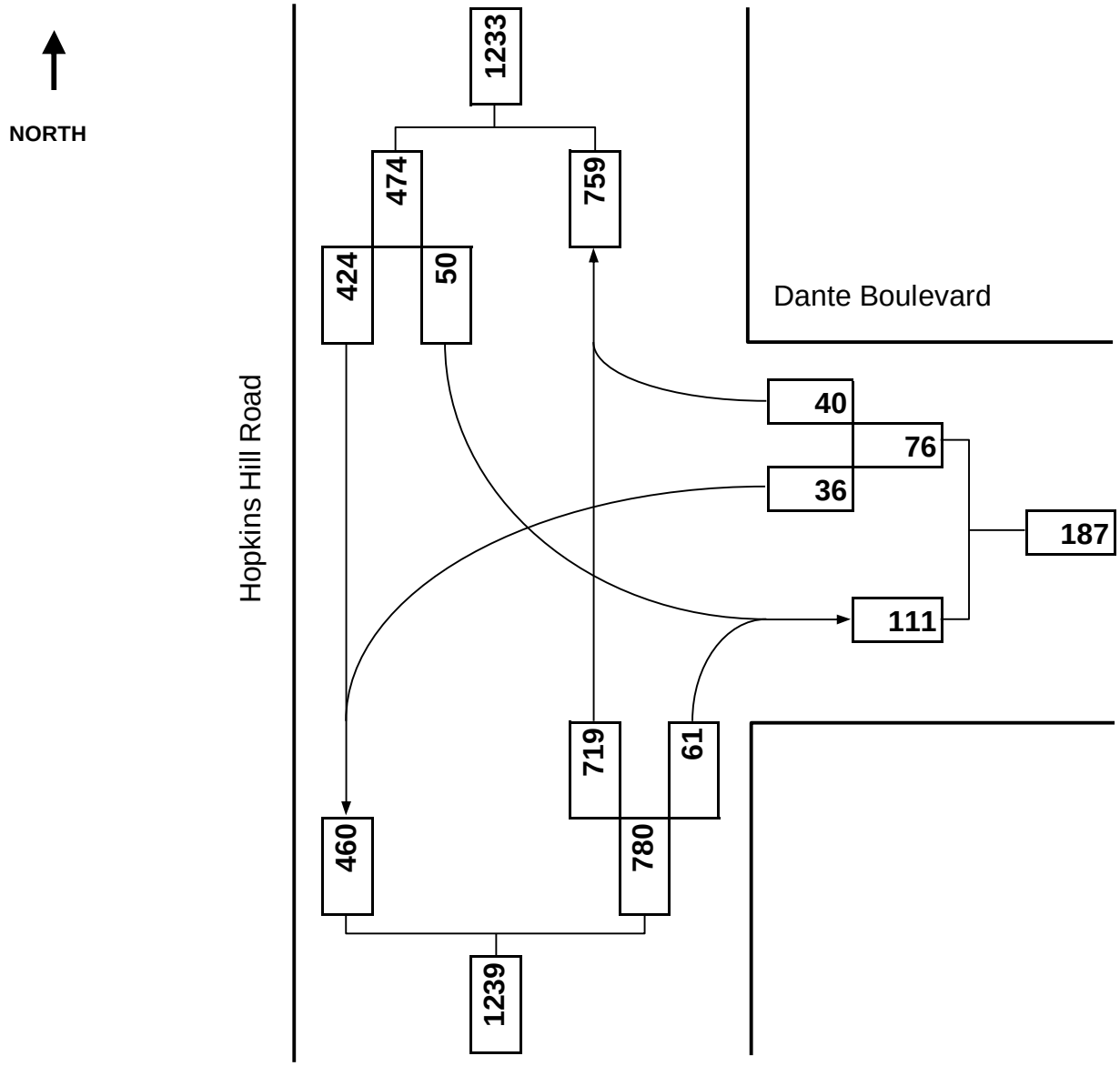
Approach	WB	NB	SB
HCM Control Delay, s/v	17.43	0	0.24
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	388	53	-
HCM Lane V/C Ratio	-	-	0.255	0.015	-
HCM Control Delay (s/veh)	-	-	17.4	8.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1	0	-

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Hopkins Hill Road	**Minor Street**:	Dante Boulevard
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	40	719	61	50	424
Future Vol, veh/h	36	40	719	61	50	424
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	39	43	782	66	54	461

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1384	815	0	0	848	0
Stage 1	815	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	159	379	-	-	794	-
Stage 1	437	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	144	379	-	-	794	-
Mov Cap-2 Maneuver	144	-	-	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	32	0	1.04
HCM LOS	D		

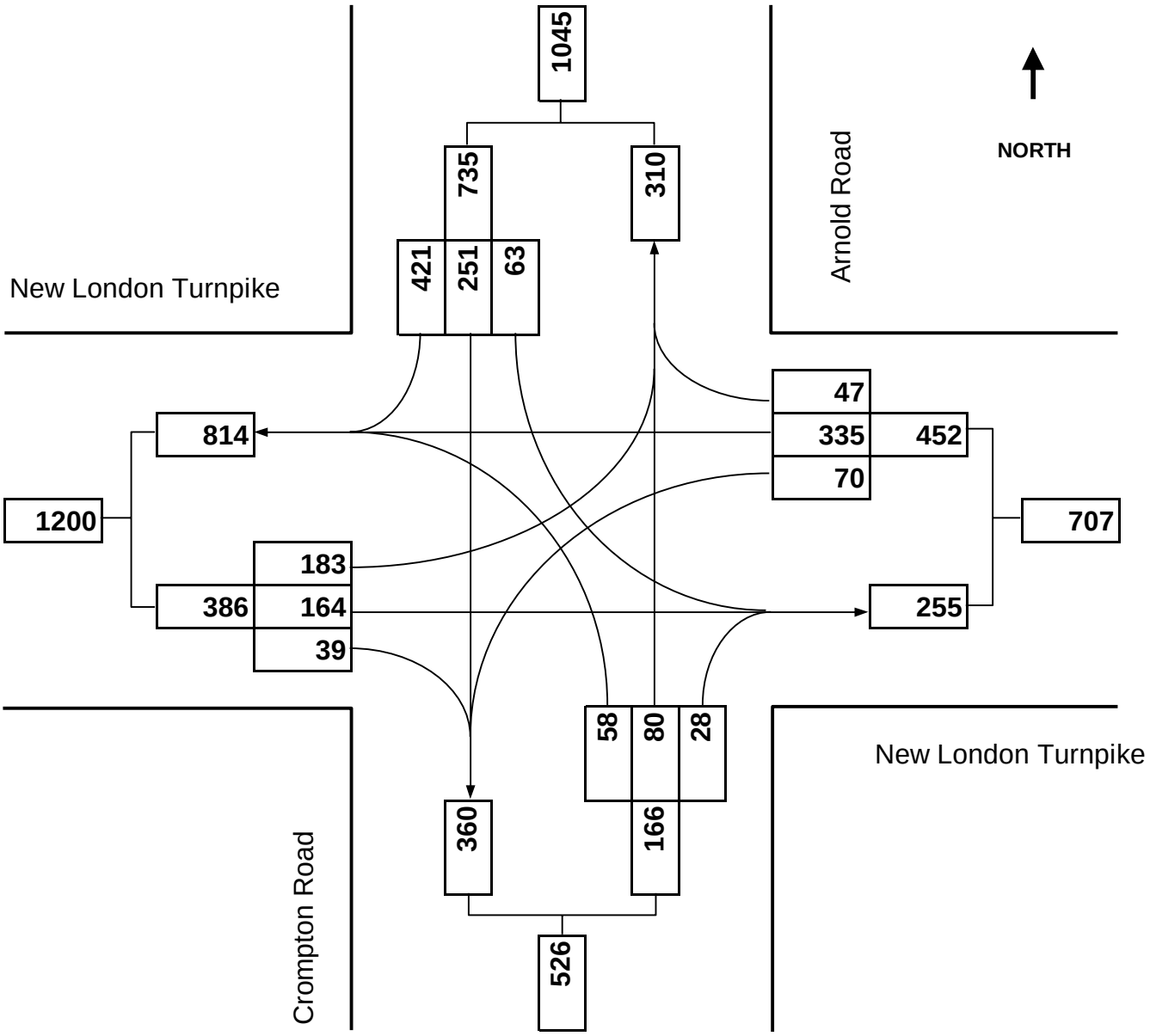
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	214	190	-
HCM Lane V/C Ratio	-	-	0.386	0.068	-
HCM Control Delay (s/veh)	-	-	32	9.9	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.7	0.2	-

Arnold Road at New London Turnpike

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	New London Turnpike
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build

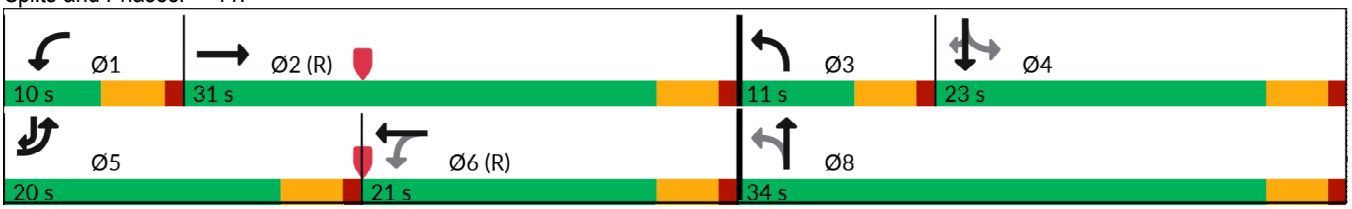


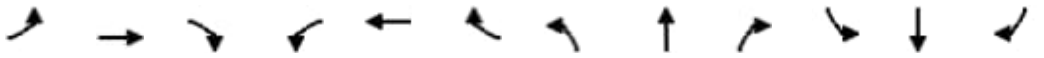
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	164	39	70	335	47	58	80	28	63	251	421
Future Volume (vph)	183	164	39	70	335	47	58	80	28	63	251	421
Adj. Flow (vph)	199	178	42	76	364	51	63	87	30	68	273	458
Lane Group Flow (vph)	199	220	0	76	415	0	63	117	0	0	341	458
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6		3	8			4	5
Permitted Phases				6			8			4		4
Detector Phase	5	2		1	6		3	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		22.5	22.5	9.5
Total Split (s)	20.0	31.0		10.0	21.0		11.0	34.0		23.0	23.0	20.0
Total Split (%)	26.7%	41.3%		13.3%	28.0%		14.7%	45.3%		30.7%	30.7%	26.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes				Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
v/c Ratio	0.43	0.26		0.13	0.60		0.25	0.19			0.85	0.54
Control Delay (s/veh)	32.3	15.6		11.2	27.7		17.9	13.0			49.3	8.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	32.3	15.6		11.2	27.7		17.9	13.0			49.3	8.2
Queue Length 50th (ft)	44	67		18	169		18	26			149	53
Queue Length 95th (ft)	71	120		39	#341		41	58			#281	117
Internal Link Dist (ft)		325			629			507			827	
Turn Bay Length (ft)	400			75			125					200
Base Capacity (vph)	716	833		561	681		250	728			421	935
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.28	0.26		0.14	0.61		0.25	0.16			0.81	0.49

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11:





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	164	39	70	335	47	58	80	28	63	251	421
Future Volume (veh/h)	183	164	39	70	335	47	58	80	28	63	251	421
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	199	178	42	76	364	51	63	87	30	68	273	458
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	301	607	143	578	612	86	233	476	164	124	367	532
Arrive On Green	0.09	0.41	0.41	0.05	0.38	0.38	0.05	0.36	0.36	0.25	0.25	0.25
Sat Flow, veh/h	3483	1475	348	1795	1618	227	1795	1340	462	270	1489	1598
Grp Volume(v), veh/h	199	0	220	76	0	415	63	0	117	341	0	458
Grp Sat Flow(s),veh/h/ln	1742	0	1823	1795	0	1844	1795	0	1802	1759	0	1598
Q Serve(g_s), s	4.2	0.0	6.1	1.9	0.0	13.5	1.8	0.0	3.4	9.5	0.0	18.5
Cycle Q Clear(g_c), s	4.2	0.0	6.1	1.9	0.0	13.5	1.8	0.0	3.4	13.5	0.0	18.5
Prop In Lane	1.00		0.19	1.00		0.12	1.00		0.26	0.20		1.00
Lane Grp Cap(c), veh/h	301	0	750	578	0	698	233	0	640	491	0	532
V/C Ratio(X)	0.66	0.00	0.29	0.13	0.00	0.59	0.27	0.00	0.18	0.69	0.00	0.86
Avail Cap(c_a), veh/h	720	0	750	615	0	698	301	0	709	491	0	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	14.8	12.8	0.0	18.7	19.6	0.0	16.7	26.2	0.0	23.4
Incr Delay (d2), s/veh	2.5	0.0	1.0	0.1	0.0	3.7	0.6	0.0	0.1	4.2	0.0	13.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.6	0.7	0.0	6.1	0.8	0.0	1.3	6.0	0.0	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	0.0	15.8	12.9	0.0	22.4	20.2	0.0	16.8	30.4	0.0	36.9
LnGrp LOS	D		B	B		C	C		B	C		D
Approach Vol, veh/h		419			491			180			799	
Approach Delay, s/veh		25.2			20.9			18.0			34.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	35.4	8.2	23.0	11.0	32.9		31.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	26.5	6.5	18.5	15.5	16.5		29.5				
Max Q Clear Time (g_c+I1), s	3.9	8.1	3.8	20.5	6.2	15.5		5.4				
Green Ext Time (p_c), s	0.0	1.1	0.0	0.0	0.4	0.3		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C

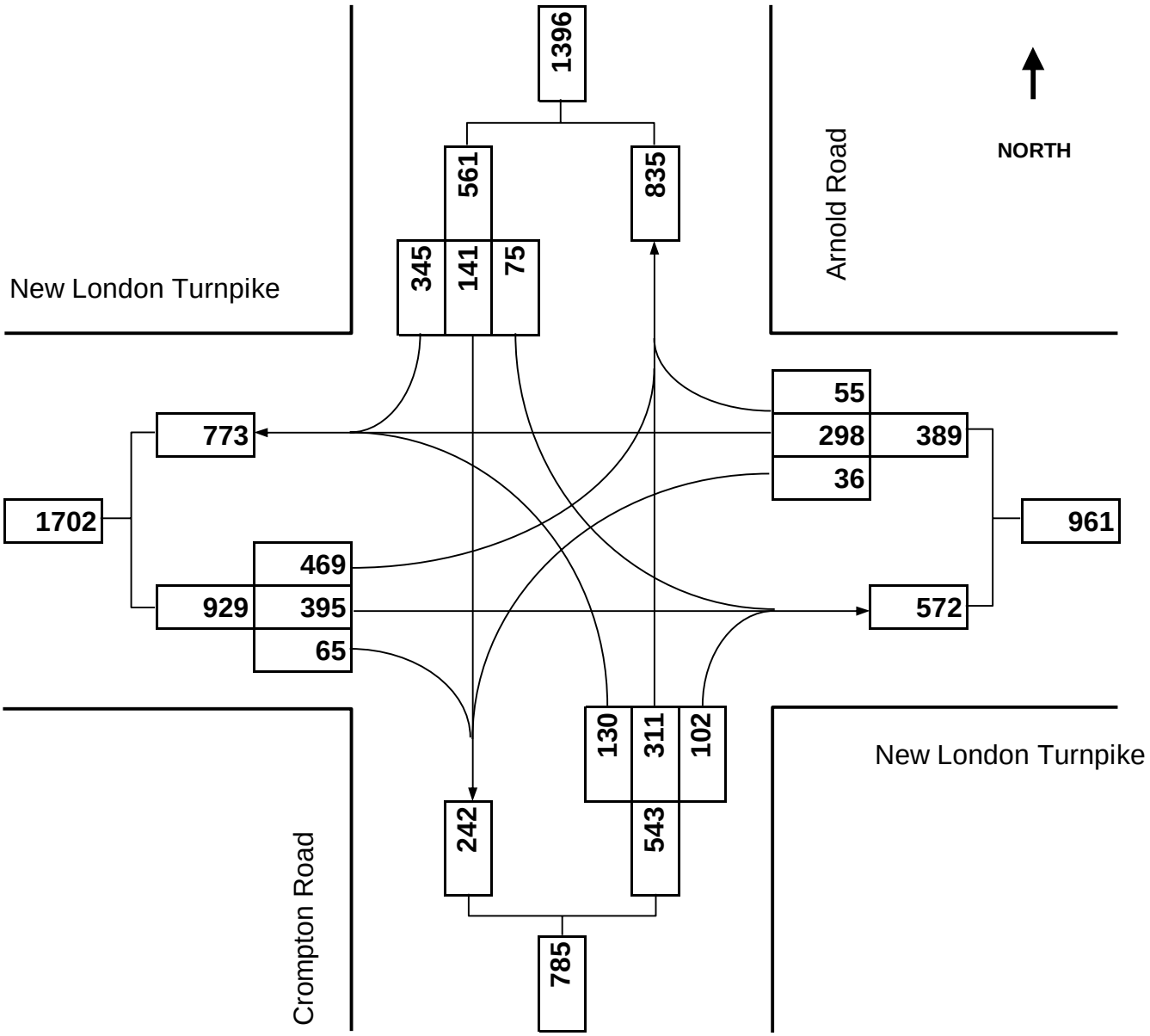
Notes

User approved pedestrian interval to be less than phase max green.

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	New London Turnpike
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build

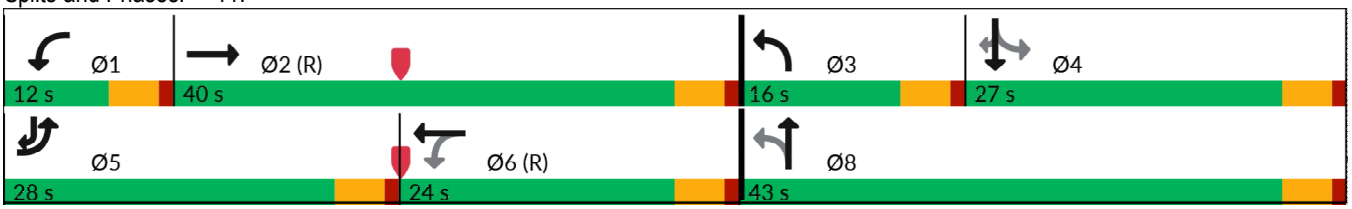


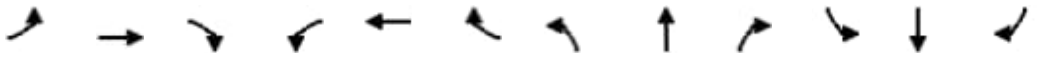
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	469	395	65	36	298	55	130	311	102	75	141	345
Future Volume (vph)	469	395	65	36	298	55	130	311	102	75	141	345
Adj. Flow (vph)	510	429	71	39	324	60	141	338	111	82	153	375
Lane Group Flow (vph)	510	500	0	39	384	0	141	449	0	0	235	375
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6		3	8			4	5
Permitted Phases				6			8			4		4
Detector Phase	5	2		1	6		3	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		22.5	22.5	9.5
Total Split (s)	28.0	40.0		12.0	24.0		16.0	43.0		27.0	27.0	28.0
Total Split (%)	29.5%	42.1%		12.6%	25.3%		16.8%	45.3%		28.4%	28.4%	29.5%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes				Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
v/c Ratio	0.71	0.57		0.10	0.71		0.40	0.67			0.86	0.42
Control Delay (s/veh)	40.4	23.9		14.6	41.8		23.4	29.0			65.9	5.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	40.4	23.9		14.6	41.8		23.4	29.0			65.9	5.7
Queue Length 50th (ft)	147	237		11	212		55	205			134	36
Queue Length 95th (ft)	192	369		28	#419		95	301			#250	83
Internal Link Dist (ft)		325			629			507			827	
Turn Bay Length (ft)	400			75			125					200
Base Capacity (vph)	857	870		400	535		365	746			306	936
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.60	0.57		0.10	0.72		0.39	0.60			0.77	0.40

Intersection Summary

Cycle Length: 95
Actuated Cycle Length: 95
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11:





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	469	395	65	36	298	55	130	311	102	75	141	345
Future Volume (veh/h)	469	395	65	36	298	55	130	311	102	75	141	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	510	429	71	39	324	60	141	338	111	82	153	375
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	612	734	121	377	500	93	234	488	160	123	189	655
Arrive On Green	0.18	0.47	0.47	0.03	0.32	0.32	0.08	0.36	0.36	0.23	0.23	0.23
Sat Flow, veh/h	3483	1577	261	1795	1547	287	1795	1359	446	306	809	1598
Grp Volume(v), veh/h	510	0	500	39	0	384	141	0	449	235	0	375
Grp Sat Flow(s),veh/h/ln	1742	0	1838	1795	0	1834	1795	0	1805	1115	0	1598
Q Serve(g_s), s	13.4	0.0	19.0	1.4	0.0	17.0	5.4	0.0	20.2	11.8	0.0	17.2
Cycle Q Clear(g_c), s	13.4	0.0	19.0	1.4	0.0	17.0	5.4	0.0	20.2	20.1	0.0	17.2
Prop In Lane	1.00		0.14	1.00		0.16	1.00		0.25	0.35		1.00
Lane Grp Cap(c), veh/h	612	0	855	377	0	593	234	0	648	312	0	655
V/C Ratio(X)	0.83	0.00	0.58	0.10	0.00	0.65	0.60	0.00	0.69	0.75	0.00	0.57
Avail Cap(c_a), veh/h	862	0	855	458	0	593	313	0	731	316	0	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.8	0.0	18.7	20.2	0.0	27.5	25.9	0.0	26.0	36.6	0.0	21.6
Incr Delay (d2), s/veh	5.0	0.0	2.9	0.1	0.0	5.4	2.5	0.0	2.4	9.6	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	8.4	0.6	0.0	8.2	2.4	0.0	8.8	6.1	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	0.0	21.6	20.4	0.0	32.9	28.4	0.0	28.4	46.2	0.0	22.8
LnGrp LOS	D		C	C		C	C		C	D		C
Approach Vol, veh/h		1010			423			590			610	
Approach Delay, s/veh		32.3			31.8			28.4			31.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	48.7	11.8	26.8	21.2	35.2		38.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	35.5	11.5	22.5	23.5	19.5		38.5				
Max Q Clear Time (g_c+I1), s	3.4	21.0	7.4	22.1	15.4	19.0		22.2				
Green Ext Time (p_c), s	0.0	2.8	0.1	0.1	1.3	0.1		2.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C

Notes

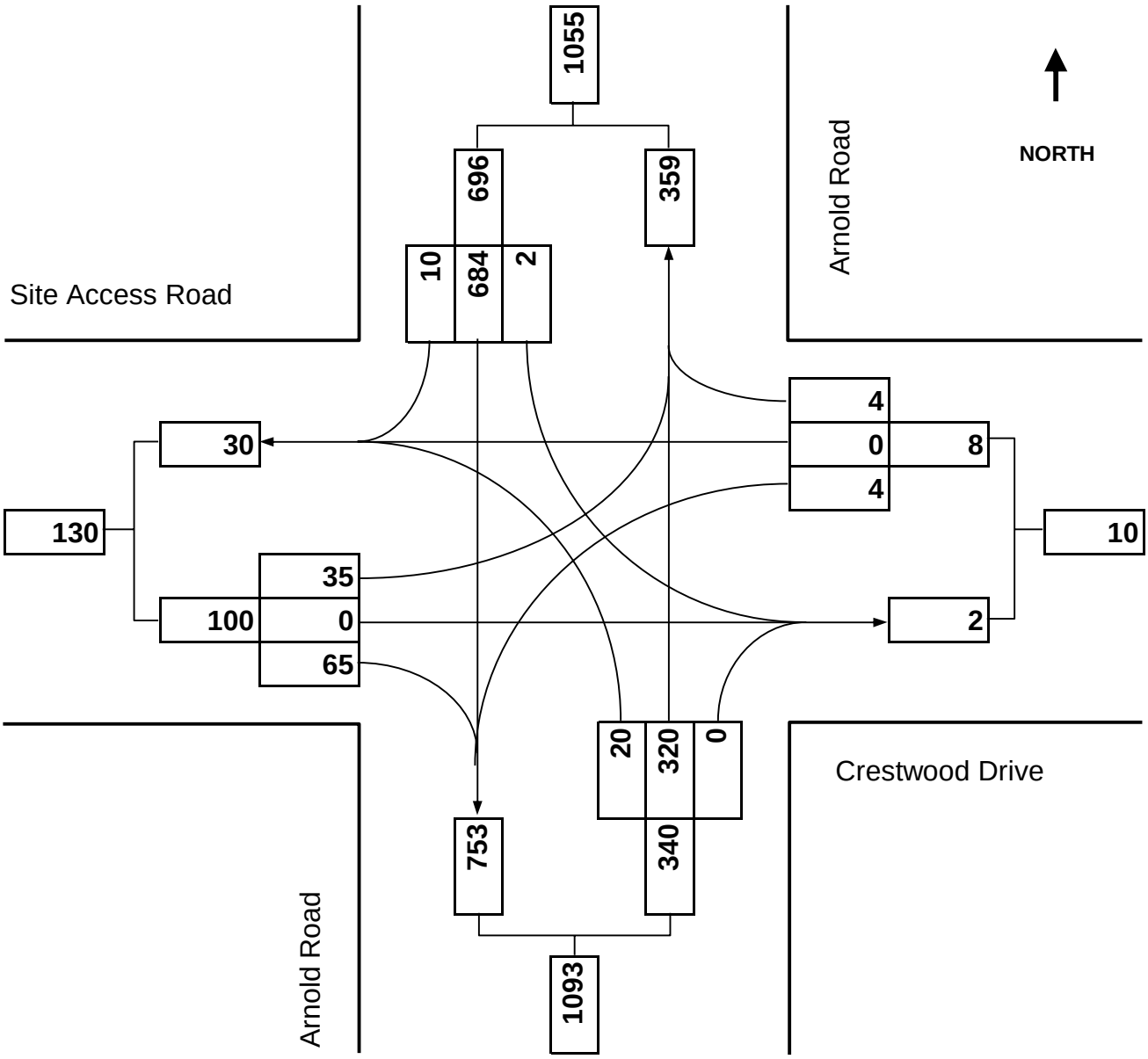
User approved pedestrian interval to be less than phase max green.

Arnold Road at Site Access Road/Crestwood Drive

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	Site Access/Crestwood
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	0	65	4	0	4	20	320	0	2	684	10
Future Vol, veh/h	35	0	65	4	0	4	20	320	0	2	684	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	0	-	-	150	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	38	0	71	4	0	4	22	348	0	2	743	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1145	1145	749	1139	1150	348	754	0	0	348	0	0
Stage 1	753	753	-	391	391	-	-	-	-	-	-	-
Stage 2	391	391	-	748	759	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	178	201	414	179	199	698	860	-	-	1217	-	-
Stage 1	403	419	-	635	609	-	-	-	-	-	-	-
Stage 2	635	609	-	406	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	172	195	414	144	194	698	860	-	-	1217	-	-
Mov Cap-2 Maneuver	172	195	-	144	194	-	-	-	-	-	-	-
Stage 1	403	418	-	619	593	-	-	-	-	-	-	-
Stage 2	615	593	-	336	416	-	-	-	-	-	-	-

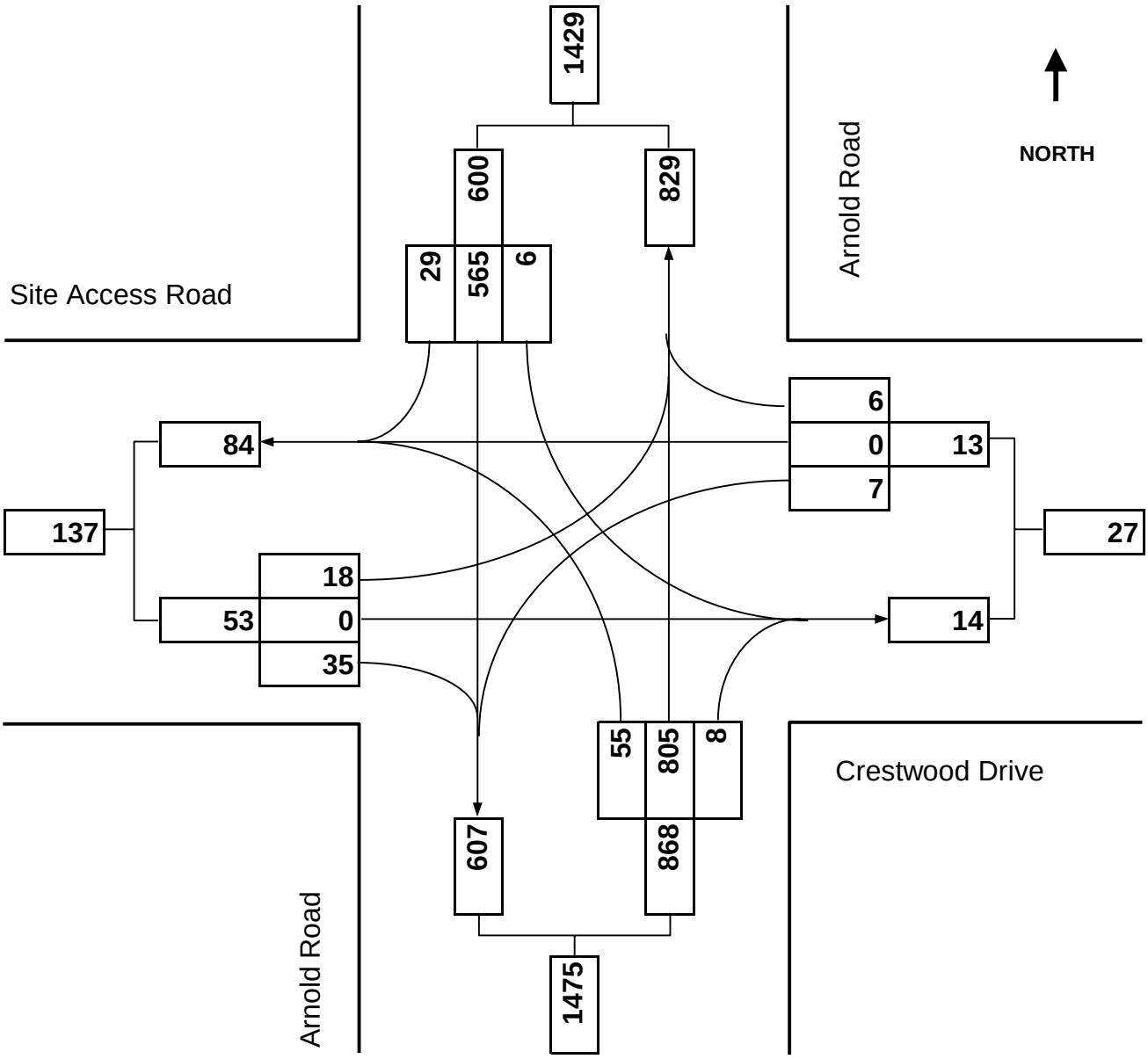
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	21.21	20.6	0.55	0.02
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	860	-	-	172	414	239	1217	-	-
HCM Lane V/C Ratio	0.025	-	-	0.222	0.171	0.036	0.002	-	-
HCM Control Delay (s/veh)	9.3	-	-	31.8	15.5	20.6	8	-	-
HCM Lane LOS	A	-	-	D	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.6	0.1	0	-	-

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Arnold Road	**Minor Street**:	Site Access/Crestwood
City/Town:	Coventry	**Day of Week**:	Weekday
Reference No.:	2873	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	0	35	7	0	6	55	805	8	6	565	29
Future Vol, veh/h	18	0	35	7	0	6	55	805	8	6	565	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	0	-	-	150	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	20	0	38	8	0	7	60	875	9	7	614	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1638	1646	630	1626	1658	879	646	0	0	884	0	0
Stage 1	643	643	-	999	999	-	-	-	-	-	-	-
Stage 2	995	1003	-	627	659	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	81	100	483	82	98	348	944	-	-	770	-	-
Stage 1	464	470	-	295	323	-	-	-	-	-	-	-
Stage 2	296	321	-	473	462	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	74	93	483	71	91	348	944	-	-	770	-	-
Mov Cap-2 Maneuver	74	93	-	71	91	-	-	-	-	-	-	-
Stage 1	460	466	-	276	302	-	-	-	-	-	-	-
Stage 2	272	301	-	432	458	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	32.62	41.89	0.57	0.1
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	944	-	-	74	483	112	770	-	-
HCM Lane V/C Ratio	0.063	-	-	0.265	0.079	0.127	0.008	-	-
HCM Control Delay (s/veh)	9.1	-	-	70.6	13.1	41.9	9.7	-	-
HCM Lane LOS	A	-	-	F	B	E	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1	0.3	0.4	0	-	-