DiPrete Engineering

RAB Professional Engineers, Inc.

Parking & Traffic Circulation Study

Luther's Corners Village

Seekonk, Massachusetts

June 5, 2012

Revised July 31, 2012

Two Stafford Court Cranston, RI 401-943-1000 | 90 Broadway Newport, RI 401-619-5890 | www.diprete-eng.com

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1.0 Executive Summary

Project Need

The Town of Seekonk recently embarked upon an effort to preserve Luther's Corners due to its historical significance as one of the locations of the Town's earliest development. To accomplish this, the Town adopted the Luther's Corners Village Zoning District to: allow a mix of limited commercial and residential uses consistent with the appearance of the Village; preserve the architectural and historic character of the area; and promote a pedestrian-friendly neighborhood. Ensuring the proper mix of land uses is only one way to accomplish the aforementioned goal and needs to be augmented by examining parking and traffic circulation throughout the Village.

Existing Conditions

Luther's Corners Village is located in South Seekonk at the intersection of Fall River Avenue and County Street. The village is approximately 14 acres in size and generally includes the portion of Fall River Avenue between Fuller Street and Clarke Street, and County Street between the Seekonk Town Line and Alta Street. Luther's Corners is one of the Town's earliest developments. Roadway improvements in Luther's Corners have adversely impacted pedestrian mobility and on-street parking capacity, however the village area remains scaled to the pedestrian. The village area itself includes a mix of land uses and has the potential to function as a walkable mixed-use village center.

Alternatives Considered

A Public Workshop was held to obtain input from interested parties regarding the future of Luther's Corners Village. Key concerns raised at the workshop include redevelopment of existing vacant businesses, parking, pedestrian access/safety and traffic. A number of alternatives were considered to address parking demands, pedestrian safety and operations including analysis of available parking, potential parking, lane configurations, traffic signal phasing/timing and lane utilization.

Recommended Improvements

Redevelopment of vacant commercial properties within the Luther's Corners Village is crucial to the promotion of mixed use growth and pedestrian mobility. Traffic and parking are major obstacles which need to be overcome. Traffic can be mitigated through various measures including modifications to the lane configurations and signal timing/phasing. Parking availability can be improved with enhanced signage directing motorist to existing parking, as well as the potential construction of a community parking lot within the village center.

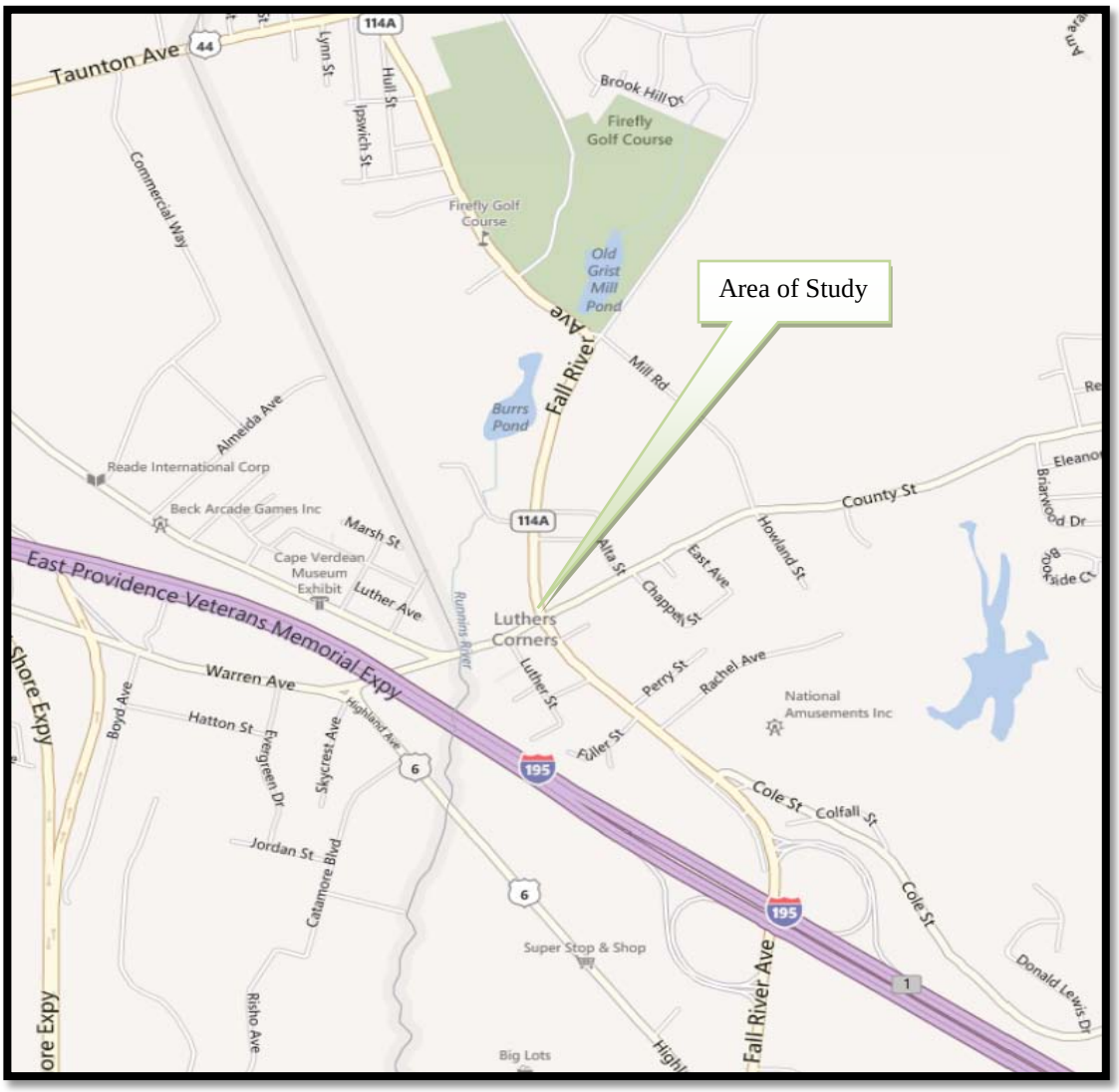
Pedestrian mobility and safety can be improved with reconstruction of deteriorated sidewalks, enhanced signing and striping throughout the village area, and raised medians at strategic locations that will provide protection to pedestrians crossing Fall River Avenue, as well as defining an entryway into the village. Other measures to consider include streetscape enhancements within the village proper that will aid in defining the limits of the district, and alerting motorists for the need to traverse the roadways with awareness of possible pedestrian or turning vehicle conflicts.

2.0 Project Description

Project Area

Luther's Corners Village is located in South Seekonk at the intersection of Fall River Avenue and County Street as can be seen in Figure 1. The village is approximately 14 acres in size and includes the portion of Fall River Avenue between Fuller Street and Clarke Street, and County Street between the Seekonk Town Line and Alta Street. On a larger scale Luther's Corners is located between Route 44 (Taunton Avenue) and Route 195. Luther's Corners is one of the locations of the Town's earliest development. Roadway improvements completed by the Massachusetts Department of Transportation on Fall River Avenue and County Street have adversely impacted pedestrian mobility and on-street parking capacity. However the village is generally scaled to the pedestrian as the area itself includes diverse land uses, and has the potential to function as a walkable mixed-use village center.

Figure 1
Location Map



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Scale: 1"=80'
0 40' 80' 160'

A) Looking North at the intersection of Fall River Avenue (Route 114A)

B) Looking Southwest on County Street toward Fall River Avenue (Route 114A)

C) Looking Northeast on County Street toward Fall River Avenue (Route 114A)

D) Looking North on Fall River Avenue (Route 114A) toward County Street

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com
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The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	By:
0	06-01-2012	Project Area Map	A.C.A.

Drawn By: A.C.A. Design By:

Project Area Map
Luther's Corners Village
Fall River Ave. & County Street
Seekonk, Massachusetts

Applicant
Town of Seekonk
100 Peck Street, Seekonk, Massachusetts 02771

Figure 2

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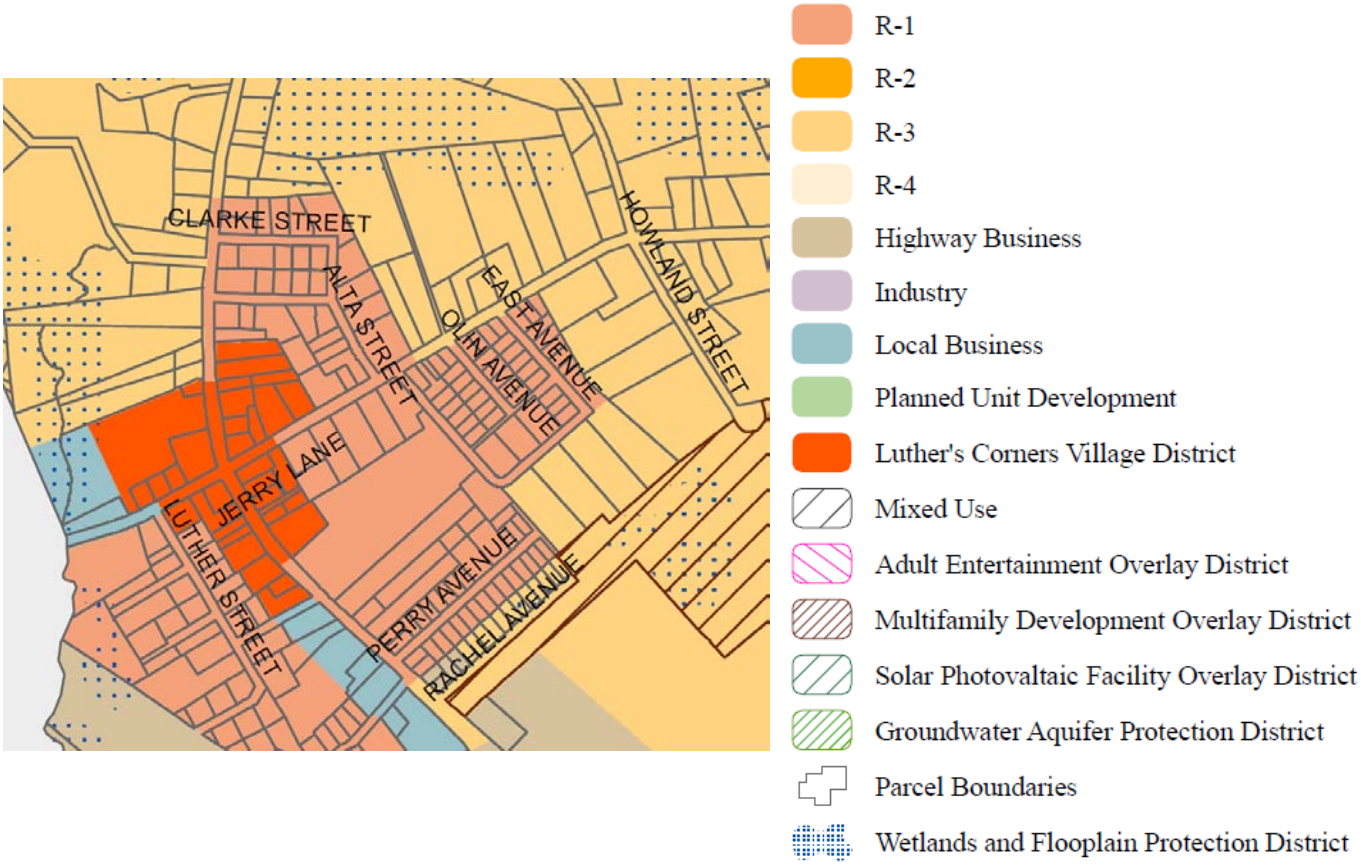
Land Use

Luther's Corners was re-zoned in May, 2010 to Luther's Corners Village District, which is depicted as the orange shaded area in Figure 3 below. The Luther's Corners Village Zoning District is abutted to the north by R-1 and R-3 Residential Zones, to the east by an R-1 Zone, to the south by Local Business and R-1 Zones and to the west by R-1 and Local Business Zones.

Existing land uses within the district include residential (single family, two family and three family), mixed-use residential/commercial, commercial, restaurant and medical office. A number of the properties are currently vacant.

Figure 3
Zoning Map



Parking

Fall River Avenue is a State Highway and therefore on-street parking is prohibited along its length, and it is signed accordingly within the project area. County Street does not support on-street parking due to its insufficient width and proximity to structures at the back of sidewalks. Off-street parking is available to varying degrees for the

existing commercial properties located within Luther's Corners. Several businesses including the Dunkin Donuts and Gulf Gas Station have sufficient parking that is conveniently located and accessible, whereas the available parking for a number of the other smaller commercial properties is not as easily accessible, not readily visible to those unfamiliar with the area or is insufficient.

Roadways

Luther's Corners is serviced by two roadways that provide high mobility through the community. Fall River Avenue (Route 114A) is a north/south urban arterial functioning as a major route to the interstate highway system from intersecting arterials and collectors in East Providence, Seekonk and Rehoboth. This primary use conflicts with its secondary function of providing immediate access to properties within the village area. County Street is an east/west local collector road in the southern section of town. The road runs parallel to Route 195 and is a primary route for residential properties and neighborhoods along its length to higher order roadways like Route 114A.

The junction of Fall River Avenue with County Street which is the center of the village, is configured as a four-way signalized intersection. The County Street eastbound approach provides for a left/through lane and a right turn lane. The remaining approaches are marked for single multipurpose lanes. Pedestrian accommodations are provided with a fully protected pedestrian phase. See section 4.0 Roadway and Intersection Infrastructure for further detail.

3.0 Land Use and Planning Evaluation

Existing Conditions

There are 32 parcels located within the Luther's Corners Village area. Four of the lots are associated with the Seekonk Congregational Church (Lots 222, 223, 247 and 250). The church property includes off-street parking and has a presence within the community with church services on Sunday as well as providing a meeting place for various groups and a daycare service.

In addition to the church, there are a variety of land uses within the Luther's Corners Village area. These uses include residential single family dwellings, residential multifamily, mixed-use residential/commercial, restaurant (Dunkin Donuts), gas station (Gulf), office, medical office, and various business uses as outlined in Table 1, Land Use on the following page.

There are nine single family residential dwellings (Lots 169, 181, 196, 197, 224/227, 225, 228, 260 and 262), three two family dwellings (Lots 226, 263 and 264), and one three family dwelling (Lot 254) located within the village area. In addition to these residential lots there are also seven mixed-use residential/commercial properties (Lots 186, 187, 191, 193/246, 195 and 248) which provide a residential component combined with a business including a hair salon, antiques shop, auto school, animal hospital and office space (accountant). The mixed-use residential/commercial properties include at least some off-street parking.

The remaining six land uses within the village include one medical office (Lot 194), one restaurant (Lot 230), three commercial (Lots 185, 190, 229) and one gas station (Lot 256). The medical office provides a family and cosmetic dentistry service. One of the commercial lots is vacant and the other two are used as a consignment shop, and barber shop. A Gulf gas station is located at the corner of County Street and Fall River Avenue and a Dunkin Donuts is located just to the north off of Fall River Avenue. These lots all include at least some off-street parking.

Dunkin Donuts and the Gulf gas station are the most active businesses within the village area. The Dunkin Donuts and Gulf gas station in addition to the other businesses within the area provide various services that are needed to sustain a village, however the redevelopment of some of the vacant properties to provide additional services will help to further enhance the village center. Potential uses that could be developed which would benefit the village include a bank, gym, bakery/café, professional office space, village grocery, florist, deli, etc.

Table 1

Land Use

Address	AP 9 Lot	Land Use
600 Fall River Avenue	222, 223 247, 250	Church (Seekonk Congregational Church)
601 Fall River Avenue	262	Residential
602 Fall River Avenue	225	Residential
608 Fall River Avenue	226	Residential (Two Family) (Vacant)
618 Fall River Avenue	228	Residential
623 Fall River Avenue	230	Restaurant (Dunkin Donuts)
625 Fall River Avenue	256	Gas Station (Gulf)
626 Fall River Avenue	229	Commercial (Corner Consignment Shop - Vacant)
632 Fall River Avenue	186	Mixed-Use Residential/Commercial (Vacant)
635-637 Fall River Avenue	248	Mixed-Use Residential/Commercial (Hairs to You/ Labonte's Auto School)
640 Fall River Avenue	187	Mixed-Use Residential/Commercial (Amanda Lynn's Antiques)
642-644 Fall River Avenue	186	Mixed-Use Residential/Commercial
643-45 Fall River Avenue	191	Mixed-Use Residential/Commercial (East Bay Animal Hospital)
648 Fall River Avenue	169	Residential
650 Fall River Avenue	190	Commercial (Gary's Barber)
651 Fall River Avenue	193, 246	Mixed-Use Residential/Commercial (Robert A. Federico Certified Public Accountant)
659 Fall River Avenue	194	Medical Office (Family and Comestic Dentistry)
660 Fall River Avenue	181	Residential
663 Fall River Avenue	195	Mixed-Use Residential/Commercial
671 Fall River Avenue	197	Residential
11 Smith Street	196	Residential
28-30 County Street	264	Residential (Two Family)
34-36 County Street	263	Residential (Two Family)
44 County Street	260	Residential
75 County Street	185	Commercial (Vacant)
86 County Street	224, 227	Residential
2 Luther Street	254	Residential (Three Family)

Future Land Use Projections

The land use element of the Master Plan for the Town of Seekonk recognizes the importance of Luther's Corners. The vacant buildings at Luther's Corners present an opportunity to continue the mix of uses within the village area. The most notable obstacle listed in preventing the mixed use growth and pedestrian mobility within the village is traffic. Other obstacles noted include the unattractiveness of the buildings, signage and streetscape. Despite these obstacles, residents envision a mixed use village that is walkable, attractive and green. Section 7 of the Zoning By-laws outlines requirements for the Luther's Corners Village District. A number of uses are permitted which support the vision of mixed use growth with restrictions such as prohibition of drive-thru lanes and limitation of retail gross floor area to promote pedestrian mobility and safety.

Parking

An off-street parking inventory and study was carried out for the existing commercial properties. The study analyzed the parking used during a weekday peak hour period (4:00pm-6:00pm) and a Saturday peak hour period (1:00pm-3:00pm). The off-street parking study data sheets can be found in Appendix A.

Based on the parking study the key parking generators are Dunkin Donuts, Gulf, and Labonte's Auto School/Hairs to You. The periods of time observed do not represent a peak period of activity for the Dunkin Donuts, however even during an off peak period there were 5-6 cars parked at any one time, and there was a high turnover of customers observed. Dunkin Donuts has an adequate amount of off-street parking available and readily accessible for its customers.

The Gulf gas station exhibited the highest parking use and turnover. The average number of cars parked for both the weekday and Saturday Peak Hour periods was 14 vehicles. The Gulf Station has approximately 25 available parking spaces which appear to be sufficient for its needs.

Labonte's Auto School and the Hairs to You hair salon are located on the same property on the southwest corner of the intersection. Twelve off-street parking spaces are available for these businesses to the rear of the buildings which front Fall River Avenue with no driveway access. During the peak periods it was observed that 50% of the parking spaces were being used.

The timing of the primary weekday/Saturday parking study did not correlate to the peak period for the church, however it should be noted that there was use on-site and parking turnover observed at the church, which is likely associated with the day care as well as groups using the church as a meeting place. The church has approximately

75 off-street parking spaces available which are mainly used during Sunday services. A separate study was done for the church parking lots on Sunday February 19, 2012. During the Sunday service approximately eight parking spaces were available in the two parking lots, while approximately 8 to 10 vehicles were parked in front of the Church on Fall River Avenue. These vehicles tended to arrive at the church with ample available spaces but chose to park on the street as a matter of convenience.

At no point during the parking study was it observed that a particular parking area was being used to capacity. It should be noted that a number of businesses were vacant and therefore were not creating a parking demand. The available parking for the Dunkin Donuts and Gulf gas station properties both appear to be adequate for the existing uses, and is easily accessible. For a number of the remaining commercial properties that front the street, the available off-street parking is less visible, in locations behind the existing buildings, and in some cases is accessible only from adjacent streets. Due to these reasons available existing parking may be overlooked by potential patrons or perceived as private parking for the property owners due to the limited number of available spaces. Some of these commercial properties are currently vacant and it is possible that a lack of available parking or the perception that parking is not available contributed to the demise of the business.

A summary of the parking analysis can be found in Table 2 on the following page. Figure 4 on page 15 shows the locations of the commercial properties and parking areas that were evaluated in the off-street parking study.

Table 2 - Parking Analysis

Map Reference No.	Address	AP 9 Lot	Business Name	Building SF	Existing Parking Spaces	Parking Requirement Per Zoning	Required Parking Per Zoning	Average Existing Parking Use¥	
								Weekay Peak Hour (4:00PM-6:00PM)	Saturday Peak Hour (1:00PM-3:00PM)
1	623 Fall River Avenue	230	Dunkin Donuts	2,000	25	1 Per 3-5 Seats	6-10	5	6
2	625 Fall River Avenue	256	Gulf	2,265	25±	1 Per 200-400 SF	6-12	14	14
3	635-37 Fall River Avenue	248	Hairs to You/ Labonte's Auto School	6,190	12	2-3 per practitioner + 1 per employee & 1 Per 200-400 SF	* + 16-31	6	6
4	643-45 Fall River Avenue	191	East Bay Animal Hospital	5,047	8	2-3 Per Doctor + 1 per employee	4-6 + 1/employee **	1	3
5	651 Fall River Avenue	193, 246	Robert A. Federico Certified Public Accountant	1,411	15±	1 Per 300-500 SF	3-5	4	3
6	659 Fall River Avenue	194	Family and Comestic Dentistry	2,932	16	2-3 Per Doctor + 1 per employee	2-3 + 1/employee **	0	6
7	663 Fall River Avenue	195	Multiuse Residential (Vacant)	1933	3	1 Per 200-400 SF	5-10***	1	2
8	650 Fall River Avenue	190	Gary's Barber	456	10	2-3 per practitioner + 1 per employee	4-6 + 1/employee **	2	3
9	75 County Street	185	Commercial (Vacant)	4,478	20±	1 Per 200-400 SF	12-23	0	1
10	640 Fall River Avenue	187	Amanda Lynn's Antiques	2,802	4	1 Per 200-400 SF	7-14	0	0
11	632 Fall River Avenue	186	Multiuse Residential (Vacant)	10,776	10±	1 Per 200-400 SF	27-54***	0	0
12	626 Fall River Avenue	229	Corner Consignment Shop (Vacant)	1,506	13	1 Per 200-400 SF	4-8	0	0
13A	600 Fall River Avenue	222, 223	Church/ Daycare	14,518	40	1 Per 3-5 Seats	61-101	0	3
13B		247, 250	Church		35			7	2

*Number of practitioners and employees unknown for Hair Salon
**Number of employees unknown
*** Dependent on Breakdown of Commercial and Residential Space.
¥Reference Appendix A for Parking Study data.

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Parking Area Map

Luther's Corners Village

Fall River Ave. & County Street

Seekonk, Massachusetts

Figure 4

Applicant

Town of Seekonk

100 Peck Street, Seekonk, Massachusetts 02771

No.	Date	Description	By:
0	06-01-2012	Parking Area Plan	A.C.A.

Drawn By: A.C.A. | Design By:

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

DiPrete Engineering

Two Stafford Court Cranston, RI 02920

tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com

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Redevelopment of vacant properties within the Luther's Corner's Village area will be a factor in creating a cohesive village center. To help make the village more attractive to potential businesses, one recommendation is to provide better way-finding signage to direct patrons to available parking. A second recommendation is to provide one or more community public parking areas.

There are several properties within Luther's Corners Village that are currently vacant. These properties may provide an opportunity for the town to purchase for use as public parking areas in an effort to stimulate redevelopment within the district. Specifically the vacant commercial property located at 632 Fall River Avenue on the southeast corner of the intersection is centrally located and could provide public parking in the village center. The storefront portion of the existing building has historical significance for the village district and should be redeveloped in a manner preserving its function and character similar to the adjacent building to the immediate south as shown in the adjacent photograph. However the rear portion of the building is a newer brick and block addition that could be razed to provide area for additional parking to this building that also has residential apartments on the second floor. The value of the vacant property at 632 Fall River Avenue is listed as $363,600.

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4.0 Roadway/Intersection Evaluation

Existing Conditions

This section of the report will review the existing physical and operational conditions of the roadways and intersections within the Luther's Corners project area. These roadways include Fall River Avenue between Fuller Street and Clarke Street, and County Street between the Seekonk Town Line and Alta Street. An inventory of the physical features and applicable regulations was completed along with traffic data collection including volume, crash and speed information. The findings of this investigation are documented as follows.

Roadway and Intersection Infrastructure

Roadways

Fall River Avenue (Route 114A)

Route 114A is a north/south state route classified as an Urban Minor Arterial according to the Southeastern Regional Planning & Economic Development District (SRPEDD). It links to two roadways in East Providence, Rhode Island, Pawtucket Avenue (Route 114) to the north, and Wampanoag Trail to the south. Route 114A is referred to as Mink Street south of Highland Avenue (Route 6). It functions as a major route to the interstate highway system from intersecting arterials and collectors in East Providence, Seekonk and Rehoboth. This primary use conflicts with its secondary function of providing immediate access to properties within the village area, which as previously described, is a mixed-use area containing numerous small businesses, churches and homes.

Fall River Avenue is variable in width between 28 and 40 feet. Beyond the immediate intersection area with County Street, the road is approximately 36 feet wide with a 12-foot travel lane and 6-foot shoulder in each direction. Granite curbing and variable width (5 to 7 foot) concrete sidewalks are provided on both sides of the road.

The roadway is delineated with a double yellow centerline and white shoulder markings as depicted in the adjacent photograph looking south towards County Street. As can be seen, a crosswalk with appropriate signage is provided in the vicinity of the Seekonk Congregational Church. ADA compliant ramps are available at the crossing. Parking is prohibited

along Route 114A where signing for *No Parking* is designated at locations both north and south of County Street on sign posts and utility poles. The utility pole corridor with cobra head lighting for nighttime visibility is located on the easterly side of the road to the north of County Street, and on the westerly side, south of County Street.

Though prohibited, parking was observed throughout the day on a regular basis at two locations on Route 114A in the project area. These locations included Labonte's Auto School approximately 75 feet south of County Street, and a residence at 601 Fall River Avenue, immediately north of the *Dunkin Donuts*. Parking at the driver education business was typically limited to drop-off and pick-up periods relating to the school operation. Observations found that typically one or two vehicles were parked/stopped with a waiting driver. The residence parking was typically longer term, as most often one vehicle would be parked in front of the house at different times of the day. A driveway is available to the house, so it is uncertain whether this is a matter of convenience or lack of available on-site parking. When on street parking was observed, there were three to four cars parked on-site, restricting access for the additional vehicle.

In addition to these daily violations of the parking restrictions, on the weekend (Sunday), vehicles were also observed parking along the frontage of the church property on both sides of Route 114A. A total of approximately ten (10) vehicles were observed during the Sunday morning church services as can be seen in the adjacent photograph. Due to the narrow shoulder width, these vehicles extend into the travel lane if not positioned against the curb.

No speed limit signs were found in the immediate project area, though Fall River Avenue/Arcade Avenue is posted at 35 mph beyond Mill Street to the north. Additional signage on Fall River Avenue includes a restriction on left turning traffic at the County Street intersection between the hours of 4:00 and 6:00 PM.

The physical condition of the roadway can be described as good, providing a safe and comfortable driving surface. The concrete sidewalks are also relatively new and are in good condition. The alignment of Fall River Avenue in the immediate project area can be described as relatively level with a large horizontal curve extending between Smith Street and Belview Street. The curve along with the signalized junction, requires drivers to travel at a lower

rate of speed (<35 mph), through the Luther's Corners village area. North and south of the intersection where the road is straight and level, travel speeds are higher and range between 35 and 45 mph under free flow conditions.

County Street

County Street is an east/west local road classified as an urban collector. It extends from Warren Avenue (Route 6) in East Providence, at its western limit, into the Town of Rehoboth to the east. In the study area it is variable in width between 30 and 32 feet, consisting of one 15 foot or 16 foot travel lane in each direction, delineated by a double yellow centerline, no shoulder markings are provided. Parking is restricted along both sides of the road, as the roadway width is insufficient to accommodate travel lanes and a parking lane(s). The speed limit is posted at 30 mph to the east of Fall River Avenue.

There is a combination of concrete and bituminous material for both curbing and sidewalks along the segment under study. The adjacent photograph depicts the roadway features to both the east and west of the junction looking west through the Fall River Avenue intersection. As can be seen, the sidewalks are in very poor condition and in need of replacement. The roadway itself is in fair condition with numerous utility patches and signs of deterioration.

The alignment of County Street in the immediate project area can be described as relatively straight, with a gradual vertical incline from the Town Line with East Providence through the Route 114A intersection where it levels off past Alta Street.

Intersection

The junction of Fall River Avenue with County Street is configured as a four-way signalized intersection. The County Road eastbound approach provides for a left/through lane and a right turn lane. The remaining approaches are marked for single multipurpose lanes. It should be noted that the northbound approach, though delineated as a single lane operates as a two lane approach with the interior lane operating as a dedicated left turn lane, with through and right turning traffic passing on the right.

The ambiguity of the wide single lane leads to uncertainty and confusion on this approach as it is driven differently depending on how the first vehicle in the queue positions itself in the wide lane. Those knowledgeable of its operation tend to stay to the right when going through or turning right, while left turning traffic straddles the centerline allowing vehicles to pass on the right. But on a regular basis, a left turning vehicle will be positioned in the center of the single lane, restricting northbound flow. In addition it was observed where a vehicle positioned adjacent to the centerline would go straight through the intersection, causing a merge conflict on the downstream side of the intersection that has insufficient width for two vehicles. This approach is depicted in the adjacent photograph where the inside vehicle is turning left and the vehicle adjacent the sidewalk is heading north through the intersection.

The junction is controlled with a three-phase fully actuated traffic signal including an exclusive pedestrian phase that is serviced between the permitted mainline and side street phasing. Recently an *Opticom* pre-emption system was installed to allow improved emergency vehicle access on all approaches to the intersection. This system forces a green indication on the approach of the emergency vehicle, allowing clear access. The intersection has a record of operational constraints during the daily peak traffic conditions due to high traffic volumes, insufficient geometry and proximity of businesses within the junction. MassDOT implemented parking and left turn restrictions at the intersection in an effort to improve operations, with limited success.

Traffic Volumes

Historical traffic volume information was obtained from the MassDOT, from counts completed for recent projects in the area, and from manual turning movement counts conducted by *RAB* as part of this project. A comparison of the hourly volumes can be found in Table 3 on the following page, and complete count information is provided in the Appendix for reference.

Extensive count data was reviewed between 2002 and 2012 on the project area roadways. Based upon a comparison of this information it was determined that traffic volumes over the last decade have remained relatively constant or have slightly declined on the roadways servicing Luther's Corners. The latest MassDOT

count station on Fall River south of Mill Road determined that approximately 19,400 vehicles were serviced in 2010. On County Street at the Rehoboth Town Line, approximately 4,000 vehicles were serviced in 2009.

In addition to the available state data, information was obtained from the Town of Seekonk available from studies that were completed for development projects. Automatic traffic recorders (ATR) were installed on Fall River Avenue and County Street in April, 2007 as part of a study for the Greenbrier Condominium project east of Fall River Avenue. Based upon the ATR data, it was determined that Route 114A serviced an average daily traffic of 24,200 vehicles between I-195 and County Street, and 23,300 vehicles between County Street and Mill Street.

Table 3

Traffic Volume Data Summary

Location/Time	**2007 ATR**			**2007 Manual Count**			**2012 Manual Count**		
Fall River Avenue	NB	SB	Total	NB	SB	Total	NB	SB	Total
North of County Street									
AM Peak	935	610	1,545	795	685	1,480	825	750	1,575
PM Peak	1,050	785	1,835	885	765	1,650	995	875	1,870
Sat Midday Peak	885	835	1,720	760	810	1,570	870	835	1,705
South of County Street									
AM Peak	950	715	1,665	815	590	1,405	895	650	1,545
PM Peak	940	1,015	1,955	780	860	1,640	895	980	1,875
Sat Midday Peak	820	920	1,740	740	765	1,505	835	860	1,695
County Street	EB	WB	Total	EB	WB	Total	EB	WB	Total
East of Fall River Avenue									
AM Peak	100	405	505	95	360	455	85	335	420
PM Peak	240	265	505	240	205	445	280	250	530
Sat Midday Peak	235	285	520	250	235	485	245	240	485
West of Fall River Avenue									
AM Peak	315	720	1,035	245	615	860	250	665	915
PM Peak	875	450	1,325	555	315	870	620	375	995
Sat Midday Peak	745	570	1,315	425	430	855	530	440	970

On a typical weekday along this section of Fall River Avenue north of County Street, traffic volumes begin to increase at 6:00 AM, with a morning peak hour of approximately 1,545 vehicles occurring between 8:00 and 9:00 AM (935 NB/610 SB). After this hour, the volumes slightly decrease to between 1,200 and 1,300 vehicles per hour, until 11:00 AM when volumes begin increasing to the daily peak hour. The afternoon peak hour was found to occur between 4:00 and 5:00 PM with approximately 1,835 vehicles (1050 NB/785 SB) per hour.

County Street serviced 6,200 vehicles immediately east of Fall River Avenue with the morning peak hour occurring between 7:00 and 8:00 AM with 505 vehicles (100 EB/405 WB). During the afternoon peak hour between 4:00 and 5:00 PM, 505 vehicles were also serviced with 240 eastbound and 265 westbound. West of Fall River Avenue, County Street serviced 15,300 vehicles per day with 1,035 vehicles (315 EB/720 WB) during the morning peak hour between 8:00 and 9:00 AM. During the afternoon peak hour between 4:00 and 5:00 PM 1,325 vehicles were counted with 875 eastbound and 450 westbound.

As part of the Greenbrier Condominium Village traffic study, manual turning movement counts were conducted at the intersection of Fall River Avenue and County Street during the morning and afternoon peak hours in July, 2007 and on a Saturday midday period in August, 2007. The morning peak hour occurred between 7:30 and 8:30 AM with 1,480 vehicles on Fall River Avenue north of County Street, 1,405 vehicles south of County Street, and 455 and 860 vehicles on County Street east and west of Fall River Avenue. Six pedestrians were counted crossing the intersection at this time. The afternoon peak hour occurred between 4:30 and 5:30 PM with 1,650 vehicles on Fall River Avenue north of County Street, 1,640 vehicles south of County Street, and 445 and 870 vehicles on County Street east and west of Fall River Avenue. Twelve pedestrians were counted crossing the intersection at this same time. During the Saturday midday peak hour between12:00 and 1:00 PM Fall River Avenue serviced 1,570 vehicles north of the intersection and 1,505 vehicles to the south. County Street serviced 485 vehicles east of the intersection and 855 vehicles west of the intersection. Two pedestrians were counted crossing the intersection. These peak hour volumes were slightly less than other data collected in the project area, which can be attributed to the summer period when the data was collected. Typically in this area, peak hour volumes, which are highly influenced by daily commuter traffic, are less during the summer months.

Specifically for this project, manual turning movement counts were conducted at the intersection during the weekday morning and afternoon periods and the Saturday midday period in April, 2012. The daily AM and PM peaks were found to be from 7:30 to 8:30 AM and 4:30 to 5:30 PM respectively. The Saturday midday peak hour occurred between 12:30 and 1:30 PM. During the morning peak hour approximately 1,575 vehicles were counted on Fall River Avenue north of the intersection and 1,545 vehicles were counted to the south. County Street

serviced 420 vehicles east of the intersection and 915 vehicles west of the intersection. During the afternoon peak hour there were 1,870 and 1,875 vehicles on Fall River Avenue north and south of County Street, and 530 and 995 vehicles on County Street east and west of Fall River Avenue. Three pedestrians were counted crossing the intersection during both the morning and afternoon peak hour. During the Saturday midday peak hour Fall River Avenue serviced 1,705 vehicles north of the intersection and 1,695 vehicles to the south. County Street serviced 485 vehicles east of the intersection and 970 vehicles west of the intersection. Twenty-five pedestrians were counted crossing the intersection at this time.

Speed Study

As mentioned previously, the posted speed on Fall River Avenue is 35 mph in both directions. To determine the actual travel speed of vehicles on Fall River Avenue in the vicinity of County Street, a radar speed study was completed at two locations to define the operational, or 85th percentile speed of vehicles traveling along the road. The locations studied were 400 feet north of County Street in the vicinity of the *Seekonk Congregational Church*, and south of County Street, 200 feet north of Fuller Street. Table 4 summarizes the speed study completed, which is also included in graphical form in the Appendix for reference.

Table 4

Speed Data Summary

Location	Average Speed	85th Speed	15th Speed	Pace	% Pace
400 feet north of County Street					
Northbound	32 mph	35 mph	29 mph	28-37 mph	91
Southbound	31 mph	34 mph	28 mph	27-36 mph	92
200 feet north of Fuller Street					
Northbound	34 mph	38 mph	32 mph	30-39 mph	90
Southbound	34 mph	38 mph	32 mph	30-39 mph	96

North of County Street the 85th percentile speeds were found to be 35 and 34 mph, with average speeds of 32 and 31 mph for the northbound and southbound directions respectively. South of County Street the 85th percentile speeds were found to be 38 mph with average speeds of 34 mph for both directions. Speeds south of County Street are somewhat higher than north of County Street, but both are in an acceptable range for the speed limit of

35 mph. The high volume of platooned traffic in combination with the traffic signal, contribute to the recorded speeds in the mid to low 30's range. In commercialized urban/village areas it is desirable to have a lower speed limit (25 mph), and resultant speeds, which are more conducive to safer pedestrian activity.

Safety Analysis

Also, as part of our study, a review of accident statistics was completed. Accident reports from the Seekonk Police Department were analyzed for a three-year period (January, 2009 to December, 2011) to determine if the roadways/intersections in the area experienced a high frequency or pattern of accidents. A summary of the accident data depicting the number, type, and severity is provided in Table 5 and a summary of the accidents is included in the Appendix.

Table 5

Crash Data Summary

Location	**Number of Accidents**		**Type of Accidents**					
	PD	**PI**	**Rear-End**	**Angle**	**Side swipe**	**Parked**	**Fixed Object**	**Total**
Fall River Avenue								
@ County Street	25	6	13	14	4	0	0	**31**
Vicinity Labonte's	1	0	0	0	0	1	0	**1**
@ service station driveway	3	0	0	1	2	0	0	**3**
County Street								
@ Labonte's driveway	4	1	0	5	0	0	0	**5**
@ service station driveway	4	1	1	4	0	0	0	**5**
@ Luther Street	1	1	1	0	0	0	1	**2**
Total	**38**	**9**	**15**	**24**	**6**	**1**	**1**	**47**

A total of 47 crashes (avg. 16 per year) occurred in the study area over the three-year study period, with nine involving injuries. Summarizing the data, 31 of the accidents occurred at the intersection of Fall River Avenue and County Street with six involving injuries. Fourteen were angle collisions, thirteen were rear end crashes, and four

were sideswipe collisions. Of the angle crashes six involved vehicles turning left in front of through vehicles, five involved vehicles going through a red light and three involved right turns on red from County Street.

A crash rate utilizing the MassDOT criteria for the intersection was calculated based upon the average number of accidents at the intersection for the three-year period, and the calculated average daily traffic. The crash rate was determined to be 0.86 crashes per million entering vehicles (MEV), which is above the Mass DOT District 5 average of 0.77 crashes per MEV for signalized intersections.

Reviewing driveway intersections, eight crashes specifically involved the service station driveways with three on Fall River Avenue and five on County Street. The gas station driveways are a concern due to their proximity to the traffic signal and the need for most movements to be made through a standing queue on the southbound and eastbound approaches. In addition, there were five angle crashes on County Street at the Labonte's Auto School driveway and two at Luther Street. On Fall River Avenue there was one crash with a parked vehicle near the Labonte's property. Consolidating a few of the driveways immediately at the intersection would reduce conflicts and potentially improve safety. For example, the gas station has four driveways with two on Fall River Avenue and two on County Street. Removing the driveways closest to the intersection on both Fall River Avenue and County Street would reduce the conflicts at the intersection.

Operational Analysis

The most accurate means of evaluating traffic capacity is through the utilization of the methodology presented in the 2000 Highway Capacity Manual (HCM). 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 is at full capacity resulting in extended vehicle delays and potential queuing. Listed in the Table 6 is the LOS delay criteria presented in the Highway Capacity Manual for signalized intersections.

In order to assess existing operational conditions at the study intersection, the HCM analysis was completed during the weekday morning, and afternoon peak hours and the Saturday midday peak hour. The results of the analysis for existing and proposed conditions are shown in the Table 7, and the complete HCS capacity analysis worksheets are included in the Appendix.

Table 6

Highway Capacity Manual Criteria

Level of Service	Signalized Delay Per Vehicle (sec)
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

The intersection currently operates in a three-phase manner with a permitted phase for Fall River Avenue, a permitted phase for County Street and an exclusive pedestrian phase which is serviced between the two when a call is received. The existing conditions analysis determined that the overall intersection presently operates in a restricted manner during the afternoon and Saturday peak hour traffic conditions reviewed.

Table 7

Level of Service Summary

	Existing						Proposed					
Location/ Movement	**AM**		**PM**		**SAT**		**AM**		**PM**		**SAT**	
Fall River Avenue & County Street	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Fall River Avenue NB Left	B	.57	B	.27	B	.43	D	.86	B	.29	B	.49
Fall River Avenue NB Thru/Right	B	.65	C	.86	B	.75	B	.71	C	.84	C	.74
Fall River Avenue SB Left/Thru/Right	B	.72	E	1.06	C	.88	-	-	-	-	-	
Fall River Avenue SB Left	-	-	-	-	-	-	A	.04	A	.07	A	.06
Fall River Avenue SB Thru/Right	-	-	-	-	-	-	D	.91	D	1.0	D	.95
County Street EB Left/Through	C	.62	F	1.04	D	.87	-	-	-	-	-	-
County Street EB Right	A	.16	B	.36	B	.29	-	-	-	-	-	-
County Street EB Left	-	-	-	-	-	-	C	.51	C	.68	C	.61
County Street EB Thru/Right	-	-	-	-	-	-	B	.22	C	.68	C	.57
County Street WB Left/Through/Right	C	.64	C	.64	C	.46	D	.87	E	.94	D	.70
Intersection	**B**	**-**	**D**	**-**	**C**	**-**	**C**	**-**	**D**	**-**	**C**	**-**

Generally observed, the critical movements during the morning peak hour are the southbound and westbound approaches. During the afternoon peak hour the critical movements are the southbound and eastbound approaches. As previously noted, in an effort to improve capacity during this period, the MassDOT instituted a left turn restriction for northbound and southbound vehicles. Based upon the counts completed, where a high number of vehicles continue to make this movement, there is a definitive need to maintain these movements at all times through the intersection. The Saturday midday peak hour critical approaches are the eastbound left/through on County Street and the southbound approach on Fall River Avenue

To address both safety and capacity issues observed in the field and described in this section, lane use and phasing/timing modifications were investigated to improve overall intersection operations. As noted previously, the geometric constraints of the village area with limited right-of-way and historic buildings in close proximity to the roads, preclude the feasibility of providing the necessary geometry that would accommodate the traffic demand associated with the daily afternoon peak hours. Given that these constraints will continue as demand increases slowly, creates the need to address at least one concern, which is the safety of pedestrians and motorist utilizing the junction on a daily basis. Implementing safety improvements will not necessarily translate into capacity improvements as typically one would be adversely affected with the limitations outlined. Specifically addressing the safety concerns as a key component in the needed changes, installation of separate left turn lanes and protected/permitted phasing for the Fall River Avenue approaches was reviewed.

As previously discussed the wide single lane northbound approach to the intersection operates as two lanes, with the inside lane being a defacto left turn lane. Formalizing this condition will aid in reducing conflicts associated with the ambiguous markings, and allow for a protected phasing scheme that will improve overall operations of this approach, which services approximately 200 left turning vehicles during the morning peak hour. This further provides an opportunity to include a separate, pocket lane for the minor southbound left turners. By removing these left turns from the through lane, periodic blocking caused by the turning traffic will be eliminated. An additional opportunity created by this design includes extension of a median dual left turn lane to the north. Creating this refuge lane will allow northbound vehicles turning left into the adjacent properties including the Gulf Station and Dunkin Donuts, an opportunity to enter a median lane out of the through northbound travel lane. These improvements will reduce vehicle conflicts and formalize proper movements through the intersection that currently result in vehicle crashes and inefficient operations.

An additional improvement proposed as part of lane modifications involves the eastbound approach, which presently has two lanes, a through/left lane and exclusive right turn lane. Based upon field observations, and

comments received from the public and town officials, an option was developed to change the approach lanes to include an exclusive left turn lane with a shared through/right lane. The volume distribution of the movements warrants this change given that often peak hour queuing extends back into the City of East Providence through the Waterman Avenue intersection. Removing the left turn conflicting traffic will aid in reducing delays to the through traffic of equal volume, while not substantially affecting the right turn volume that has limited opportunity to access the existing short right turn lane due to queuing. To effectively implement this change, the new eastbound left turn lane should extend for a minimum length of 250 feet, and the outbound eastbound lane widened by several feet to allow proper through traffic movements. The wide sidewalk on the southeast corner of the intersection would need to be narrowed for a short distance. This sidewalk is in poor condition and in need of replacement today, so this minor work can be completed as part of the sidewalk repair.

As can be seen in the table, the delays are estimated to increase for the critical movements defined for each period. Specifically for the afternoon peak, allowing the left turn (which occurs regardless of restriction) will increase delays for the southbound approach. The northbound approach has a positive result from the change where delays are reduced. Overall the intersection will operate at an acceptable LOS C and D during the daily peak traffic conditions with the proposed changes.

Recommended Improvements

As depicted in the Figure 5 and outlined above, substantial safety benefits can be realized with the modifications proposed. Installation of dedicated left turn lanes on Fall River Avenue and County Street as described above, including protected phasing, will reduce crashes realized by left turning traffic. Additional benefits will include a reduction in delays for these movements with the advanced phasing, as well as improved efficiency of through traffic that is often blocked by the left turning vehicles at the junction.

Extension of the turn lane to the north on Fall River Avenue will also allow a refuge area for left turning traffic into adjacent high volume commercial properties. A review of the crash data indicates that there are a number of crashes involving the gas station driveways on the corner of the intersection. A further option to enhance safety relating to the driveways at this location would be to modify or close the two driveways directly at the corner of the intersection. Since there are two driveways on both Fall River Avenue and County Street altering/removing the driveways would improve safety without substantially compromising access.

In an effort to enhance pedestrian safety, the pedestrian signal equipment could be upgraded to include countdown timers that greatly enhance pedestrian recognition of crossing limitations and adherence to the

designed clearance intervals. In addition, the crosswalks that are provided at the intersection and at mid-block locations could be modified to provide high visibility markings. Installation of "Continental" style markings would enhance driver recognition of the potential for pedestrian activity and the location of potential conflicts.

The median lane north of County Street would allow installation of raised median islands on either side of the high visibility crosswalk in front of the church. The island installation would also create a visual entryway at the northern end of the village, alerting motorist of the changing roadway environs. This concept could also be implemented to the south of County Street at a strategic location, possibly the crosswalk in the vicinity of Smith Street where a school bus stop is provided for children in the adjacent residential neighborhood.

Creating these gateways into the district can also provide an opportunity to add streetscape elements, which can be implemented in a manner to better define the limits and makeup of the village. These features can help recreate the sense of a downtown village area that is walkable and pedestrian friendly, different from the major routes feeding into Luther's Corners. Streetscape amenities could include lighting, ornamental trees, benches, etc. in period with the existing characteristics of abutting properties.

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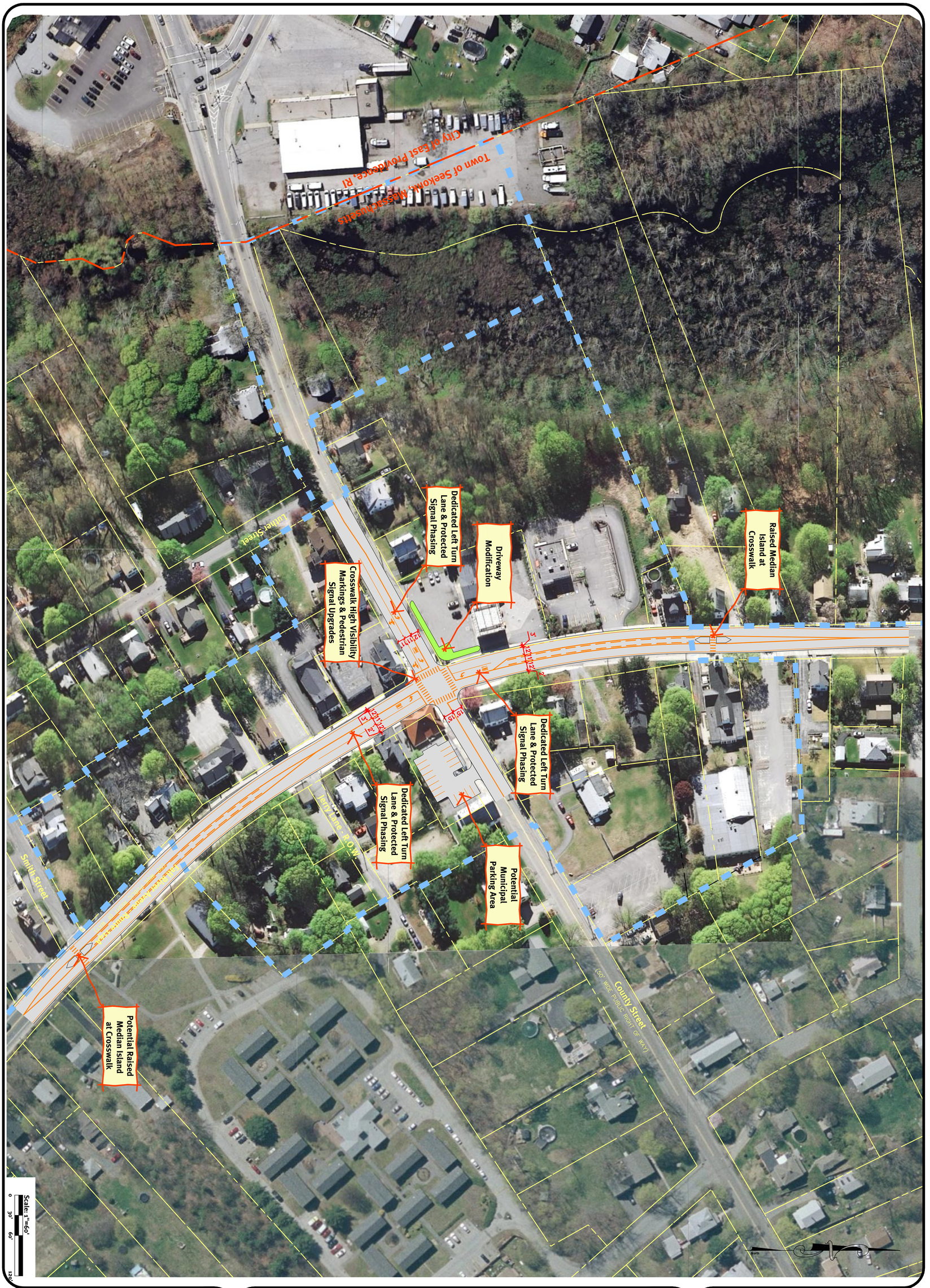

Overall Improvements Plan

Luther's Corners Village

Fall River Ave. & County Street

Seekonk, Massachusetts

Figure 5

Applicant

Town of Seekonk

100 Peck Street, Seekonk, Massachusetts 02771

No.	Date	Description	By:
1	07-24-2012	County St. Left Turn Lane	J.P.C.
1	06-12-2012	Fall River Ave. Left Turn Lane	A.C.A.
0	06-05-2012	Overall Improvements Plan	A.C.A.

Drawn By: A.C.A. | Design By:

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

DiPrete Engineering

Two Stafford Court Cranston, RI 02920

tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com

Engineers • Planners • Surveyors

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5.0 Project Coordination

Public Workshop Summary

A Public Workshop was held on February 28, 2012 at the Seekonk Congregational Church located at 600 Fall River Avenue to discuss the future of Luther's Corners Village with interested parties. In attendance from Seekonk Planning were John Hansen (Town Planner), Neal Abelson (Chairman of Planning Board) and Phoebe Lee Dunn (Planning Board member). Also in attendance were Jason Clough of DiPrete Engineering and Judy Zimmerman-Reisch of RAB Professional Engineers. The audience included village residents and business owners. The discussions during the meeting focused on the importance of the redevelopment of vacant properties, pedestrian safety, traffic congestion and parking. Meeting minutes from the Public Workshop can be found in Appendix C.

A draft report was prepared and presented to the Planning Board at a public meeting on June 12, 2012. The comments/suggestions from this public meeting have been incorporated into the final report to be utilized as a guide in planning for enhancements to the village that will preserve its historical significance while making it a viable community center.

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6.o Conclusions and Recommendations

Infrastructure Improvements

The infrastructure improvements as detailed in Section 4.0 can have substantial benefits related to pedestrian and vehicular safety and traffic flow along the major routes through the southern section of town. Recommended improvements include (Reference Section 4.0);

- signal phasing/timing modifications,
- lane striping,
- signage,
- sidewalk reconstruction,
- consolidation of driveway openings,
- pedestrian signal upgrades,
- crosswalk striping and
- installation of raised median islands at crosswalk locations.

Land Use Planning Guidelines

The promotion of mixed use growth and pedestrian mobility is critical to the redevelopment of Luther's Corners into a viable village center. Pedestrian mobility is greatly enhanced by the infrastructure improvements noted in Section 4.0. Streetscape enhancements can also have a positive influence on the delineation of the village district, and creating the needed environment to attract businesses that will support the surrounding residential uses (Reference Section 4.0).

Redevelopment of vacant commercial and mixed use properties will be greatly affected by the ability to provide access to not only pedestrian users but users who commute through the village on a daily basis and may want to patronize one of the small businesses. Increased signage to direct patrons to available parking areas as well as potential community public parking areas will provide an incentive to redevelopment and establishment of businesses and residential uses within the village area (Reference Section 3.0).

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Appendix A: Land Use and Parking Analysis

Zoning By-Laws of the Town of Seekonk Massachusetts (Portion)

Section 7 - Local Business Districts and Luther's Corners Village District

Section 10.6 - Design Standards

Off-Street Parking Study

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Zoning By-Laws of the Town of Seekonk Massachusetts (Portion)

Section 7 - Local Business Districts and Luther's Corners Village District

Section 10.6 - Design Standards

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ZONING BY-LAWS
OF THE
TOWN OF SEEKONK
MASSACHUSETTS

APPROVED OCTOBER 2, 1958
INCORPORATING SUBSEQUENT REVISIONS THROUGH TOWN MEETING
CONCLUDED November 28, 2011
Reprinted February 2012

The following by-laws, having been adopted by the Town on April 28, 1958, and approved by the Attorney General of the Commonwealth of Massachusetts on October 2, 1958, supersede the original Zoning Laws approved November 14, 1942 and the amendments thereto.

SEEKONK PLANNING BOARD

TABLE OF CONTENTS

Chronological list of revisions since October 1979 and rezones since February 1959 follows Section 25.

SECTION 7. LOCAL AND HIGHWAY BUSINESS DISTRICTS AND LUTHER'S CORNERS VILLAGE DISTRICT

7.1. USES PERMITTED

Residence district uses permitted in Section 6.1 except dwellings.

LOCAL BUSINESS

Retail stores and service establishments other than restaurants and mini-storage facilities - the principal activities of which are the selling of merchandise at retail; the merchandise and services of which are sold for use or consumption either within a building or principally off the premises; and the customers of which are provided goods and services principally within a building.

Restaurants with the exception of those described under Highway Business.

Offices and banks - the principal activities of which are the conduct of governmental, professional, management, or financial activities.

Funeral homes.

Accessory buildings and uses.

HIGHWAY BUSINESS

Local business district uses. Retail stores and service establishments, excluding mini-storage facilities - the principal activities of which are the selling of services or merchandise at retail and the operations of which may be carried on outside a building as customarily as within.

Wholesale establishments, the principal activities of which are the sale of merchandise to individuals and corporations for resale to the public.

Hotels, motels.

Commercial recreation establishments.

Establishments processing for direct consumption - the principal products from which are customarily delivered to individuals or retail outlets, as for example, bakeries, cleaning and dying plants, carpet cleaning plants, ice plants, soft drink bottling plants, printers, provided such establishments comply with industrial district construction and operation standards and limitations.

Restaurants principally providing prepared and packaged food for customer pick-up at a counter for take-out or for self-service within the building (i.e., fast food restaurants) to be allowed only in Highway Business Zone.

Automotive service stations - provided that any building or facility within a service station site shall be at least 50′ away from any residential district boundary and be at least 200′ away from any entrance or exit to or from a school, playground, public library, church, hospital, or children's home, and provided further that any lubricating, washing, or repairing not conducted within a building shall be permitted only if a wall of solid appearance or a tight evergreen hedge not less than six (6) feet in height is erected and maintained between such uses and any adjoining residence district. That the minimum frontage measured at the street line shall be 150′ and if a corner lot, it shall be 150′ on both streets. That the minimum lot area shall be 15,000 sq. ft. or if a corner lot, 22,500 sq. ft.

LUTHER'S CORNERS VILLAGE DISTRICT

Single family, Residential
Duplex, Residential
Accessory Apartment above ground floor commercial (maximum 8 units)
Small business or office (under 2,000 sq.ft.)
Athletic/Physical Fitness
Bakery/cafe (Not including Drive Thru)
Bank (Includes walk up ATM)
Boarding House
Carpentry, plumbing and electrical workshops
Engineering Professional Offices
Entertainment or Recreation facilities (Indoor)
Bed and breakfast establishments
Medical or health related (under 25,000 sq. ft.)
Newspaper or job printing establishment
Retail (under 2,000 sq. ft., ex. Adult Uses defined in MGL Ch40A Sec. 9A)

7.2 USES PERMITTED AFTER APPROVAL OF THE ZONING BOARD OF APPEALS

Include those residence district uses permitted in Section 6.2, plus dwelling units that are an accessory use within a structure utilized primarily for uses listed in Sections 7.1 and 6.2.

7.3 SCREENING

LOCAL BUSINESS

All outdoor storage areas or facilities for fuels, materials and products, shall be enclosed by a wall of solid appearance or tight evergreen hedge not less than 6′ high, erected and maintained where necessary to conceal such areas or facilities from adjoining residence districts and uses.

HIGHWAY BUSINESS

Any highway business use not conducted wholly within a building shall be permitted only if a wall of solid appearance or tight evergreen hedge not less than 6′ high is erected and maintained between such use and any adjoining residence district or use.

LUTHER'S CORNERS VILLAGE DISTRICT

All outdoor storage areas or facilities shall be enclosed by a wall of solid appearance or tight evergreen hedge not less than 6 feet high, erected and maintained where necessary to conceal such areas or facilities from adjoining residence districts or uses.

7.4 MAXIMUM LOT COVERAGE BY ALL BUILDINGS

LOCAL BUSINESS	*HIGHWAY BUSINESS*
40 percent	30 percent

LUTHER'S CORNERS VILLAGE DISTRICT

75 percent

7.5 MINIMUM DEPTH OF FRONT YARD

LOCAL BUSINESS	*HIGHWAY BUSINESS*
50′	70′

LUTHER'S CORNERS VILLAGE DISTRICT

0'

7.6 MINIMUM LOT WIDTH AT STREET LINE

LOCAL BUSINESS	*HIGHWAY BUSINESS*
50′	50′

LUTHER'S CORNERS VILLAGE DISTRICT

50'

7.7 MINIMUM WIDTH OF SIDE YARD

LOCAL BUSINESS	*HIGHWAY BUSINESS*
15′, except 50′ from a side street	15′, except 50′ from a side street

LUTHER'S CORNERS VILLAGE DISTRICT

5'

When a side yard adjoins a lot in a residence district, the side yard shall be of the same width as the required side yard in the adjoining district.

The side and rear yard adjoining any district or use shall include a minimum of 15′ around any buildings. This includes appurtenances extending out from any building, or other items, which in the opinion of the Planning Board unduly constitute an obstruction or which impeded safe vehicular travel by current emergency vehicles.

7.8 MINIMUM DEPTH OF REAR YARD

When a rear yard abuts a lot in a residence district, the rear yard shall be of the same depth as the required adjoining yard, side or rear.

When a rear yard abuts a street, the rear yard shall be of sufficient depth to provide the required off-street loading space.

7.9 EXTERIOR LIGHTING

Exterior lighting shall not shine directly on properties and streets beyond the property line.

7.10 MAXIMUM HEIGHT REQUIREMENT

Local Business	Highway Business	Luther's Corners Village District
3 stories or 40 feet	3 stories or 40 feet	4 stories or 45 feet

shall be borne by the applicant. Review fees shall be in the form of a check made out to the Board's reviewing engineer. Said review fee should be forwarded to the Board for payment to the Board's reviewing engineer.

Prior to the issuance of a building permit, a site plan shall be submitted to the Planning Board for review of compliance with these By-Laws. A building permit shall not be issued without either an approved plan signed by the Clerk of the Board that is compliant with any conditions put forth as part of the approval by the Board or by indicated approval as follows. If the Planning Board does not act to reject such plan within sixty (60) consecutive days after receipt of a completed application, it shall be deemed to be acceptable and the plan shall be signed "Approved by Default" by the Town Clerk.

Site Plan approvals are valid for one year following the date of approval. Construction shall commence within this timeframe. A one-year extension can be granted by Board upon receipt of correspondence by the applicant seeking said extension. Prior to construction erosion and sedimentation control measures shall be in place in accordance with any bylaws regulating said measures.

10.6 Design Standards:

The following elements, in addition to any standards prescribed elsewhere in this by-law, shall be utilized by the Board in considering all site plans.

10.6.1. Parking Requirements

10.6.1.1 Number of Spaces: Off-street parking shall be provided in all districts for uses where off-street parking is required, according to the standards set forth in the following schedule.

10.6.1.2 Shared Parking: Where mixed primary uses occur, applicants may propose a reduction in parking requirements based on an analysis using data from the Institute of Traffic Engineers (ITE). For peak demands of non-competing uses, a reduction up to 25% of the parking requirements in 10.6.1.3 may be approved by the Planning Board. For peak demands of competing uses, a reduction up to 10% of the parking requirements in 10.6.1.3 may be approved by the Planning Board.

10.6.1.3 Parking Space Schedule

Land Use	**Minimum**	**Maximum**
Hotel or Motel	1 per guest room	1.2 per guest room
Place of assembly, church, meeting hall or room, club, lodge and country club	1 per five seats	1 per three seats
Restaurant, stadium, gymnasium, auditorium, arena	1 per five seats	1 per three seats
Theater	1 per four seats	1 per two seats
Bank	1 per 400 square feet of gross floor area	1 per 150 square feet of gross floor area
Commercial establishments at least 20,000 square feet	1 per 500 square feet of gross floor area	1 per 250 square feet of gross floor area

Commercial establishments less than 20,000 square feet	1 per 400 square feet of gross floor area	1 per 200 square feet of gross floor area
Automotive retail and service	1 per 2000 square feet of gross floor area	1 per 1000 square feet of gross floor area
Wholesale, warehouse, or storage establishment	1 per each employee on the largest shift	1.2 per each employee on the largest shift
Medical or dental office	2 per each doctor plus one for each employee	3 per each doctor plus one for each employee
Hair, Nail, Massage, Tattoo establishment	2 per each practitioner plus one for each employee	3 per each practitioner plus one for each employee
Hospital	1.5 per bed	2 per bed
Nursing Home	0.25 per bed	0.5 per bed
Business, trade or industrial school or college	1 per 400 square feet of gross floor area	1 per 200 square feet of gross floor area
School or college dormitory facilities	1 per resident	1.2 per resident
Other schools	2 per classroom	4 per classroom
Office	1 per 500 square feet of gross floor area	1 per 300 square feet of gross floor area
Golf course	1.5 per green	2 per green
Tennis court	1.5 per court	2 per court
Swimming pool or skating rink	1 per four spectator capacity	1 per four spectator capacity plus one per each 1000 square feet of gross floor area
Sports field	1 per six spectator capacity	1 per four spectator capacity
Amusement park	1 per each 600 square feet of amusement area	1 per each 300 square feet of amusement area
Ranges (golf, batting, etc.)	1 per station	1.5 per station
Campgrounds	2 per campsite	2.5 per campsite
Public utility	1 per 400 square feet of gross floor area	1 per 200 square feet of gross floor area
Manufacturing or industrial establish	1 per each three employees of the largest working shift	2 per each three employees of the largest working shift

The Planning Board shall determine the closest similar use for any use permitted by these By-Laws not interpreted to be covered by this schedule. Only the primary land use needs to be considered in calculating the required parking spaces. The Planning Board may suggest an appropriate number of spaces for a specified land use within the range of minimum and maximum parking spaces based on historical demand. Handicapped spaces shall be in conformance with 521 CMR and an appropriate notation stating such conformance shall be placed on the prepared site plan.

10.6.1.4 Dimensions: Each off-street parking space shall be a minimum of nine (9) feet in width by twenty (20) feet in length. In the case of angle parking, the minimum dimensions for stalls and aisles shall be in compliance with the Institute of Traffic Engineers (ITE) standards.

10.6.1.5 Aisle and Entrance Dimensions: The minimum width of aisles and entrance drives providing access to more than two spaces shall be at least 24 feet wide. On lots where one entrance and exit driveway or access is constructed, the access shall not exceed fifty-four (54) feet in width. Where two or more driveways or accesses are constructed, the accesses

shall each not exceed thirty (30) feet in width. For automotive service stations, the maximum width shall be thirty-two (32) feet for each driveway or access.

10.6.1.6 Off-Street Loading: For every building hereafter erected and for every use hereafter established in an existing building or area, the off-street loading requirements presented in the Loading Space Schedule apply. Provided however, that for any building existing prior to October 2, 1973, but not expanded after such date, the Zoning Board of Appeals may grant a variance to allow for on or off loading on the street where conditions unique to the use reasonably justify such loading.

10.6.1.7 Loading Space Schedule

Use	**Minimum number of loading spaces per units**
All uses under 5000 square feet	No minimum, sufficient provision to eliminate all on or off loading on the street pursuant to normal economic activity
Retail trade, manufacturing and hospital establishmen over 5000 square feet of gross floor area	1 per 20,000 square feet or fraction thereof of gross floor area up to two spaces; one additional space for each 60,000 square feet or fraction thereof of gross floor are over 40,000 square feet; spaced used for ambulance receiving at a hospital is not to be used to meet these loading requirements.
Business services, other	1 per 75,000 square feet or fraction thereof of gross floor area up to two spaces; one additional space for each 20,0000 square feet or fraction thereof of gross floor area over 150,000 square feet

10.6.1.8 Dimensions: Each space for off-street loading shall be a minimum of five (5) feet longer than and four (4) feet wider than the largest vehicle which shall use the loading space. Each loading space shall have a vertical clearance of at least fourteen (14) feet. Each loading space shall have an additional area adequate for parking, loading, and maneuvering off any public street, sidewalk, or any portion thereof.

10.6.1.9 Computation of Spaces: When the computation of required parking or loading spaces results in the requirements of a fractional space, any fraction over ½ shall require one additional space.

10.6.1.10 Location of Parking Spaces: Required off-street parking spaces shall be provided on the same lot as the principal use they are required to serve, or when practical difficulties prevent their establishment upon the same lot, the Planning Board shall rule upon the acceptability of alternative plans.

10.6.1.11 Rental Spaces: No lot in common ownership shall contain more than two spaces for rental or lease except as an understood accessory to rental of a room on the same lot.

10.6.1.12 The location of spaces shall be suitably marked by painted lines or other appropriate markings.

10.6.1.13 A substantial bumper of concrete, steel, or heavy timber, or a concrete curb or berm curb which is backed, or a natural berm, shall be so located at the edge of surfaced areas except driveways as to protect abutting structures, properties, sidewalks, and landscaping.

10.6.1.14 No parking or loading area shall be used for the sale, repair, display, storage, dismantling or servicing of any vehicle, equipment, merchandise, material or supplies except as specifically permitted by these By-Laws in conjunction with uses directly involving sale, servicing, storage or repair of vehicles in districts where such uses are permitted.

10.6.1.15 Parking and loading spaces other than those for single-family or two family dwellings shall be so arranged as not to require backing of vehicles onto any public street.

10.6.1.16 No portion of any entrance or exit driveway shall be closer than fifty (50) feet to the nearest edge of the legal layout of an intersecting street.

10.6.1.17 All parking areas shall have clearly defined traffic flow into and out of the area and throughout the lot. Traffic moving in one direction may be required to be separated from traffic moving in an opposite direction at the entrance and exit to the parking lot by barrier, striping, rumble strip or the like, as determined to be necessary by the Planning Board. The flow pattern shall direct traffic into parking units. All driveways shall be clearly identified as to exit and/or entrance and direction of traffic flow. Where possible, curb-cuts shall be located on secondary roads and limited to only one on primary roads.

10.6.1.18 Curbing and walkways wherever developed shall meet all standards for curbing and walkways specified in the effective Rules & Regulations Governing the Subdivision of Land in the Town of Seekonk.

10.6.1.19 All parking spaces shall be accessible from the driving aisles or lanes by a single turn.

10.6.1.20 If the proposed development may generate 100 or more additional peak hour trips, based on the Institute of Traffic Engineers (ITE) Trip Generation Handbook, or if the Board determines that a safety or capacity deficiency exists, a traffic impact analysis prepared by a registered professional engineer shall be submitted by the applicant of existing conditions and future conditions with the proposed development.

10.6.1.21 The Planning Board may require that parking lots of adjacent properties be connected so as to prevent multiple entrances and exits on to the public streets by consumers.

10.6.2 Drainage

10.6.2.1 Any increase in the rate and or volume of stormwater runoff from existing conditions to the proposed conditions shall be prohibited unless said runoff can be captured onsite with drainage facilities designed to handle 100-year storm events. No drainage facilities shall dispose any runoff onto abutting properties.

10.6.3 Landscaping

10.6.3.1 A minimum 10 foot landscaped buffer around the perimeter of all sites shall be provided. A 25 foot buffer containing landscaping, a grassed earth berm, a fence, masonry wall or some combination of these screening devices, shall be provided on each side which adjoins or faces the side or rear lot line of a parcel in residential use or in a residence district to buffer non-residential sites from residential areas.

10.6.3.2 Each double row of parking spaces shall be terminated by landscaped islands which measure not less than ten feet in width and not less than 36 feet in length. The interior of parking lots shall have at a minimum landscaped center islands at every other double row. Pedestrian paths may be incorporated within the landscaped area provided a minimum of four feet, exclusive of paved areas, is maintained for all landscaped areas. Said double rows of parking spaces shall not exceed twenty (20) adjacent spaces or ten (10) spaces in each row.

10.6.3.3 The interior of parking areas shall be shaded by deciduous trees, which at maturity, each tree shall be presumed to shade a circular area having a radius of 15 feet with the trunk as the center. There must be sufficient trees so that, using this standard, 30 percent of the parking will be shaded.

10.6.3.4 Landscaping shall be so designed as to prevent parking or driving on any portion of a landscaped area except grassed areas to be used as overflow parking areas.

10.6.3.5 Landscaping, which shall all be live, shall include trees or shrubs of a potential height of at least three (3) feet sufficiently spaced to define and screen the area in the event the landscaping is inadequately maintained. Landscaping shall not interfere with a safe view of traffic or pedestrian flow.

10.6.3.6 Garbage collection, recycling areas, utility areas and other outside storage areas shall be screened by a planted buffer strip along three sides of such a facility. Planting material should include a mixture of evergreen trees and shrubs.

10.6.3.7 Display lots for motor vehicle sales shall be exempt from section 10.6.3.2 and 10.6.3.3 as long as a landscaped setback area not less than twenty (20) feet in depth except the area covered by access drives is provided. No vehicle shall be parked in the landscaped area or nearer than twenty (20) feet from the street lot line.

10.6.4. Lighting: The following shall be the minimum illumination levels measured in footcandles for all parking spaces serving the designated uses:

Industrial - 1.0; Commercial - 2.0; Shopping Centers - 3.0

The maximum spillover illumination to adjacent property shall be 1.0 footcandle. No areas shall be floodlit. Drives and parking areas shall not be illuminated by lighting fixtures higher than twenty (20) feet. Sidewalks shall not be illuminated by lighting fixtures higher than fifteen (15) feet. All lighting fixtures shall be shielded to have a total cutoff of all light at less than ninety (90) degrees. The total cutoff of all light shall occur within the property lines of

the parcel to be developed. A lighting plan showing the location and type of lighting fixtures as well as a photometric plan conforming to this section shall be submitted.

10.6.5. Drive-thrus

10.6.5.1 Drive-through facilities shall provide a minimum of 10 stacking spaces for donut shops, fast-food restaurants and banks and a minimum of 4 stacking spaces for pharmacies. If an order board and a transaction window are proposed, a minimum of 4 spaces between the two shall be provided. If more than one board and/or window are proposed, the stacking spaces may be divided between said boards and/or windows. A minimum of 3 stacking spaces to exit the facility shall also be provided.

10.6.5.2 Each stacking space shall be a minimum of 20 feet in length and 10 feet in width along straight portions and 12 feet in width along curved segments of the stacking lanes.

10.6.5.3 Stacking lanes shall be delineated from traffic aisles, other stacking lanes and parking areas with striping, curbing, landscaping, alternative paving materials, or raised medians. Said lanes shall be designed to prevent circulation congestion and shall not impede access into or out of parking spaces, pedestrian traffic, refuse/recycling areas and loading areas. An emergency by-pass lane shall be provided with all drive-through facilities.

10.6.6. Architectural Guidelines

The design of proposed buildings, structures and additions shall complement, whenever feasible, the general setback, roof line, arrangement of openings, color, exterior materials, proportion and scale of existing buildings in the vicinity.

10.6.7. Sustainable design incentives

The Board may waive any standards within the Site Plan Review section if any LEED certified standards or LID techniques are provided on the subject property.

10.6.8. Additional Site Plan Standards for the Luther's Corners Village District

10.6.8.1. Front yards shall not be used for parking. The parking standards in section 10.6.1.3 can be waived by the Planning Board if in the Board's opinion they will have a detrimental effect on the neighborhood character.

10.6.8.2. Front, side, or rear yards of commercial and mixed use buildings may be used as seasonal outdoor seating areas for businesses, provided that such areas are regularly cleaned and maintained, with trash removed on a daily basis. Seasonal outdoor seating areas may be installed during warm weather months. All related temporary furnishings and fixtures, including but not limited to tables, chairs, umbrellas, light fixtures, freestanding signs and menu boards, etc., shall be stored indoors off season; however any fencing, bollards, planters, or other means of delineating the boundaries of such outdoor seating areas may remain in place permanently.

10.6.8.3. Service alleys shall be provided behind mixed-use, commercial, or multi-family residential buildings to provide access for parking, loading, and garbage collection.

Alleys will typically be narrower than primary streets and need not include sidewalks, street trees, or parking lanes.

10.6.8.4. On streets with mixed and non-residential uses, sidewalks should be approximately 6 feet wide; for residential uses, approximately 5 feet wide. Smooth or aggregate concrete pavement, or unit pavers of brick, stone, or similar materials are preferred (unit pavers should be easily negotiable by wheelchairs); color-tinted asphalt stamped to resemble unit pavers may also be considered, but smooth black asphalt is discouraged. Accessible curb cuts shall be provided at all intersections and pedestrian crosswalks.

10.6.8.5. Crosswalks shall be provided at all intersections where heavy volumes of pedestrian and vehicular traffic are expected to intersect, and are encouraged for all street crossings along primary routes of pedestrian travel through this District. Crosswalks shall be constructed to provide both a change in color and texture from the regular roadway surface; such changes shall be A.D.A. compliant.

10.6.8.6. All streets trees shall be planted in a landscaped belt at least 5 feet wide between the street curb and the sidewalk. New development should consider utilizing existing mature trees for this purpose, particularly if such trees already frame or can be used to frame an important vista. New trees shall have a minimum 4-inch caliper at a level of 4 feet above grade, and shall be planted at intervals of approximately 40 feet or less. Hardy, climate-appropriate, deciduous species that will grow to a mature height of approximately 60 feet and will provide shade are preferred; smaller, ornamental trees may be interspersed with larger trees. Lower branches shall be trimmed to a height of at least 7 feet, so as not to interfere with pedestrians and to provide good visibility for drivers.

10.6.8.7. Buildings may vary in size and form and should provide that a comfortable pedestrian scale is maintained; variety in massing is specifically encouraged in developments containing multiple buildings. Vertical proportions are generally preferred, especially for windows and doors on horizontally massed buildings. Buildings with 100 feet or more of frontage should utilize design techniques that will create the appearance of a several smaller buildings, such as variations in the plane of the façade, in materials, in ornamentation, and/or in fenestration patterns (windows and doors).

10.6.8.8. Buildings shall be sited with their primary façade and main entrance facing either a street or a public open space; a sidewalk shall be provided to access the main entrances of all buildings. Rear elevations may face a service alley but shall not face a main road or a public open space. In a residential development with multiple buildings, consider varying the positioning of buildings within individual lots to provide visual interest along the streetscape.

10.6.8.9. A variety of roof lines is encouraged, including front gable, side gable, hip, and flat (with or without a parapet), particularly where buildings are to be sited close together within the same development. All buildings shall have a defined cornice.

i. Dormers are permitted on residential and mixed use buildings, provided that the ridge of any dormer shall be below the ridge of the main roof.

ii. Buildings sited at the intersection of two or more streets may have a clock tower at the corner(s) nearest that intersection(s), to create a focal point on a streetscape. The height of any such clock tower shall not exceed 55 feet.

10.6.8.10. All buildings shall be designed with varied and articulated facades to provide visual interest; decorative patterning in exterior wall materials should be considered. Long expanses of blank walls facing the street or public open space are not permitted, either on the ground floor or on upper floors. Where building frontage along a street is greater than 100 feet, architectural elements such as vertical piers, bay windows, and recessed entrances should be used to maintain pedestrian scale.

10.6.8.11. Mixed use and non-residential buildings shall provide continuous storefronts at the ground floor level, with at least sixty percent (60%) of the storefront containing transparent clear glass. Storefront windows may either provide views into the interior space used by a business, or be used for display only, enclosed on the interior by opaque walls. Storefront entrances may be recessed.

10.6.8.12. Awnings and/or Canopies may be provided above storefront windows and entrances, and may incorporate signage for a business. Preferred materials are opaque canvas, metal, or glass. Exterior illumination for awnings and canopies is preferred; gooseneck lamps or other decorative fixtures should be considered.

10.7 Compliance:

Before the issuance of a permanent occupancy permit, the Town Planner shall verify compliance with the approved site plan and an as-built, certified by a registered professional land surveyor or engineer shall be submitted to the Planning Board and Building Inspector. The as-built plan shall attest to a development's conformity to its approved site plan by indicating landscaping, buildings, drainage flow, number of parking stalls, and limits of parking areas and drives.

Any changes in the approved site plan or in the activity to be conducted on the site that would cause a change to any of the design standards of section 10.6 shall be submitted to the Planning Board for review and approval. The Town Planner may administratively approve any changes to the approved site plan that do not cause a change in any of the design standards of section 10.6.

10.8 Appeals:

Any person aggrieved by a decision of the Board under this section, shall first appeal to the Zoning Board of Appeals. Subsequent appeals shall be brought forth to Superior Court, the Land Court or the District Court pursuant to Chapter 40A, section 17 of the Massachusetts General Laws.

Off-Street Parking Study

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DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	3:59pm	14
2	Gulf	25±	3:58pm	16*
3	Hairs to You/Labonte's Auto School	12	4:02pm	5
4	East Bay Animal Hospital	8	4:03pm	1
5	Robert A. Federico Certified Public Accountant	15±	4:04pm	4
6	Family and Cosmetic Dentistry	16	4:05pm	9
7	Unknown	3	4:06pm	2
8	Gary's Barber	10	4:08pm	5
9	Unknown	20±	4:09pm	1
10	Amanda Lynn's Antiques	4	4:10pm	0
11	Vacant	10±	3:54pm	0
12	Corner Consignment Shop	13	3:54pm	0
13A	Seekonk Congregational Church/Daycare	40	3:53pm	7
13B	Seekonk Congregational Church	35	3:56pm	10

*4-6 Cars being worked on at service station

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	4:16pm	4
2	Gulf	25±	4:17pm	13
3	Hairs to You/Labonte's Auto School	12	4:18pm	5
4	East Bay Animal Hospital	8	4:19pm	3
5	Robert A. Federico Certified Public Accountant	15±	4:19pm	4
6	Family and Cosmetic Dentistry	16	4:19pm	8
7	Unknown	3	4:20pm	2
8	Gary's Barber	10	4:20pm	6
9	Unknown	20±	4:21pm	1
10	Amanda Lynn's Antiques	4	4:21pm	0
11	Vacant	10±	4:23pm	0
12	Corner Consignment Shop	13	4:12pm	0
13A	Seekonk Congregational Church/Daycare	40	4:12pm	3
13B	Seekonk Congregational Church	35	4:14pm	2

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	4:34pm	6
2	Gulf	25±	4:34pm	15
3	Hairs to You/Labonte's Auto School	12	4:35pm	7
4	East Bay Animal Hospital	8	4:36pm	3
5	Robert A. Federico Certified Public Accountant	15±	4:36pm	4
6	Family and Cosmetic Dentistry	16	4:37pm	6
7	Unknown	3	4:37pm	2
8	Gary's Barber	10	4:38pm	5
9	Unknown	20±	4:39pm	1
10	Amanda Lynn's Antiques	4	4:39pm	0
11	Vacant	10±	4:40pm	0
12	Corner Consignment Shop	13	4:31pm	0
13A	Seekonk Congregational Church/Daycare	40	4:30pm	3
13B	Seekonk Congregational Church	35	4:33pm	1

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	4:49pm	4
2	Gulf	25±	4:49pm	14
3	Hairs to You/Labonte's Auto School	12	4:50pm	6
4	East Bay Animal Hospital	8	4:50pm	3
5	Robert A. Federico Certified Public Accountant	15±	4:51pm	4
6	Family and Cosmetic Dentistry	16	4:51pm	6
7	Unknown	3	4:51pm	2
8	Gary's Barber	10	4:52pm	5
9	Unknown	20±	4:52pm	1
10	Amanda Lynn's Antiques	4	4:53pm	0
11	Vacant	10±	4:55pm	0
12	Corner Consignment Shop	13	4:45pm	0
13A	Seekonk Congregational Church/Daycare	40	4:45pm	5
13B	Seekonk Congregational Church	35	4:46pm	1

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	5:04pm	5
2	Gulf	25±	5:04pm	16
3	Hairs to You/Labonte's Auto School	12	5:05pm	6
4	East Bay Animal Hospital	8	5:06pm	4
5	Robert A. Federico Certified Public Accountant	15±	5:06pm	3
6	Family and Cosmetic Dentistry	16	5:06pm	6
7	Unknown	3	5:06pm	2
8	Gary's Barber	10	5:07pm	5
9	Unknown	20±	5:08pm	1
10	Amanda Lynn's Antiques	4	5:09pm	0
11	Vacant	10±	5:10pm	0
12	Corner Consignment Shop	13	5:01pm	0
13A	Seekonk Congregational Church/Daycare	40	5:01pm	2
13B	Seekonk Congregational Church	35	5:03pm	1

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	5:19pm	5
2	Gulf	25±	5:19pm	13
3	Hairs to You/Labonte's Auto School	12	5:20pm	6
4	East Bay Animal Hospital	8	5:20pm	3
5	Robert A. Federico Certified Public Accountant	15±	5:21pm	3
6	Family and Cosmetic Dentistry	16	5:21pm	5
7	Unknown	3	5:21pm	1
8	Gary's Barber	10	5:23pm	1
9	Unknown	20±	5:23pm	1
10	Amanda Lynn's Antiques	4	5:24pm	0
11	Vacant	10±	5:24pm	0
12	Corner Consignment Shop	13	5:16pm	0
13A	Seekonk Congregational Church/Daycare	40	5:16pm	2
13B	Seekonk Congregational Church	35	5:18pm	1

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	5:35pm	6
2	Gulf	25±	5:35pm	16
3	Hairs to You/Labonte's Auto School	12	5:36pm	6
4	East Bay Animal Hospital	8	5:36pm	2
5	Robert A. Federico Certified Public Accountant	15±	5:38pm	2
6	Family and Cosmetic Dentistry	16	5:38pm	3
7	Unknown	3	5:38pm	2
8	Gary's Barber	10	5:40pm	0
9	Unknown	20±	5:40pm	1
10	Amanda Lynn's Antiques	4	5:42pm	0
11	Vacant	10±	5:44pm	0
12	Corner Consignment Shop	13	5:32pm	0
13A	Seekonk Congregational Church/Daycare	40	5:32pm	1
13B	Seekonk Congregational Church	35	5:35pm	1

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Saturday Peak (1:00pm-3:00pm)

Date Observed: 4/17/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	5:51pm	3
2	Gulf	25±	5:51pm	12
3	Hairs to You/Labonte's Auto School	12	5:52pm	8
4	East Bay Animal Hospital	8	5:53pm	2
5	Robert A. Federico Certified Public Accountant	15±	5:54pm	2
6	Family and Cosmetic Dentistry	16	5:54pm	2
7	Unknown	3	5:54pm	2
8	Gary's Barber	10	5:56pm	0
9	Unknown	20±	5:56pm	1
10	Amanda Lynn's Antiques	4	5:56pm	0
11	Vacant	10±	5:58pm	0
12	Corner Consignment Shop	13	5:48pm	0
13A	Seekonk Congregational Church/Daycare	40	5:48pm	0
13B	Seekonk Congregational Church	35	5:50pm	0

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	1:02pm	5
2	Gulf	25±	1:02pm	15
3	Hairs to You/Labonte's Auto School	12	1:02pm	8
4	East Bay Animal Hospital	8	1:03pm	0
5	Robert A. Federico Certified Public Accountant	15±	1:03pm	4
6	Family and Cosmetic Dentistry	16	1:03pm	0
7	Unknown	3	1:03pm	0
8	Gary's Barber	10	1:04pm	7
9	Unknown	20±	1:04pm	0
10	Amanda Lynn's Antiques	4	1:04pm	1
11	Vacant	10±	1:00pm	0
12	Corner Consignment Shop	13	1:00pm	0
13A	Seekonk Congregational Church/Daycare	40	1:00pm	0
13B	Seekonk Congregational Church	35	1:01pm	10

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	1:16pm	6
2	Gulf	25±	1:16pm	12
3	Hairs to You/Labonte's Auto School	12	1:16pm	8
4	East Bay Animal Hospital	8	1:17pm	0
5	Robert A. Federico Certified Public Accountant	15±	1:17pm	4
6	Family and Cosmetic Dentistry	16	1:17pm	0
7	Unknown	3	1:17pm	0
8	Gary's Barber	10	1:17pm	7
9	Unknown	20±	1:17pm	0
10	Amanda Lynn's Antiques	4	1:17pm	1
11	Vacant	10±	1:15pm	0
12	Corner Consignment Shop	13	1:15pm	0
13A	Seekonk Congregational Church/Daycare	40	1:15pm	0
13B	Seekonk Congregational Church	35	1:15pm	9

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	1:30pm	2
2	Gulf	25±	1:30pm	15
3	Hairs to You/Labonte's Auto School	12	1:31pm	6
4	East Bay Animal Hospital	8	1:31pm	3
5	Robert A. Federico Certified Public Accountant	15±	1:31pm	4
6	Family and Cosmetic Dentistry	16	1:31pm	0
7	Unknown	3	1:32pm	0
8	Gary's Barber	10	1:32pm	2
9	Unknown	20±	1:32pm	0
10	Amanda Lynn's Antiques	4	1:32pm	0
11	Vacant	10±	1:30pm	0
12	Corner Consignment Shop	13	1:30pm	0
13A	Seekonk Congregational Church/Daycare	40	1:30pm	0
13B	Seekonk Congregational Church	35	1:30pm	6

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	1:46pm	3
2	Gulf	25±	1:46pm	15
3	Hairs to You/Labonte's Auto School	12	1:46pm	6
4	East Bay Animal Hospital	8	1:47pm	3
5	Robert A. Federico Certified Public Accountant	15±	1:47pm	4
6	Family and Cosmetic Dentistry	16	1:47pm	0
7	Unknown	3	1:47pm	0
8	Gary's Barber	10	1:48pm	1
9	Unknown	20±	1:48pm	0
10	Amanda Lynn's Antiques	4	1:48pm	0
11	Vacant	10±	1:45pm	0
12	Corner Consignment Shop	13	1:45pm	0
13A	Seekonk Congregational Church/Daycare	40	1:45pm	0
13B	Seekonk Congregational Church	35	1:45pm	8

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	2:02pm	6
2	Gulf	25±	2:02pm	12
3	Hairs to You/Labonte's Auto School	12	2:02pm	5
4	East Bay Animal Hospital	8	2:03pm	2
5	Robert A. Federico Certified Public Accountant	15±	2:03pm	6
6	Family and Cosmetic Dentistry	16	2:03pm	0
7	Unknown	3	2:04pm	0
8	Gary's Barber	10	2:04pm	5
9	Unknown	20±	2:04pm	0
10	Amanda Lynn's Antiques	4	2:04pm	0
11	Vacant	10±	2:00pm	0
12	Corner Consignment Shop	13	2:00pm	0
13A	Seekonk Congregational Church/Daycare	40	2:00pm	0
13B	Seekonk Congregational Church	35	2:02pm	6

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	2:16pm	4
2	Gulf	25±	2:16pm	10
3	Hairs to You/Labonte's Auto School	12	2:18pm	5
4	East Bay Animal Hospital	8	2:18pm	1
5	Robert A. Federico Certified Public Accountant	15±	2:18pm	5
6	Family and Cosmetic Dentistry	16	2:18pm	0
7	Unknown	3	2:18pm	4
8	Gary's Barber	10	2:20pm	0
9	Unknown	20±	2:20pm	0
10	Amanda Lynn's Antiques	4	2:20pm	0
11	Vacant	10±	2:15pm	0
12	Corner Consignment Shop	13	2:15pm	0
13A	Seekonk Congregational Church/Daycare	40	2:15pm	0
13B	Seekonk Congregational Church	35	2:15pm	8

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	2:31pm	6
2	Gulf	25±	2:31pm	11
3	Hairs to You/Labonte's Auto School	12	2:31pm	5
4	East Bay Animal Hospital	8	2:32pm	0
5	Robert A. Federico Certified Public Accountant	15±	2:32pm	4
6	Family and Cosmetic Dentistry	16	2:32pm	0
7	Unknown	3	2:32pm	3
8	Gary's Barber	10	2:34pm	0
9	Unknown	20±	2:34pm	0
10	Amanda Lynn's Antiques	4	2:34pm	0
11	Vacant	10±	2:30pm	0
12	Corner Consignment Shop	13	2:30pm	0
13A	Seekonk Congregational Church/Daycare	40	2:30pm	0
13B	Seekonk Congregational Church	35	2:31pm	6

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	2:46pm	5
2	Gulf	25±	2:46pm	16
3	Hairs to You/Labonte's Auto School	12	2:46pm	4
4	East Bay Animal Hospital	8	2:47pm	0
5	Robert A. Federico Certified Public Accountant	15±	2:47pm	3
6	Family and Cosmetic Dentistry	16	2:47pm	0
7	Unknown	3	2:47pm	0
8	Gary's Barber	10	2:48pm	0
9	Unknown	20±	2:48pm	0
10	Amanda Lynn's Antiques	4	2:48pm	0
11	Vacant	10±	2:45pm	0
12	Corner Consignment Shop	13	2:45pm	0
13A	Seekonk Congregational Church/Daycare	40	2:45pm	0
13B	Seekonk Congregational Church	35	2:46pm	4

DiPrete Engineering

Luther's Corner's Village Off-Street Parking Study

Weekday Peak (4:00pm-6:00pm)

Date Observed: 4/21/2012

Observed by: BDC

Map Reference No.	Business Name	# Existing Parking Spaces	Time Observed	# of Cars
1	Dunkin Donuts	25	3:03pm	6
2	Gulf	25±	3:03pm	16
3	Hairs to You/Labonte's Auto School	12	3:04pm	5
4	East Bay Animal Hospital	8	3:04pm	0
5	Robert A. Federico Certified Public Accountant	15±	3:04pm	2
6	Family and Cosmetic Dentistry	16	3:04pm	0
7	Unknown	3	3:04pm	0
8	Gary's Barber	10	3:05pm	0
9	Unknown	20±	3:05pm	0
10	Amanda Lynn's Antiques	4	3:05pm	0
11	Vacant	10±	3:00pm	0
12	Corner Consignment Shop	13	3:00pm	0
13A	Seekonk Congregational Church/Daycare	40	3:00pm	0
13B	Seekonk Congregational Church	35	3:03pm	6

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Appendix B: Traffic Data and Analysis

Traffic Volume Data

Speed Study Data

Traffic Crash Data

Intersection Capacity Analysis Worksheets

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Traffic Volume Data

Automatic Traffic Recorder Data

Fall River Avenue (Route 114A)

County Street

Intersection Turning Movement Count Data

Fall River Avenue (Route 114A) @ County Street

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Fall River Avenue (Route 114A)

(Source: Caputo and Wick Ltd.)

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Weather : VARIABLE
Counted by: A.C.T.S.
Board # : 356
Other : SEEKONK
Street name :FALL RIVER AVE Cross street:BTW COUNTY ST & MILL ST LN 1 NB, LN 2 SB

A.C.T.S.
AUTOMATED COUNTS & TRAFFIC SURVEYS INC.
2 BURCHARD AVENUE, LITTLE COMPTON, R.I.
(401) 635 - 1650

Site Code : 000007042503
Start Date: 04/22/07
File I.D. : CWS0403
Page : 1

Begin	Mon. 04/23		Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week Avg.	
Time	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
12:00 am	*	*	*	*	*	*	*	*	62	54	116	105	161	129	113	96
01:00	*	*	*	*	*	*	*	*	42	30	72	56	98	67	71	51
02:00	*	*	*	*	*	*	*	*	29	26	60	29	69	39	53	31
03:00	*	*	*	*	*	*	*	*	26	18	19	15	30	21	25	18
04:00	*	*	*	*	*	*	*	*	64	49	30	28	23	25	39	34
05:00	*	*	*	*	*	*	*	*	198	134	70	73	36	55	101	87
06:00	*	*	*	*	*	*	*	*	491	394	193	153	90	108	258	218
07:00	*	*	*	*	*	*	*	*	858	557	310	330	158	189	442	359
08:00	*	*	*	*	*	*	*	*	934	612	570	499	305	336	603	482
09:00	*	*	*	*	*	*	*	*	633	644	674	659	470	516	592	606
10:00	*	*	*	*	*	*	655	685	611	672	785	795	*	*	684	717
11:00	*	*	*	*	*	*	768	628	690	678	960	829	*	*	806	712
12:00 pm	*	*	*	*	*	*	723	681	781	621	885	837	*	*	796	713
01:00	*	*	*	*	*	*	768	745	766	768	901	790	*	*	812	768
02:00	*	*	*	*	*	*	887	717	876	783	875	808	*	*	879	769
03:00	*	*	*	*	*	*	971	773	958	800	842	775	*	*	924	783
04:00	*	*	*	*	*	*	1049	788	995	817	934	840	*	*	993	815
05:00	*	*	*	*	*	*	1074	825	974	777	799	742	*	*	949	781
06:00	*	*	*	*	*	*	851	710	803	748	709	724	*	*	788	727
7:00	*	*	*	*	*	*	659	633	614	565	601	526	*	*	625	575
08:00	*	*	*	*	*	*	483	431	465	389	534	438	*	*	494	419
9:00	*	*	*	*	*	*	363	313	458	316	487	348	*	*	436	326
0:00	*	*	*	*	*	*	205	150	313	251	316	222	*	*	278	208
1:00	*	*	*	*	*	*	116	105	213	226	239	175	*	*	189	169
Totals	0	0	0	0	0	0	9572	8184	12854	10929	11981	10796	1440	1485	11950	10464
	0		0		0		17756		23783		22777		2925		22414	

Avg. = 23,280

Avg. Day	.0%	.0%	.0%	.0%	.0%	.0%	80.1%	78.2%	107.5%	104.4%	100.2%	103.1%	12.0%	14.1%		
AM Peaks							11:00	10:00	08:00	11:00	11:00	11:00	09:00	09:00	11:00	10:00
Volume							768	685	934	678	960	829	470	516	806	717
PM Peaks							05:00	05:00	04:00	04:00	04:00	04:00			04:00	04:00
Volume							1074	825	995	817	934	840			993	815

ADTs

AADT = 22,000 vpd

Weather : VARIABLE
Counted by: A.C.T.S.
Board # : 56
Other : SEEKONK

A.C.T.S.
AUTOMATED COUNTS & TRAFFIC SURVEYS INC.
2 BURCHARD AVENUE, LITTLE COMPTON, R.I.
(401) 635 - 1650

Site Code : 000007042502
Start Date: 04/22/07
File I.D. : CWS0402
Page : 1

Street name :FALL RIVER AVE Cross street:BTW RTE 195 & COUNTY ST LN 1 SB, LN 2 NB

Begin	Mon. 04/23		Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week	Avg.
Time	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
12:00 am	*	*	*	*	*	*	44	63	50	62	133	119	118	169	86	103
01:00	*	*	*	*	*	*	28	43	37	46	63	80	77	95	51	66
02:00	*	*	*	*	*	*	27	27	32	34	38	53	46	64	36	44
03:00	*	*	*	*	*	*	30	33	27	35	18	37	28	32	26	34
04:00	*	*	*	*	*	*	51	72	53	66	32	39	26	15	40	48
05:00	*	*	*	*	*	*	165	218	153	208	74	78	48	41	110	136
06:00	*	*	*	*	*	*	414	555	417	554	170	219	128	91	282	355
07:00	*	*	*	*	*	*	671	1108	570	952	375	327	206	184	456	643
08:00	*	*	*	*	*	*	752	910	715	948	567	584	382	338	604	695
09:00	*	*	*	*	*	*	667	596	683	623	741	607	542	434	658	565
10:00	*	*	*	*	*	*	733	601	746	578	825	870	*	*	768	683
11:00	*	*	*	*	*	*	721	681	726	639	967	960	*	*	805	760
12:00 pm	*	*	*	*	*	*	765	666	743	682	920	822	*	*	809	723
01:00	*	*	*	*	683	727	812	693	842	657	963	773	*	*	825	712
02:00	*	*	*	*	870	743	822	808	888	759	909	836	*	*	872	786
03:00	*	*	*	*	935	867	925	898	957	882	891	749	*	*	927	849
04:00	*	*	*	*	991	977	1039	963	1012	872	925	834	*	*	992	912
05:00	*	*	*	*	1048	907	1014	941	994	881	840	705	*	*	974	858
06:00	*	*	*	*	795	625	838	707	868	673	822	660	*	*	831	666
07:00	*	*	*	*	563	517	651	531	608	563	564	523	*	*	596	534
08:00	*	*	*	*	432	394	461	408	434	451	464	455	*	*	448	427
09:00	*	*	*	*	289	350	312	312	375	434	423	454	*	*	350	388
10:00	*	*	*	*	138	156	176	195	296	321	257	308	*	*	217	245
11:00	*	*	*	*	95	94	116	114	225	227	187	235	*	*	156	168
Totals	0	0	0	0	6839	6357	12234	12143	12451	12147	12168	11327	1601	1463	11919	11400
	0		0		13196		24377		24598		23495		3064		23319	

Avg. = 24,157

Avg. Day	.0%	.0%	.0%	.0%	57.3%	55.7%	102.6%	106.5%	104.4%	106.5%	102.0%	99.3%	13.4%	12.8%		
AM Peaks							08:00	07:00	10:00	07:00	11:00	11:00	09:00	09:00	11:00	11:00
Volume							752	1108	746	952	967	960	542	434	805	760
PM Peaks					05:00	04:00	04:00	04:00	04:00	03:00	01:00	02:00			04:00	04:00
Volume					1048	977	1039	963	1012	882	963	836			992	912

ADTs

AADT = 22,700 vpd

County Street

(Source: Caputo and Wick Ltd.)

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Weather : VARIABLE
Counted by: A.C.T.S.
Board # : 366
Other : SEEKONK

A.C.T.S.
AUTOMATED COUNTS & TRAFFIC SURVEYS INC.
2 BURCHARD AVENUE, LITTLE COMPTON, R.I.
(401) 635 - 1650

Site Code : 000007042506
Start Date: 04/22/07
File I.D. : CWS0406

Street name :COUNTY ST Cross street:EAST OF FALL RIVER AVE LN 1 WB, LN 2 EB

Begin	Mon.	04/23	Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week Avg.	
Time	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
12:00 am	*	*	*	*	*	*	9	15	9	19	13	29	35	54	16	29
01:00	*	*	*	*	*	*	2	8	4	15	7	19	17	27	8	17
02:00	*	*	*	*	*	*	4	4	3	5	6	18	21	16	8	11
03:00	*	*	*	*	*	*	8	3	15	9	10	12	13	11	12	9
04:00	*	*	*	*	*	*	20	6	20	4	11	2	5	2	14	4
05:00	*	*	*	*	*	*	88	12	78	13	36	13	24	14	56	13
06:00	*	*	*	*	*	*	205	34	185	43	89	51	50	36	132	41
07:00	*	*	*	*	*	*	407	99	391	93	135	66	88	74	255	83
08:00	*	*	*	*	*	*	317	111	308	94	202	101	183	121	252	107
09:00	*	*	*	*	*	*	202	110	194	108	225	149	182	150	201	129
10:00	*	*	*	*	*	*	158	142	151	136	271	205	*	*	193	161
11:00	*	*	*	*	*	*	173	146	159	153	302	234	*	*	211	178
12:00 pm	*	*	*	*	*	*	176	176	165	159	287	234	*	*	209	190
01:00	*	*	*	*	163	166	197	158	186	136	270	240	*	*	204	175
02:00	*	*	*	*	203	194	218	201	198	188	270	230	*	*	222	203
03:00	*	*	*	*	227	217	220	217	193	243	263	231	*	*	226	227
04:00	*	*	*	*	228	272	234	257	232	216	212	220	*	*	226	241
05:00	*	*	*	*	269	219	246	233	265	240	217	167	*	*	249	215
06:00	*	*	*	*	185	209	230	229	199	210	207	166	*	*	205	204
07:00	*	*	*	*	146	161	153	181	133	186	156	153	*	*	147	170
08:00	*	*	*	*	95	138	111	147	93	144	96	135	*	*	99	141
09:00	*	*	*	*	98	94	62	112	79	107	82	122	*	*	80	109
10:00	*	*	*	*	38	54	47	49	55	72	72	94	*	*	53	67
11:00	*	*	*	*	20	35	26	38	39	62	54	75	*	*	35	52
Totals	0	0	0	0	1672	1759	3513	2688	3354	2655	3493	2966	618	505	3313	2776
	0		0		3431		6201		6009		6459		1123		6089	

AVG. = 6,223

Avg. Day	.0%	.0%	.0%	.0%	50.4%	63.3%	106.0%	96.8%	101.2%	95.6%	105.4%	106.8%	18.6%	18.1%		
AM Peaks							07:00	11:00	07:00	11:00	11:00	11:00	08:00	09:00	07:00	11:00
Volume							407	146	391	153	302	234	183	150	255	178
PM Peaks					05:00	04:00	05:00	04:00	05:00	03:00	12:00	01:00			05:00	04:00
Volume					269	272	246	257	265	243	287	240			249	241

ADTs

AADT = 5,800 vpd

Weather : VARIABLE
Counted by: A.C.T.S.
Board # : 2870
Other : SEEKONK

A.C.T.S.
AUTOMATED COUNTS & TRAFFIC SURVEYS INC.
2 BURCHARD AVENUE, LITTLE COMPTON, R.I.
(401) 635 - 1650

Site Code : 000007042507
Start Date: 04/22/07
File I.D. : CWS0407
Page : 1

Street name :WATERMAN AVE Cross street:WEST OF FALL RIVER AVE LN 1 WB, LN 2 EB

Begin	Mon. 04/23		Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week Avg.	
Time	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
12:00 am	*	*	*	*	*	*	26	27	28	41	31	98	78	94	41	65
01:00	*	*	*	*	*	*	14	26	23	34	16	56	35	63	22	45
02:00	*	*	*	*	*	*	15	15	15	19	14	55	24	47	17	34
03:00	*	*	*	*	*	*	16	15	20	13	20	28	18	24	18	20
04:00	*	*	*	*	*	*	39	23	38	25	16	21	9	20	26	22
05:00	*	*	*	*	*	*	145	62	127	56	52	37	32	26	89	45
06:00	*	*	*	*	*	*	387	127	356	104	136	115	76	82	239	107
07:00	*	*	*	*	*	*	734	291	658	262	227	191	142	130	440	218
08:00	*	*	*	*	*	*	722	313	714	318	351	289	226	257	503	294
09:00	*	*	*	*	*	*	443	322	465	356	442	384	345	336	424	350
10:00	*	*	*	*	*	*	423	421	385	405	538	561	*	*	449	462
11:00	*	*	*	*	*	*	405	453	428	466	567	635	*	*	467	518
12:00 pm	*	*	*	*	*	*	483	559	448	524	571	746	*	*	501	610
01:00	*	*	*	*	*	*	478	519	459	499	505	638	*	*	481	552
02:00	*	*	*	*	451	575	479	556	501	622	543	663	*	*	494	604
03:00	*	*	*	*	427	577	462	612	457	679	538	603	*	*	471	618
04:00	*	*	*	*	414	914	452	876	418	725	476	564	*	*	440	770
05:00	*	*	*	*	439	817	447	754	458	744	438	502	*	*	446	704
06:00	*	*	*	*	437	537	457	568	436	516	438	462	*	*	442	521
07:00	*	*	*	*	319	399	377	459	343	445	386	420	*	*	356	431
08:00	*	*	*	*	215	310	292	372	242	348	244	365	*	*	248	349
09:00	*	*	*	*	200	250	182	264	210	284	205	283	*	*	199	270
10:00	*	*	*	*	103	115	119	148	133	195	145	189	*	*	125	162
11:00	*	*	*	*	69	79	80	95	96	158	111	134	*	*	89	116
Totals	0	0	0	0	3074	4573	7677	7877	7458	7838	7010	8039	985	1079	7027	7887
	0		0		7647		15554		15296		15049		2064		14914	

Avg. = 15,300

Avg. Day	.0%	.0%	.0%	.0%	43.7%	57.9%	109.2%	99.8%	106.1%	99.3%	99.7%	101.9%	14.0%	13.6%		
AM Peaks							07:00	11:00	08:00	11:00	11:00	11:00	09:00	09:00	08:00	11:00
Volume							734	453	714	466	567	635	345	336	503	518
PM Peaks					02:00	04:00	12:00	04:00	02:00	05:00	12:00	12:00			12:00	04:00
Volume					451	914	483	876	501	744	571	746			501	770

ADTs

AADT = 14,400 vpd

Fall River Avenue (Route 114A) @ County Street

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RAB Professional Engineers, Inc.
10 Ross Simons Drive
Cranston, Rhode Island 02920

Project: Luthers Corner
Town: Seekonk
Intersection: Fall River at County
Weather: Sunny/Cool

File Name : Fall River at County
Site Code : 00000111
Start Date : 04/11/2012
Page No : 1

Groups Printed- Automobiles - Trucks

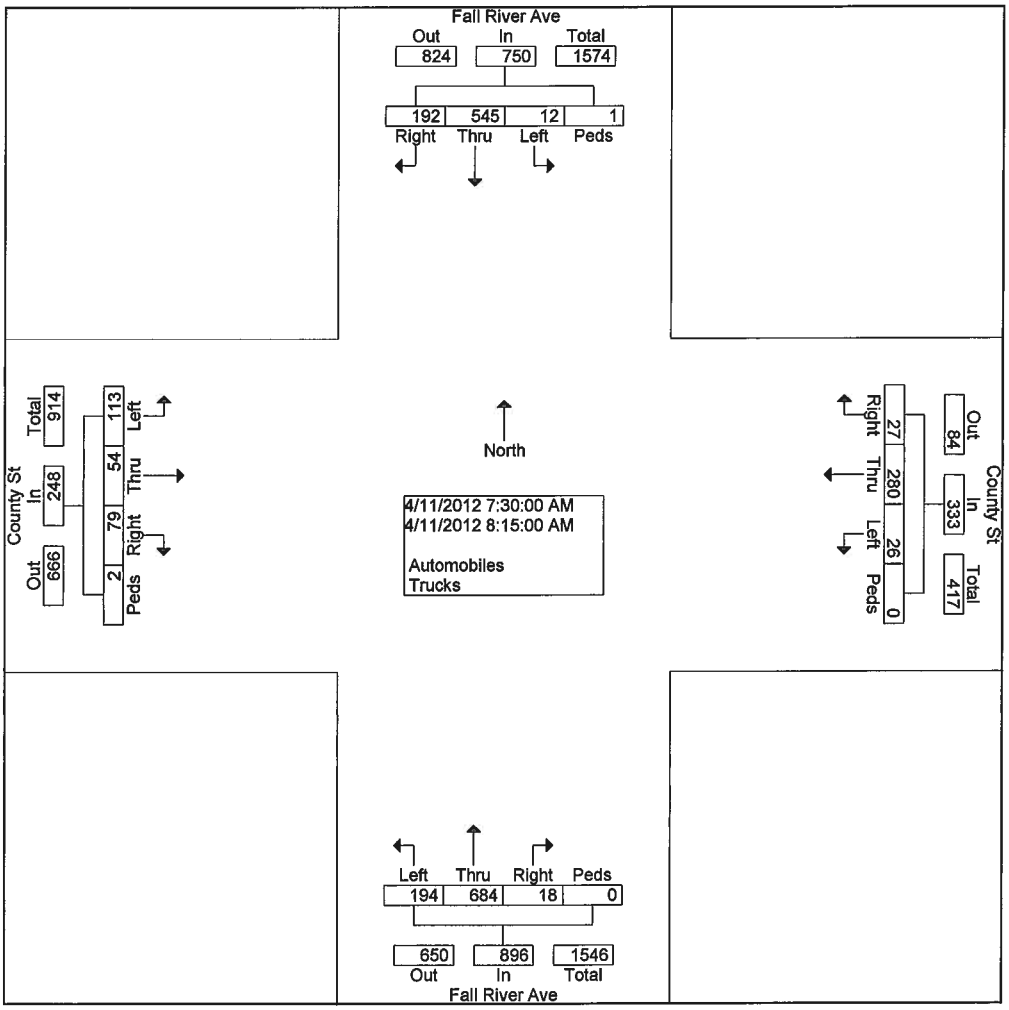
	Fall River Ave Southbound					County St Westbound					Fall River Ave Northbound					County St Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	3	83	30	0	116	5	47	10	0	62	28	137	1	0	166	12	12	14	0	38	382
07:15 AM	2	115	38	1	156	6	55	8	1	70	35	162	4	1	202	25	9	10	0	44	472
07:30 AM	2	126	40	0	168	5	73	7	0	85	33	181	1	0	215	27	10	21	0	58	526
07:45 AM	2	137	56	0	195	6	81	4	0	91	52	198	5	0	255	32	12	15	0	59	600
Total	9	461	164	1	635	22	256	29	1	308	148	678	11	1	838	96	43	60	0	199	1980
08:00 AM	5	125	36	0	166	4	63	8	0	75	51	152	4	0	207	29	14	16	1	60	508
08:15 AM	3	157	60	1	221	11	63	8	0	82	58	153	8	0	219	25	18	27	1	71	593
08:30 AM	4	116	39	0	159	10	81	6	0	97	43	134	4	0	181	20	16	18	0	54	491
08:45 AM	1	112	53	0	166	11	38	4	0	53	44	144	3	0	191	30	23	23	1	77	487
Total	13	510	188	1	712	36	245	26	0	307	196	583	19	0	798	104	71	84	3	262	2079
09:00 AM	3	118	39	0	160	8	31	5	0	44	22	97	7	0	126	25	21	29	1	76	406
09:15 AM	1	128	41	0	170	7	30	7	0	44	23	110	7	0	140	26	20	25	0	71	425
																					***
BREAK ***																					
Total	4	246	80	0	330	15	61	12	0	88	45	207	14	0	266	51	41	54	1	147	831
*** BREAK ***																					
04:00 PM	2	167	36	0	205	12	43	4	0	59	17	135	15	0	167	47	58	42	0	147	578
04:15 PM	1	156	37	0	194	4	40	2	0	46	12	170	13	0	195	60	48	53	0	161	596
04:30 PM	6	144	30	0	180	13	43	1	0	57	13	176	13	0	202	53	45	51	0	149	588
04:45 PM	3	184	27	0	214	15	36	3	0	54	11	193	12	0	216	57	56	43	0	156	640
Total	12	651	130	0	793	44	162	10	0	216	53	674	53	0	780	217	207	189	0	613	2402
05:00 PM	3	177	36	0	216	9	42	7	0	58	24	193	20	0	237	58	48	59	0	165	676
05:15 PM	7	184	20	0	211	10	33	10	0	53	12	193	21	0	226	61	49	53	0	163	653
05:30 PM	2	167	65	0	234	27	52	4	0	83	16	179	18	1	214	39	43	51	2	135	666
05:45 PM	6	166	47	0	219	8	55	8	0	71	20	151	12	0	183	50	37	46	0	133	606
Total	18	694	168	0	880	54	182	29	0	265	72	716	71	1	860	208	177	209	2	596	2601
06:00 PM	4	142	42	0	188	8	46	4	0	58	22	146	13	0	181	50	57	48	0	155	582
06:15 PM	2	168	34	0	204	6	52	4	0	62	18	145	12	0	175	48	40	34	0	122	563
Grand Total	62	2872	806	2	3742	185	1004	114	1	1304	554	3149	193	2	3898	774	636	678	6	2094	11038
Apprch %	1.7	76.8	21.5	0.1		14.2	77.0	8.7	0.1		14.2	80.8	5.0	0.1		37.0	30.4	32.4	0.3		
Total %	0.6	26.0	7.3	0.0	33.9	1.7	9.1	1.0	0.0	11.8	5.0	28.5	1.7	0.0	35.3	7.0	5.8	6.1	0.1	19.0	

RAB Professional Engineers, Inc.
10 Ross Simons Drive
Cranston, Rhode Island 02920

Project: Luthers Corner
Town: Seekonk
Intersection: Fall River at County
Weather: Sunny/Cool

File Name : Fall River at County
Site Code : 00000111
Start Date : 04/11/2012
Page No : 2

	Fall River Ave Southbound					County St Westbound					Fall River Ave Northbound					County St 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 From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	12	545	192	1	750	26	280	27	0	333	194	684	18	0	896	113	54	79	2	248	2227
Percent	1.6	72.7	25.6	0.1		7.8	84.1	8.1	0.0		21.7	76.3	2.0	0.0		45.6	21.8	31.9	0.8		
07:45 Volume	2	137	56	0	195	6	81	4	0	91	52	198	5	0	255	32	12	15	0	59	600
Peak Factor																					0.928
High Int.	08:15 AM					07:45 AM					07:45 AM					08:15 AM					
Volume	3	157	60	1	221	6	81	4	0	91	52	198	5	0	255	25	18	27	1	71	
Peak Factor					0.848					0.915					0.878					0.873	

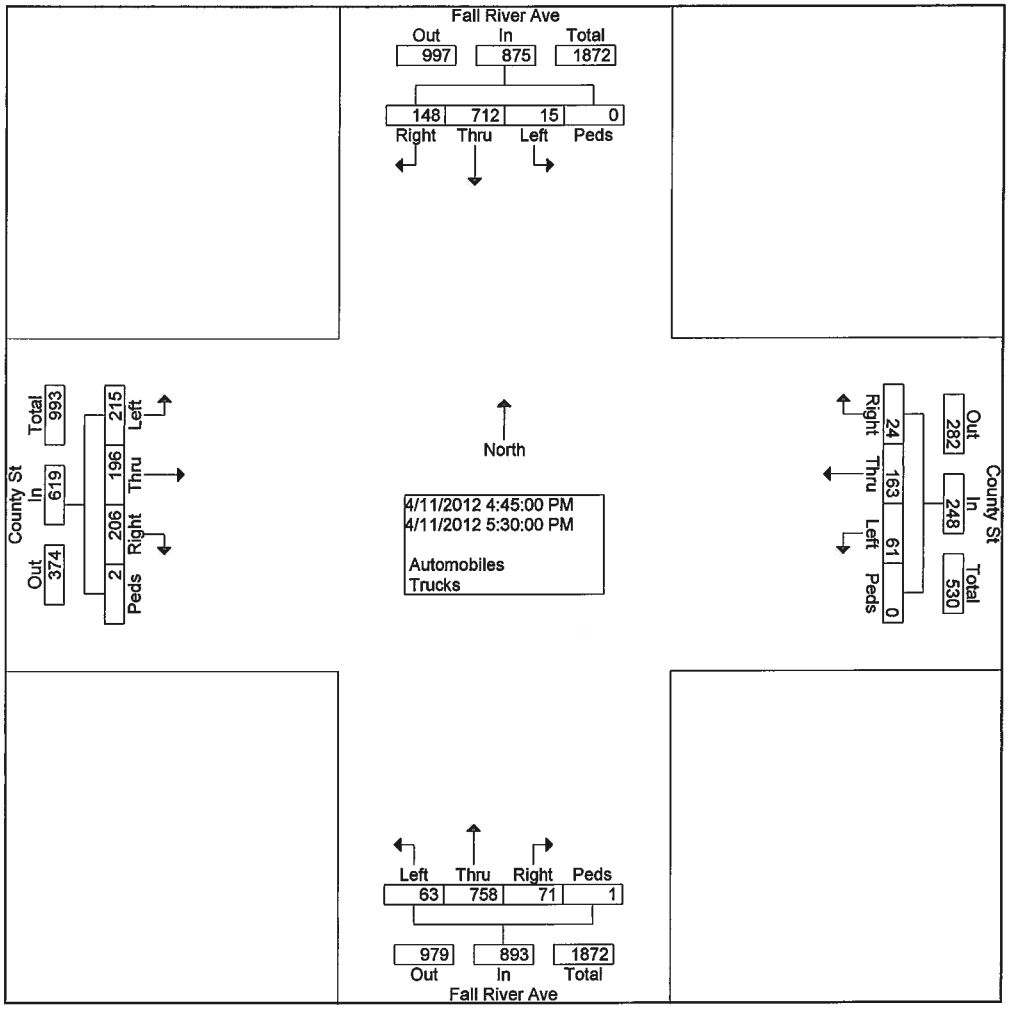


RAB Professional Engineers, Inc.
10 Ross Simons Drive
Cranston, Rhode Island 02920

Project: Luthers Corner
Town: Seekonk
Intersection: Fall River at County
Weather: Sunny/Cool

File Name : Fall River at County
Site Code : 00000111
Start Date : 04/11/2012
Page No : 3

	Fall River Ave Southbound					County St Westbound					Fall River Ave Northbound					County St 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 From 12:00 PM to 06:15 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	15	712	148	0	875	61	163	24	0	248	63	758	71	1	893	215	196	206	2	619	2635
Percent	1.7	81.4	16.9	0.0		24.6	65.7	9.7	0.0		7.1	84.9	8.0	0.1		34.7	31.7	33.3	0.3		
05:00 Volume	3	177	36	0	216	9	42	7	0	58	24	193	20	0	237	58	48	59	0	165	676
Peak Factor																					0.974
High Int.	05:30 PM					05:30 PM					05:00 PM					05:00 PM					
Volume	2	167	65	0	234	27	52	4	0	83	24	193	20	0	237	58	48	59	0	165	
Peak Factor					0.935					0.747					0.942					0.938	



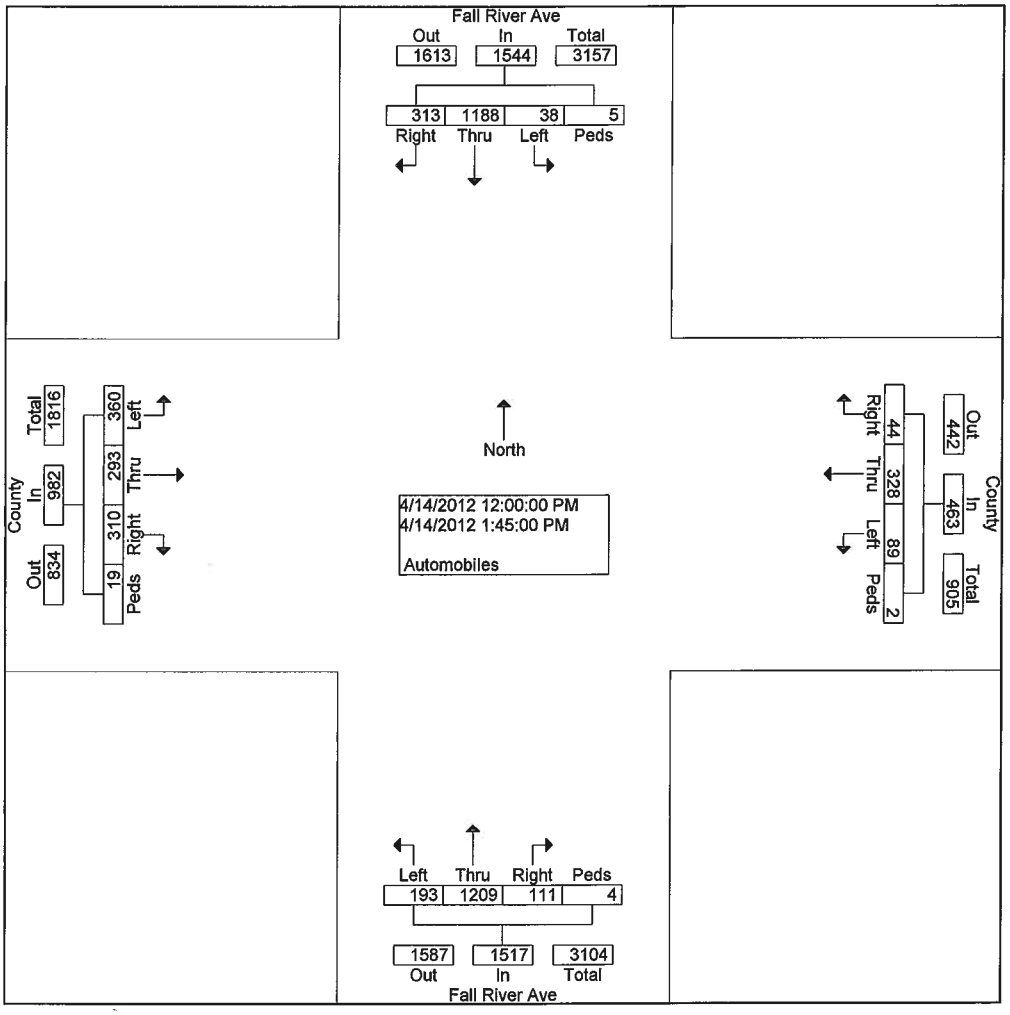
RAB Professional Engineers, Inc.
10 Ross Simons Drive
Cranston, Rhode Island 02920

Project: Luthers Corner - Saturday
Town: Seekonk
Intersection: Fall River at County
Weather: Sunny/Cool

File Name : Fall River at County Sat
Site Code : 00000555
Start Date : 04/14/2012
Page No : 1

Groups Printed- Automobiles

	Fall River Ave Southbound					County Westbound					Fall River Ave Northbound					County 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
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
12:00 PM	3	123	25	0	151	10	26	6	0	42	17	77	14	1	109	33	29	21	0	83	385
12:15 PM	3	137	37	0	177	9	48	3	0	60	36	159	16	0	211	52	38	54	0	144	592
12:30 PM	2	139	45	0	186	10	36	7	0	53	19	140	10	0	169	42	25	27	0	94	502
12:45 PM	2	157	48	2	209	16	45	3	0	64	22	182	20	1	225	50	36	54	16	156	654
Total	10	556	155	2	723	45	155	19	0	219	94	558	60	2	714	177	128	156	16	477	2133
01:00 PM	5	162	40	1	208	9	45	6	1	61	36	165	13	0	214	41	50	46	0	137	620
01:15 PM	5	159	35	1	200	13	46	4	0	63	24	163	16	1	204	43	44	36	0	123	590
01:30 PM	4	174	38	0	216	6	34	10	1	51	26	158	10	0	194	47	39	27	1	114	575
01:45 PM	14	137	45	1	197	16	48	5	0	69	13	165	12	1	191	52	32	45	2	131	588
Total	28	632	158	3	821	44	173	25	2	244	99	651	51	2	803	183	165	154	3	505	2373
Grand Total	38	1188	313	5	1544	89	328	44	2	463	193	1209	111	4	1517	360	293	310	19	982	4506
Apprch %	2.5	76.9	20.3	0.3		19.2	70.8	9.5	0.4		12.7	79.7	7.3	0.3		36.7	29.8	31.6	1.9		
Total %	0.8	26.4	6.9	0.1	34.3	2.0	7.3	1.0	0.0	10.3	4.3	26.8	2.5	0.1	33.7	8.0	6.5	6.9	0.4	21.8	

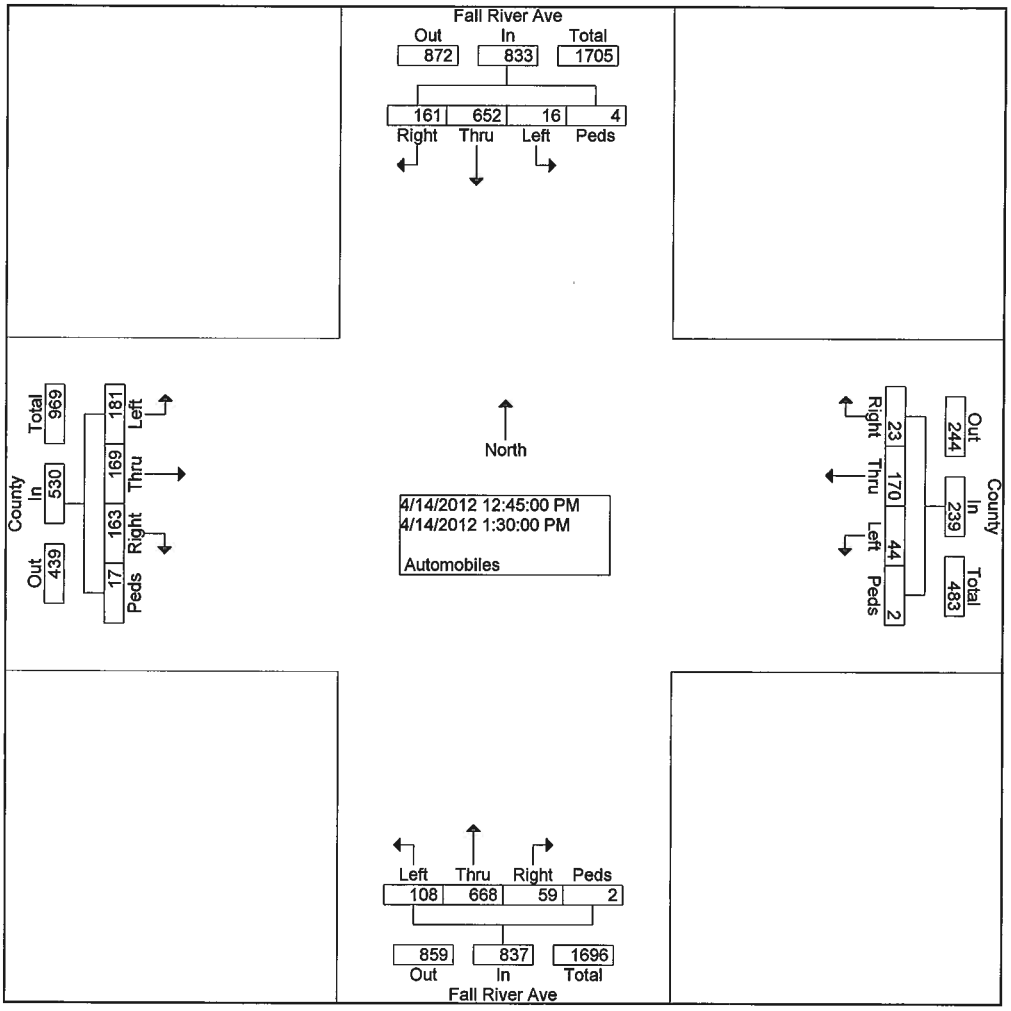


RAB Professional Engineers, Inc.
10 Ross Simons Drive
Cranston, Rhode Island 02920

Project: Luthers Corner - Saturday
Town: Seekonk
Intersection: Fall River at County
Weather: Sunny/Cool

File Name : Fall River at County Sat
Site Code : 00000555
Start Date : 04/14/2012
Page No : 2

	Fall River Ave Southbound					County Westbound					Fall River Ave Northbound					County 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 From 12:00 PM to 01:45 PM - Peak 1 of 1																					
Intersection	12:45 PM																				
Volume	16	652	161	4	833	44	170	23	2	239	108	668	59	2	837	181	169	163	17	530	2439
Percent	1.9	78.3	19.3	0.5		18.4	71.1	9.6	0.8		12.9	79.8	7.0	0.2		34.2	31.9	30.8	3.2		
12:45 Volume	2	157	48	2	209	16	45	3	0	64	22	182	20	1	225	50	36	54	16	156	654
Peak Factor																					0.932
High Int.	01:30 PM					12:45 PM					12:45 PM					12:45 PM					
Volume	4	174	38	0	216	16	45	3	0	64	22	182	20	1	225	50	36	54	16	156	
Peak Factor					0.964					0.934					0.930					0.849	



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Fall River Avenue (Route 114A) @ County Street

(Source: Caputo and Wick Ltd.)

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Caputo and Wick Ltd

1150 Pawtucket Avenue
Rumford, Rhode Island 02916
401-434-8880

Weather: Clear
Collected By: JB
Intersection: Fall River Ave (Rte. 114)
County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave
Site Code : 11111111
Start Date : 7/25/2007
Page No : 1

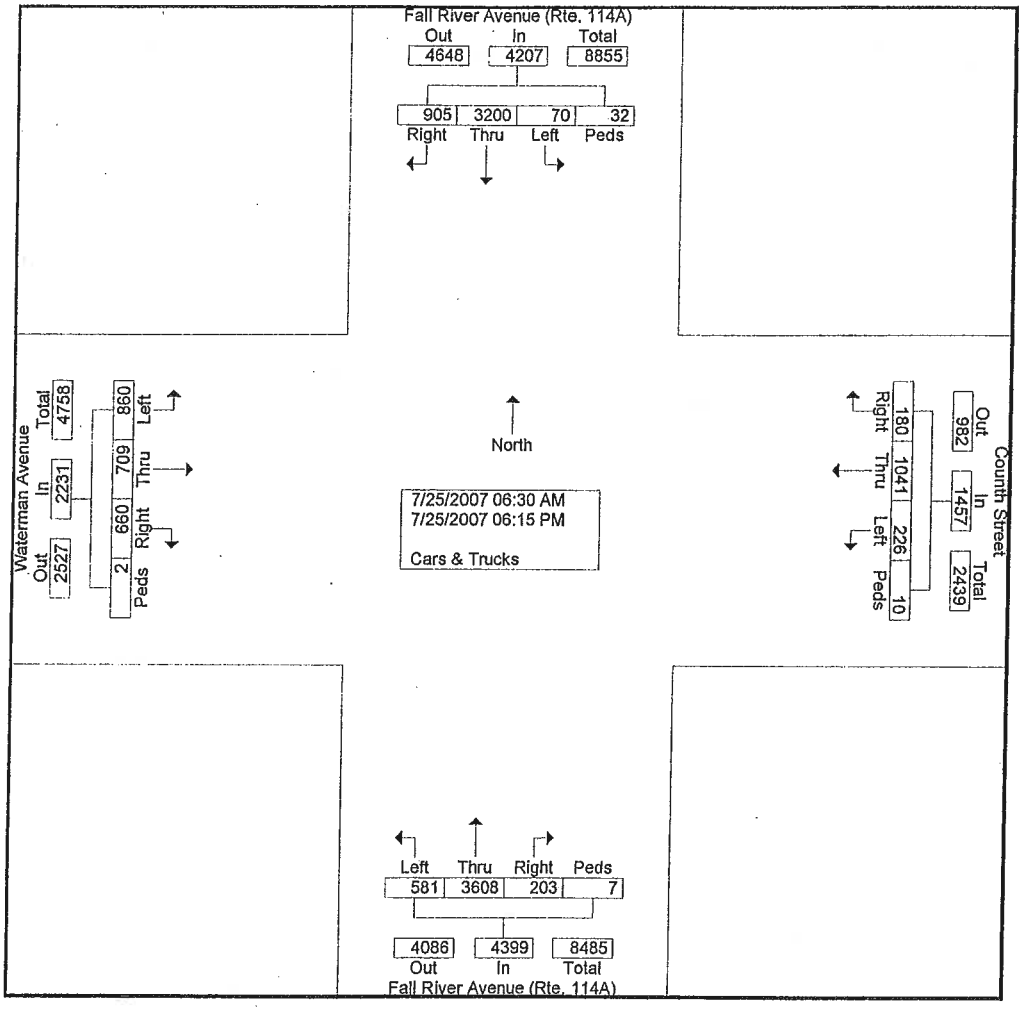
Groups Printed- Cars & Trucks

	Fall River Avenue (Rte. 114A) Southbound					Counth Street Westbound					Fall River Avenue (Rte. 114A) Northbound					Waterman Avenue 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
06:30 AM	2	103	24	0	129	6	40	5	1	52	14	97	6	0	117	12	9	15	0	36	334
06:45 AM	4	89	33	0	126	2	44	9	0	55	34	117	3	0	154	11	14	7	0	32	367
Total	6	192	57	0	255	8	84	14	1	107	48	214	9	0	271	23	23	22	0	68	701
07:00 AM	3	89	29	1	122	6	49	12	0	67	33	121	3	1	158	14	14	14	0	42	389
07:15 AM	3	117	40	0	160	6	50	8	1	65	22	158	5	1	186	25	15	8	0	48	459
07:30 AM	1	121	41	0	163	6	71	10	0	87	30	184	0	0	214	27	13	22	0	62	526
07:45 AM	4	126	60	2	192	14	73	7	1	95	44	169	5	0	218	31	16	12	0	59	564
Total	11	453	170	3	637	32	243	37	2	314	129	632	13	2	776	97	58	56	0	211	1938
08:00 AM	3	102	39	0	144	11	63	8	1	83	37	155	8	1	201	25	20	17	0	62	490
08:15 AM	4	135	48	0	187	12	65	17	0	94	43	133	2	1	179	30	20	13	0	63	523
08:30 AM	8	127	39	13	187	8	59	10	0	77	27	147	9	0	183	25	13	21	0	59	506
08:45 AM	4	131	58	4	197	18	51	13	0	82	36	131	9	0	176	44	14	32	0	90	545
Total	19	495	184	17	715	49	238	48	1	336	143	566	28	2	739	124	67	83	0	274	2064
09:00 AM	3	158	46	2	209	11	34	9	0	54	21	126	9	1	157	33	14	25	0	72	492
09:15 AM	9	116	49	0	174	9	32	7	1	49	23	119	7	0	149	33	14	19	0	66	438
* BREAK ***																					
Total	12	274	95	2	383	20	66	16	1	103	44	245	16	1	306	66	28	44	0	138	930
* BREAK ***																					
03:30 PM	2	134	34	0	170	3	25	5	0	33	22	143	8	1	174	46	32	28	0	106	483
03:45 PM	2	155	36	0	193	11	43	6	0	60	19	163	11	0	193	40	49	30	2	121	567
Total	4	289	70	0	363	14	68	11	0	93	41	306	19	1	367	86	81	58	2	227	1050
04:00 PM	2	149	30	0	181	8	33	3	0	44	19	161	15	0	195	47	57	45	0	149	569
04:15 PM	2	122	33	0	157	3	28	4	1	36	20	170	12	0	202	45	49	30	0	124	519
04:30 PM	2	162	35	4	203	12	31	3	0	46	13	179	21	0	213	52	36	48	0	136	598
04:45 PM	3	147	32	2	184	15	35	7	1	58	9	167	6	0	182	34	55	51	0	140	564
Total	9	580	130	6	725	38	127	17	2	184	61	677	54	0	792	178	197	174	0	549	2250
05:00 PM	0	161	28	0	189	15	40	3	0	58	19	168	15	0	202	47	50	45	0	142	591
05:15 PM	2	154	31	3	190	9	29	4	2	44	11	167	6	0	184	53	43	42	0	138	556
05:30 PM	2	174	43	0	219	10	29	6	0	45	18	178	7	0	203	50	32	42	0	124	591
05:45 PM	1	141	32	1	175	14	38	10	0	62	19	155	13	1	188	42	43	39	0	124	549
Total	5	630	134	4	773	48	136	23	2	209	67	668	41	1	777	192	168	168	0	528	2287
06:00 PM	3	130	27	0	160	9	36	8	0	53	17	164	9	0	190	45	47	21	0	113	516
06:15 PM	1	157	38	0	196	8	43	6	1	58	31	136	14	0	181	49	40	34	0	123	558
Grand Total	70	3200	905	32	4207	226	1041	180	10	1457	581	3608	203	7	4399	860	709	660	2	2231	12294
Apprch %	1.7	76.1	21.5	0.8		15.5	71.4	12.4	0.7		13.2	82	4.6	0.2		38.5	31.8	29.6	0.1		
Total %	0.6	26	7.4	0.3	34.2	1.8	8.5	1.5	0.1	11.9	4.7	29.3	1.7	0.1	35.8	7	5.8	5.4	0	18.1	

Caputo and Wick Ltd
1150 Pawtucket Avenue
Rumford, Rhode Island 02916
401-434-8880

Weather: Clear
Collected By: JB
Intersection: Fall River Ave (Rte. 114)
& County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave
Site Code : 11111111
Start Date : 7/25/2007
Page No : 2

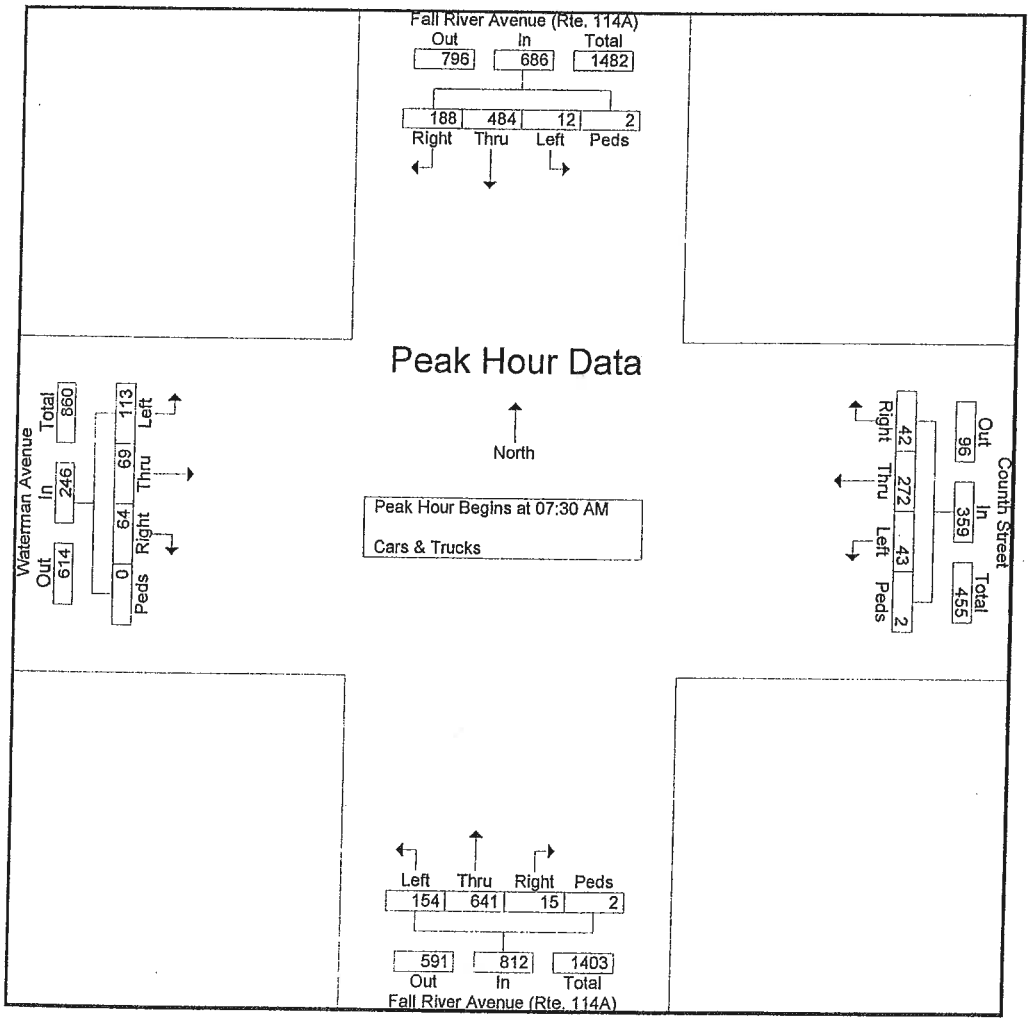


Caputo and Wick Ltd
1150 Pawtucket Avenue
Rumford, Rhode Island 02916
401-434-8880

Weather: Clear
Collected By: JB
Intersection: Fall River Ave (Rte. 114)
& County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave
Site Code : 11111111
Start Date : 7/25/2007
Page No : 3

	Fall River Avenue (Rte. 114A) Southbound					Counth Street Westbound					Fall River Avenue (Rte. 114A) Northbound					Waterman Avenue 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 06:30 AM to 12:30 PM - Peak 1 of 1																					
eak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	121	41	0	163	6	71	10	0	87	30	**184**	0	0	214	27	13	**22**	0	62	526
07:45 AM	**4**	126	**60**	**2**	**192**	**14**	**73**	7	**1**	**95**	**44**	169	5	0	**218**	**31**	16	12	0	59	**564**
08:00 AM	3	102	39	0	144	11	63	8	1	83	37	155	**8**	**1**	201	25	**20**	17	0	62	490
08:15 AM	4	**135**	48	0	187	12	65	**17**	0	94	43	133	2	1	179	30	20	13	0	**63**	523
Total Volume	12	484	188	2	686	43	272	42	2	359	154	641	15	2	812	113	69	64	0	246	2103
% App. Total	1.7	70.6	27.4	0.3		12	75.8	11.7	0.6		19	78.9	1.8	0.2		45.9	28	26	0		
PHF	.750	.896	.783	.250	.893	.768	.932	.618	.500	.945	.875	.871	.469	.500	.931	.911	.863	.727	.000	.976	.932

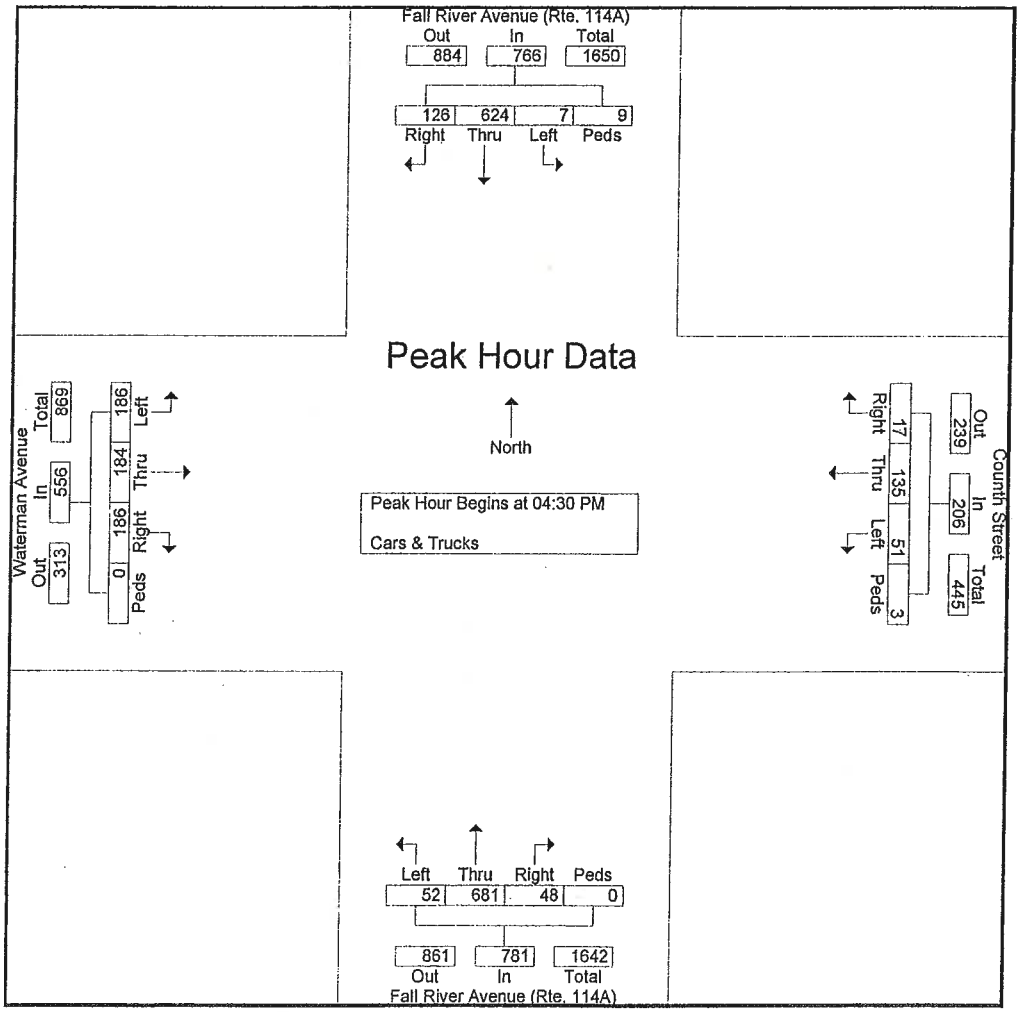


Caputo and Wick Ltd
1150 Pawtucket Avenue
Rumford, Rhode Island 02916
401-434-8880

Weather: Clear
Collected By: JB
Intersection: Fall River Ave (Rte. 114)
& County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave
Site Code : 11111111
Start Date : 7/25/2007
Page No : 4

	Fall River Avenue (Rte. 114A) Southbound					Counth Street Westbound					Fall River Avenue (Rte. 114A) Northbound					Waterman Avenue 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 12:45 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	2	**162**	**35**	**4**	**203**	12	31	3	0	46	13	**179**	**21**	0	**213**	52	36	48	0	136	**598**
04:45 PM	**3**	147	32	2	184	**15**	35	**7**	1	**58**	9	167	6	0	182	34	**55**	**51**	0	140	564
05:00 PM	0	161	28	0	189	15	**40**	3	0	58	**19**	168	15	0	202	47	50	45	0	**142**	591
05:15 PM	2	154	31	3	190	9	29	4	**2**	44	11	167	6	0	184	**53**	43	42	0	138	556
Total Volume	7	624	126	9	766	51	135	17	3	206	52	681	48	0	781	186	184	186	0	556	2309
% App. Total	0.9	81.5	16.4	1.2		24.8	65.5	8.3	1.5		6.7	87.2	6.1	0		33.5	33.1	33.5	0		
PHF	.583	.963	.900	.563	.943	.850	.844	.607	.375	.888	.684	.951	.571	.000	.917	.877	.836	.912	.000	.979	.965



Saturday

Caputo and Wick Ltd
1150 Pawtucket Avenue
Rumford, Rhode Island 02916
401-434-8880

eather: Clear
llected By: JB
ersection: Fall River Avenue (Rte. 114)
County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave_S
Site Code : 11111111
Start Date : 8/4/2007
Page No : 1

Groups Printed- Cars & Trucks

	Fall River Avenue (Rte.114A) Southbound					County Street Westbound					Fall River Avenue (Rte.114A) Northbound					Waterman Avenue Eastbound					
art 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
0:00 AM	6	133	45	0	184	15	36	1	0	52	26	95	9	0	130	36	25	15	0	76	442
0:15 AM	1	129	35	0	165	10	40	0	0	50	30	99	11	0	140	35	38	18	0	91	446
0:30 AM	4	106	23	0	133	9	31	2	0	42	25	99	18	0	142	32	32	22	0	86	403
0:45 AM	3	167	55	0	225	14	22	7	0	43	20	124	19	0	163	30	27	26	0	83	514
Total	14	535	158	0	707	48	129	10	0	187	101	417	57	0	575	133	122	81	0	336	1805
1:00 AM	4	146	50	0	200	14	50	5	0	69	22	112	9	0	143	32	29	36	0	97	509
1:15 AM	4	136	46	0	186	12	35	2	2	51	24	122	10	1	157	36	39	36	0	111	505
1:30 AM	3	141	46	0	190	16	36	2	0	54	32	172	14	0	218	43	31	48	0	122	584
1:45 AM	3	151	39	1	194	9	38	5	1	53	15	153	9	0	177	40	41	33	0	114	538
Total	14	574	181	1	770	51	159	14	3	227	93	559	42	1	695	151	140	153	0	444	2136
2:00 PM	5	123	44	1	173	10	32	7	0	49	17	125	12	0	154	39	31	20	0	90	466
2:15 PM	15	168	28	0	211	16	46	1	0	63	28	155	16	0	199	54	36	18	0	108	581
2:30 PM	2	161	33	0	196	13	48	2	0	63	26	158	19	0	203	41	46	16	0	103	565
2:45 PM	4	155	42	0	201	9	49	2	1	61	21	119	18	0	158	43	31	17	0	91	511
Total	26	607	147	1	781	48	175	12	1	236	92	557	65	0	714	177	144	71	0	392	2123
1:00 PM	6	148	47	0	201	8	35	3	1	47	29	139	13	0	181	43	43	37	0	123	552
1:15 PM	2	137	46	2	187	7	40	0	0	47	24	151	9	0	184	42	35	32	0	109	527
1:30 PM	3	157	29	0	189	9	33	0	0	42	26	103	5	0	134	44	36	26	0	106	471
1:45 PM	6	150	44	0	200	4	43	1	0	48	26	153	13	0	192	40	32	27	0	99	539
Total	17	592	166	2	777	28	151	4	1	184	105	546	40	0	691	169	146	122	0	437	2089
rand Total	71	2308	652	4	3035	175	614	40	5	834	391	2079	204	1	2675	630	552	427	0	1609	8153
pprch %	2.3	76	21.5	0.1		21	73.6	4.8	0.6		14.6	77.7	7.6	0		39.2	34.3	26.5	0		
Total %	0.9	28.3	8	0	37.2	2.1	7.5	0.5	0.1	10.2	4.8	25.5	2.5	0	32.8	7.7	6.8	5.2	0	19.7	

Caputo and Wick Ltd
1150 Pawtucket Avenue
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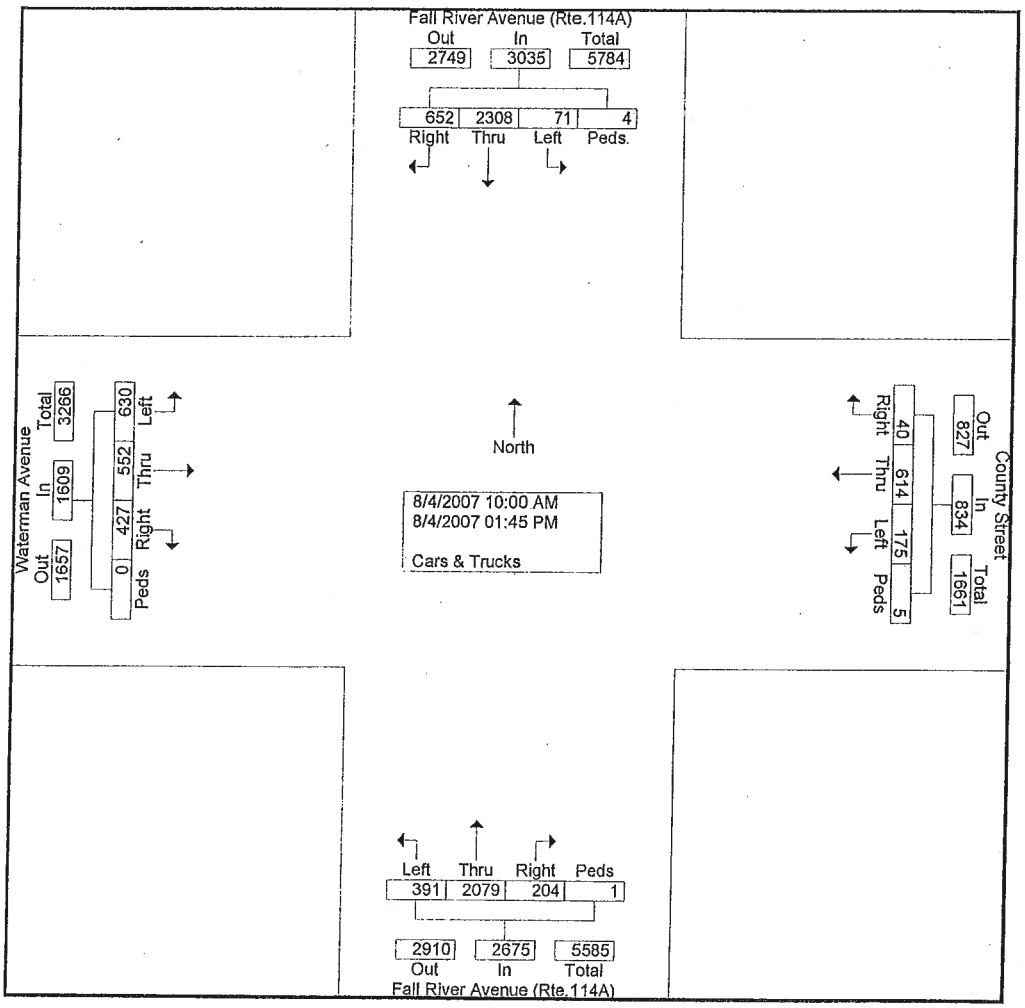
401-434-8880

Weather: Clear
Collected By: JB
Intersection: Fall River Avenue (Rte. 114)
& County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave_S
Site Code : 11111111
Start Date : 8/4/2007
Page No : 2



Caputo and Wick Ltd
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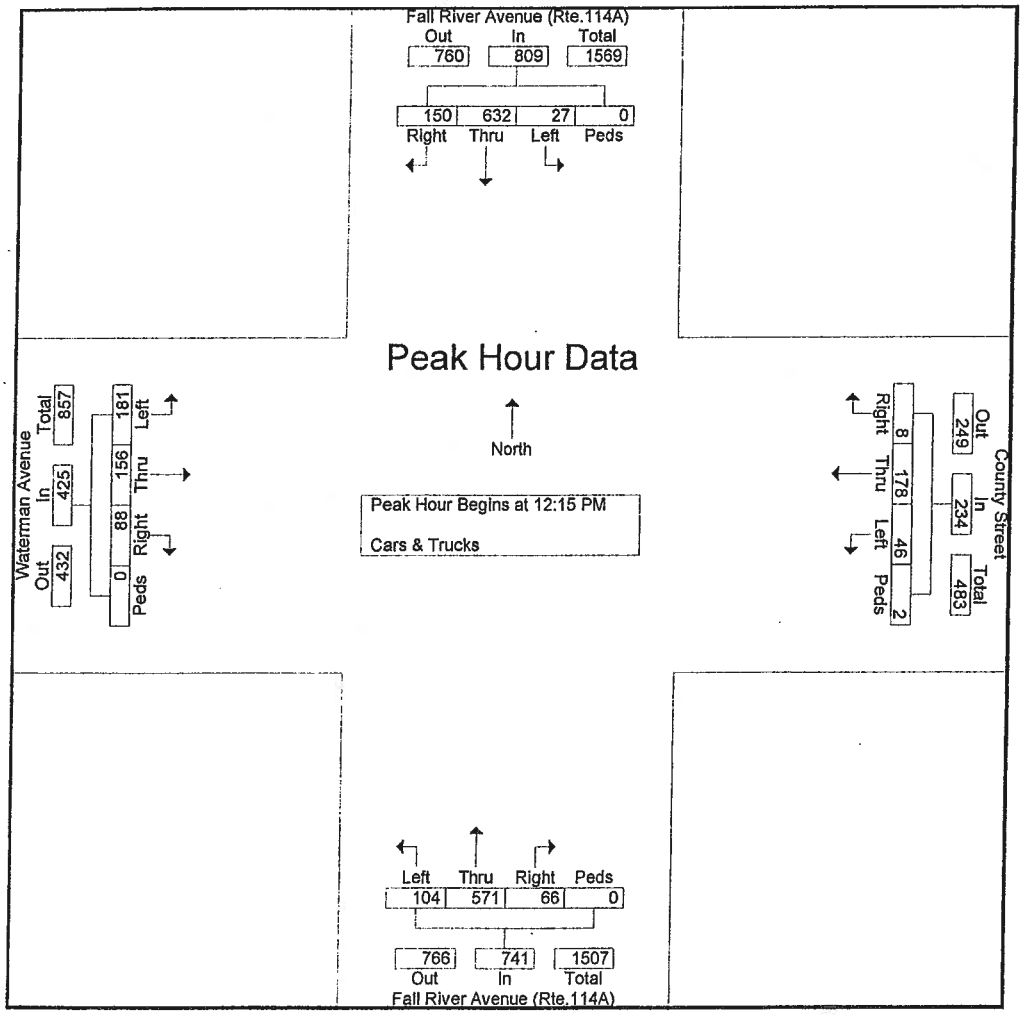
Weather: Clear
Collected By: JB
Intersection: Fall River Avenue (Rte. 114)
& County St/Waterman Ave - Seekonk, MA

File Name : Rte. 114A_County St & Waterman Ave_S
Site Code : 11111111
Start Date : 8/4/2007
Page No : 3

	Fall River Avenue (Rte.114A) Southbound					County Street Westbound					Fall River Avenue (Rte.114A) Northbound					Waterman Avenue 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 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	**15**	**168**	28	0	**211**	**16**	46	1	0	**63**	28	155	16	0	199	**54**	36	18	0	108	**581**
12:30 PM	2	161	33	0	196	13	48	2	0	63	26	**158**	**19**	0	**203**	41	**46**	16	0	103	565
12:45 PM	4	155	42	0	201	9	**49**	2	**1**	61	21	119	18	0	158	43	31	17	0	91	511
01:00 PM	6	148	**47**	0	201	8	35	**3**	1	47	**29**	139	13	0	181	43	43	**37**	0	**123**	552
Total Volume	27	632	150	0	809	46	178	8	2	234	104	571	66	0	741	181	156	88	0	425	2209
% App. Total	3.3	78.1	18.5	0		19.7	76.1	3.4	0.9		14	77.1	8.9	0		42.6	36.7	20.7	0		
PHF	.450	.940	.798	.000	.959	.719	.908	.667	.500	.929	.897	.903	.868	.000	.913	.838	.848	.595	.000	.864	.951



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Speed Study Data

Fall River Avenue (Route 114A)

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Fall River Avenue (Route 114A) 400 feet North of County Street

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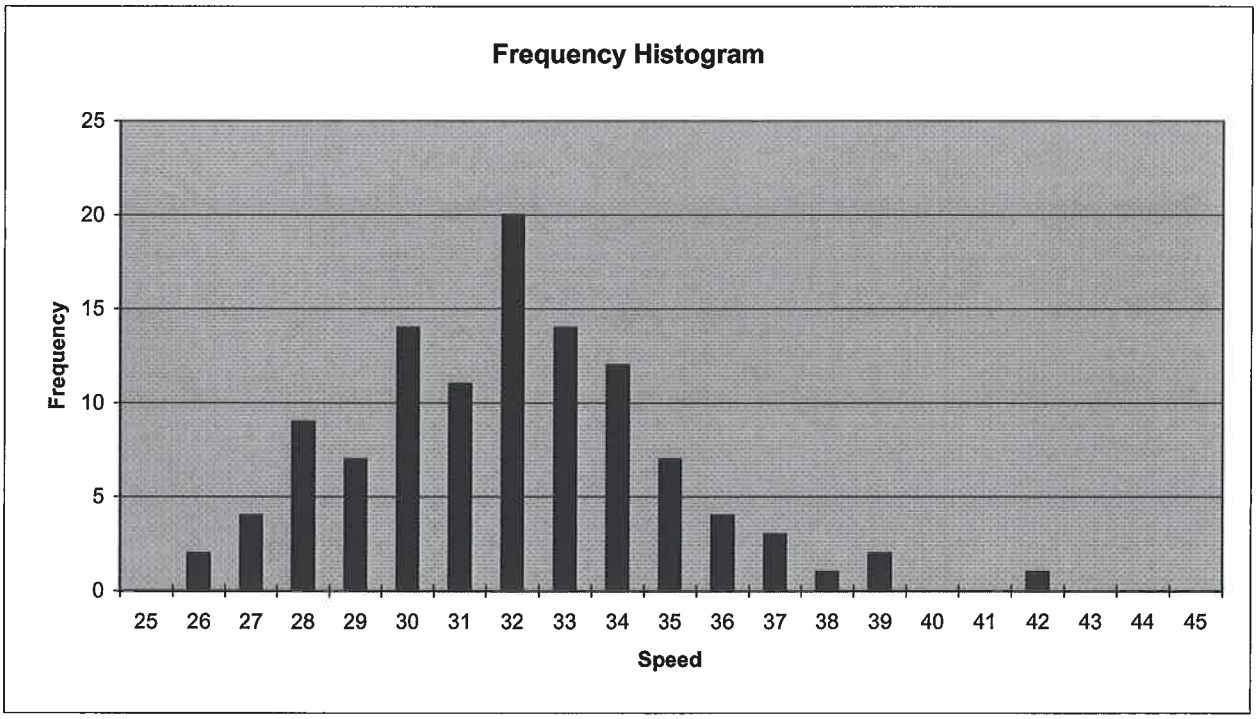
VEHICLE SPEED STUDY SUMMARY FORM

Location: Fall River Avenue
400 ft north of County St
Direction: Northbound

Speed Limit: 35 mph
Time: Off- Peak
Date: May 23, 2012



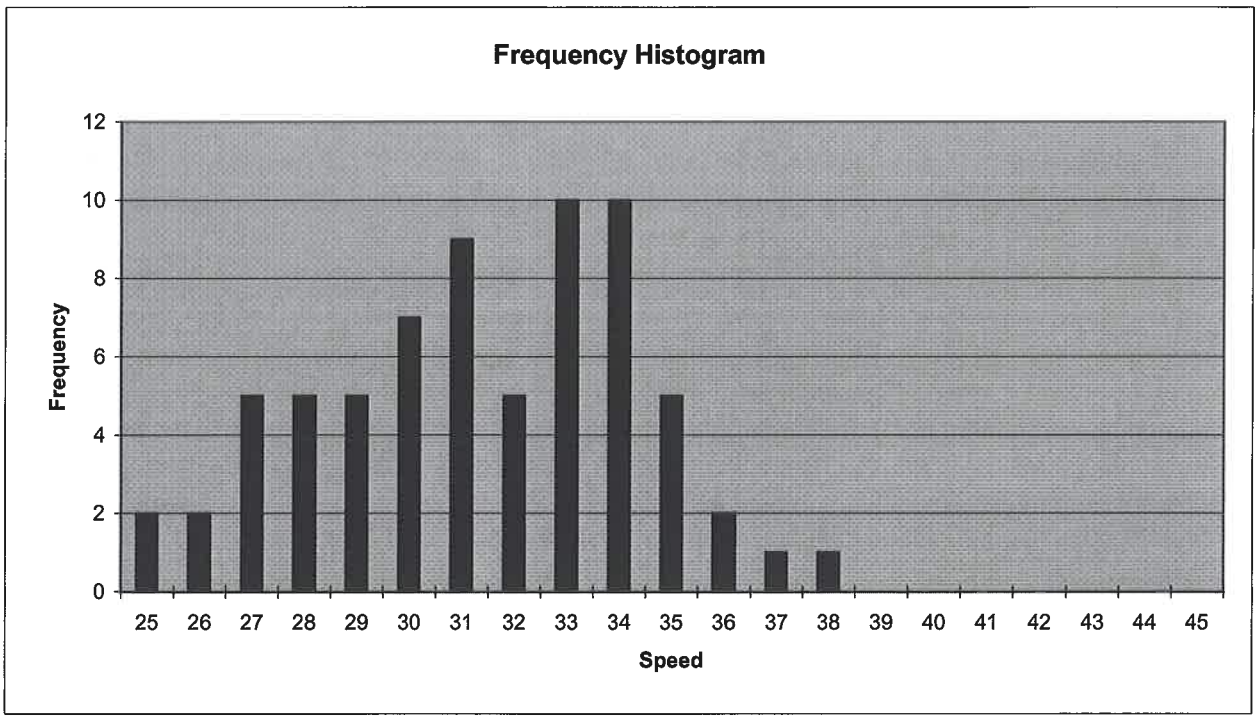
Frequency	Speed
0	45
0	44
0	43
1	42
0	41
0	40
2	39
1	38
3	37
4	36
7	35
12	34
14	33
20	32
11	31
14	30
7	29
9	28
4	27
2	26
0	25
Total = 111	Avg. = 32

Speed Data Statistics	
Average Speed	32 mph
85th Percentile Speed	35 mph
15th Percentile Speed	29 mph
Pace Speed (10 MPH)	28-37 mph
Percent Vehicles in pace	91 %

VEHICLE SPEED STUDY SUMMARY FORM

Location: Fall River Avenue
400 ft north of County St
Direction: Southbound

Speed Limit: 35 mph
Time: Off- Peak
Date: May 23, 2012



Frequency	Speed
0	45
0	44
0	43
0	42
0	41
0	40
0	39
1	38
1	37
2	36
5	35
10	34
10	33
5	32
9	31
7	30
5	29
5	28
5	27
2	26
2	25
Total = 69	Avg. = 31

Speed Data Statistics	
Average Speed	31 mph
85th Percentile Speed	34 mph
15th Percentile Speed	28 mph
Pace Speed (10 MPH)	27-36 mph
Percent Vehicles in pace	92 %

Fall River Avenue (Route 114A) 200 Feet North of Fuller Street

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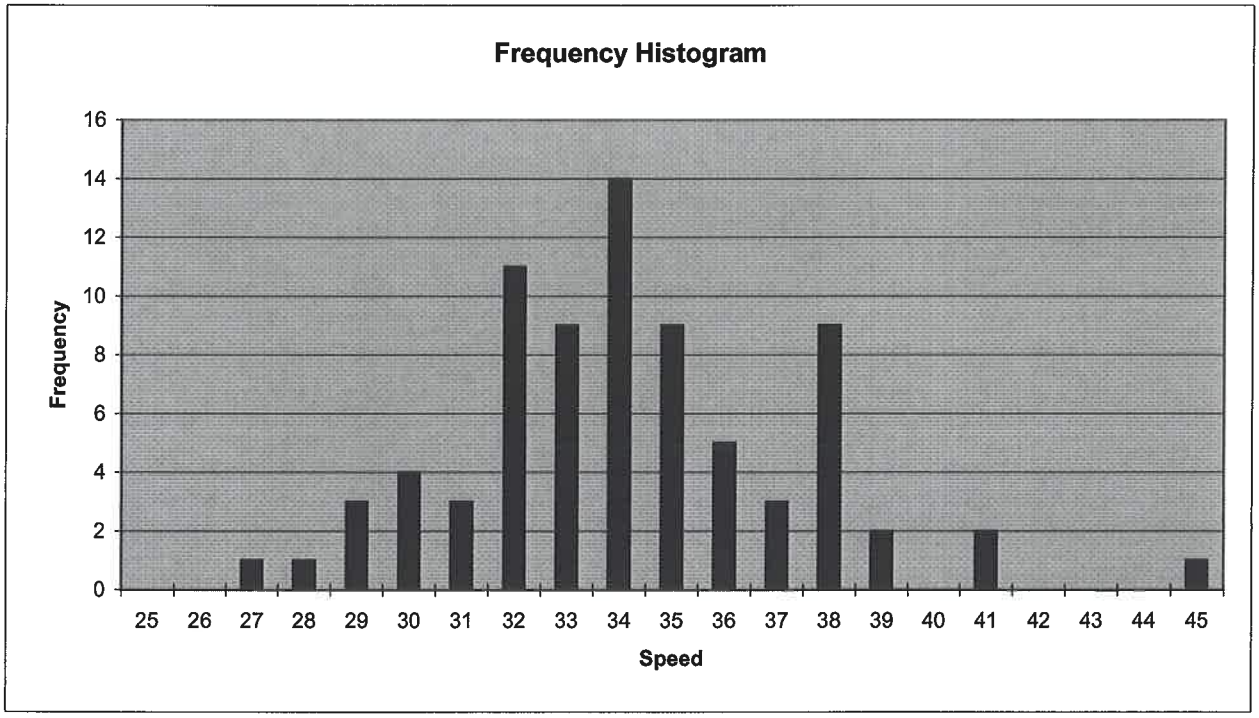
VEHICLE SPEED STUDY SUMMARY FORM

Location: Fall River Avenue
200 ft north of Fuller St
Direction: Northbound

Speed Limit: 35 mph
Time: Off- Peak
Date: May 23, 2012



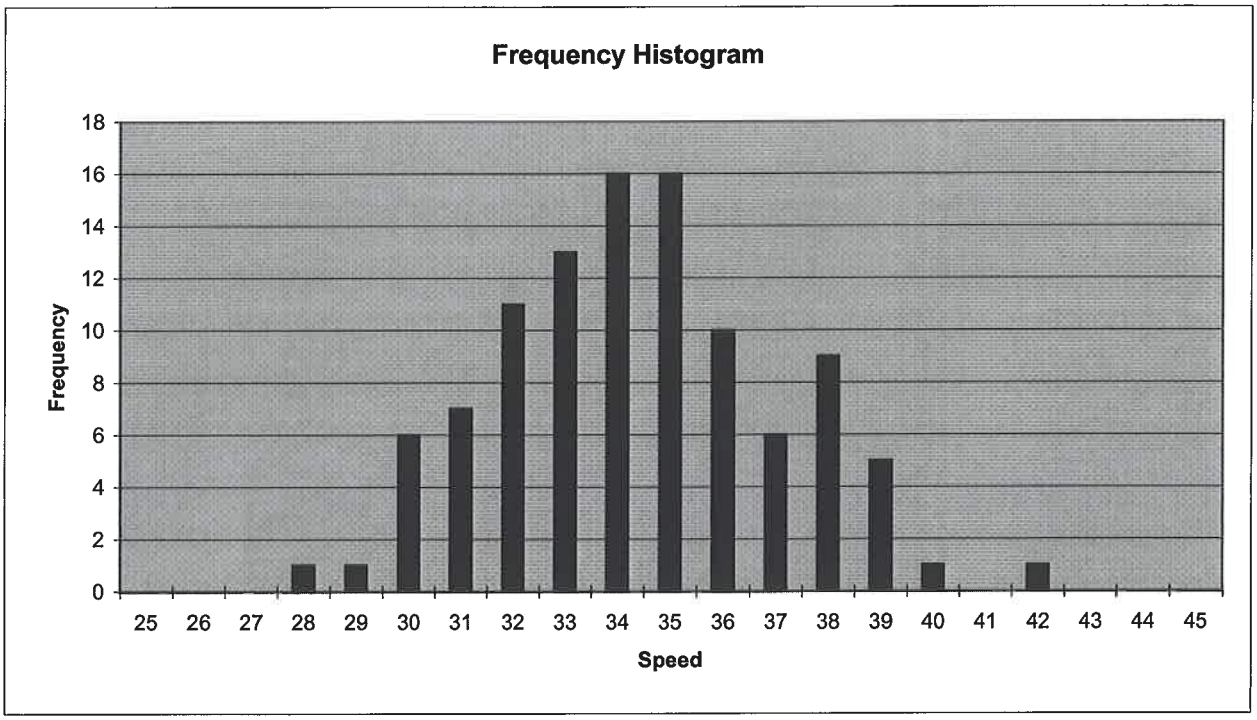
Frequency	Speed
1	45
0	44
0	43
0	42
2	41
0	40
2	39
9	38
3	37
5	36
9	35
14	34
9	33
11	32
3	31
4	30
3	29
1	28
1	27
0	26
0	25
Total = 77	Avg. = 34

Speed Data Statistics	
Average Speed	34 mph
85th Percentile Speed	38 mph
15th Percentile Speed	32 mph
Pace Speed (10 MPH)	30-39 mph
Percent Vehicles in pace	90 %

VEHICLE SPEED STUDY SUMMARY FORM

Location: Fall River Avenue
200 ft north of Fuller St
Direction: Southbound

Speed Limit: 35 mph
Time: Off- Peak
Date: May 23, 2012



Frequency	Speed
0	45
0	44
0	43
1	42
0	41
1	40
5	39
9	38
6	37
10	36
16	35
16	34
13	33
11	32
7	31
6	30
1	29
1	28
0	27
0	26
0	25
Total = 103	Avg. = 34

Speed Data Statistics	
Average Speed	34 mph
85th Percentile Speed	38 mph
15th Percentile Speed	32 mph
Pace Speed (10 MPH)	30-39 mph
Percent Vehicles in pace	96 %

Traffic Crash Data

January, 2009 to December, 2011

Fall River Avenue (Route 114A) @ County Street

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Accident Data Summary

Fall River Avenue (Route 114A) and County Street

Date	Type	Direction	Severity
Fall River Avenue at County Street			
2009			
3/2/2009	Sideswipe	South/East	PP
4/16/2009	Angle	North/South	PI
6/20/2009	Angle	North/East	PP
6/24/2009	Angle	North/East	PP
6/29/2009	Rear End	South	PI
8/7/2009	Angle	North/South	PP
9/11/2009	Angle	East/West	PP
10/15/2009	Rear End	East	PP
11/27/2009	Rear End	North	PP
11/29/2009	Angle	North/South	PP
12/9/2009	Angle	East/West	PP
2010			
2/22/2010	Angle	South/East	PP
5/18/2010	Rear End	West	PP
5/28/2010	Rear End	North	PI
6/17/2010	Angle	North/West	PP
8/21/2010	Rear End	East	PP
9/24/2010	Rear End	North	PP
12/1/2010	Angle	South/West	PP

Date	Type	Direction	Severity
2011			
2/1/2011	Sideswipe	North	PP
2/17/2011	Sideswipe	East	PP
3/29/2011	Rear End	East	PI
7/1/2011	Rear End	East	PP
7/25/2011	Rear End	North	PP
7/26/2011	Rear End	East	PI
8/4/2011	Rear End	North	PI
8/15/2011	Angle	South/East	PP
8/20/2011	Angle	South/East	PP
9/1/2011	Rear End	North	PP
11/28/2011	Angle	North/South	PP
12/14/2011	Angle	North/East	PP
12/16/2011	Sideswipe	East	PP
Fall River Avenue			
Vicinity Labonte			
11/25/2009	Parked	South	PP
At service station driveway			
12/7/2010	Sideswipe	North	PP
12/11/2010	Sideswipe	South	PP
9/23/2011	Angle	North/South	PP

Date	Type	Direction	Severity
County Street			
At Labonte driveway			
2/7/2009	Angle	East/West	PP
2/15/2009	Angle	West/North	PP
8/14/2010	Angle	East/West	PI
7/18/2011	Angle	East/West	PP
10/25/2011	Angle	East/West	PP
At service station driveway			
2/20/2009	Angle	West/South	PP
3/30/2009	Angle	East/West	PI
8/8/2009	Rear End	West	PP
8/16/2009	Angle	West/South	PP
3/26/2010	Angle	East/South	PP
At Luther Street			
6/26/2010	Fixed Object	West	PI
2/5/2011	Rear End	East	PP

Severity Legend:

PP	Personal Property Damage
PI	Personal Injury
F	Fatal

MassHighway

CRASH RATE WORKSHEET

CITY/TOWN : Seekonk, Massachusetts COUNT DATE : 4/11/12

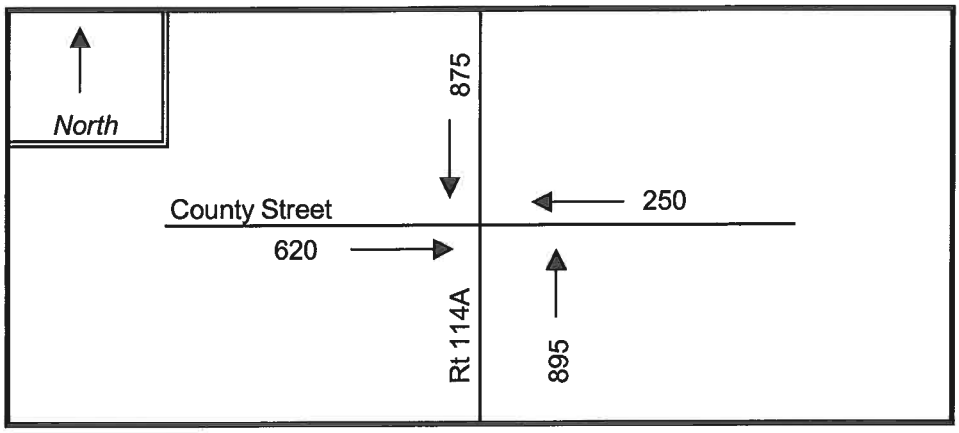
DISTRICT : 5 UNSIGNALIZED : [ ] SIGNALIZED : [X]

~ INTERSECTION DATA ~

MAJOR STREET : Fall River Avenue (Route 114A)

MINOR STREET(S) : County Street

INTERSECTION DIAGRAM (Label Approaches)



Peak Hour Volumes

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (AM/PM) :	895	875	620	250		2,640

" K " FACTOR : 0.080 APPROACH ADT : 33,000 **ADT** = TOTAL VOL/"K" FACT.

TOTAL # OF CRASHES : 31 # OF YEARS : 3 AVERAGE # OF CRASHES (**A**) : 10.33

CRASH RATE CALCULATION : 0.86 RATE = $\frac{(A * 1{,}000{,}000)}{(ADT * 365)}$

Comments : Crash Rate is above MassDOT District 5 rate of 0.77

Project Title & Date: Luther's Corners

Intersection Capacity Analysis Worksheets

Existing and Proposed AM/PM/SAT Peak Hour

Fall River Avenue (Route 114A) @ County Street

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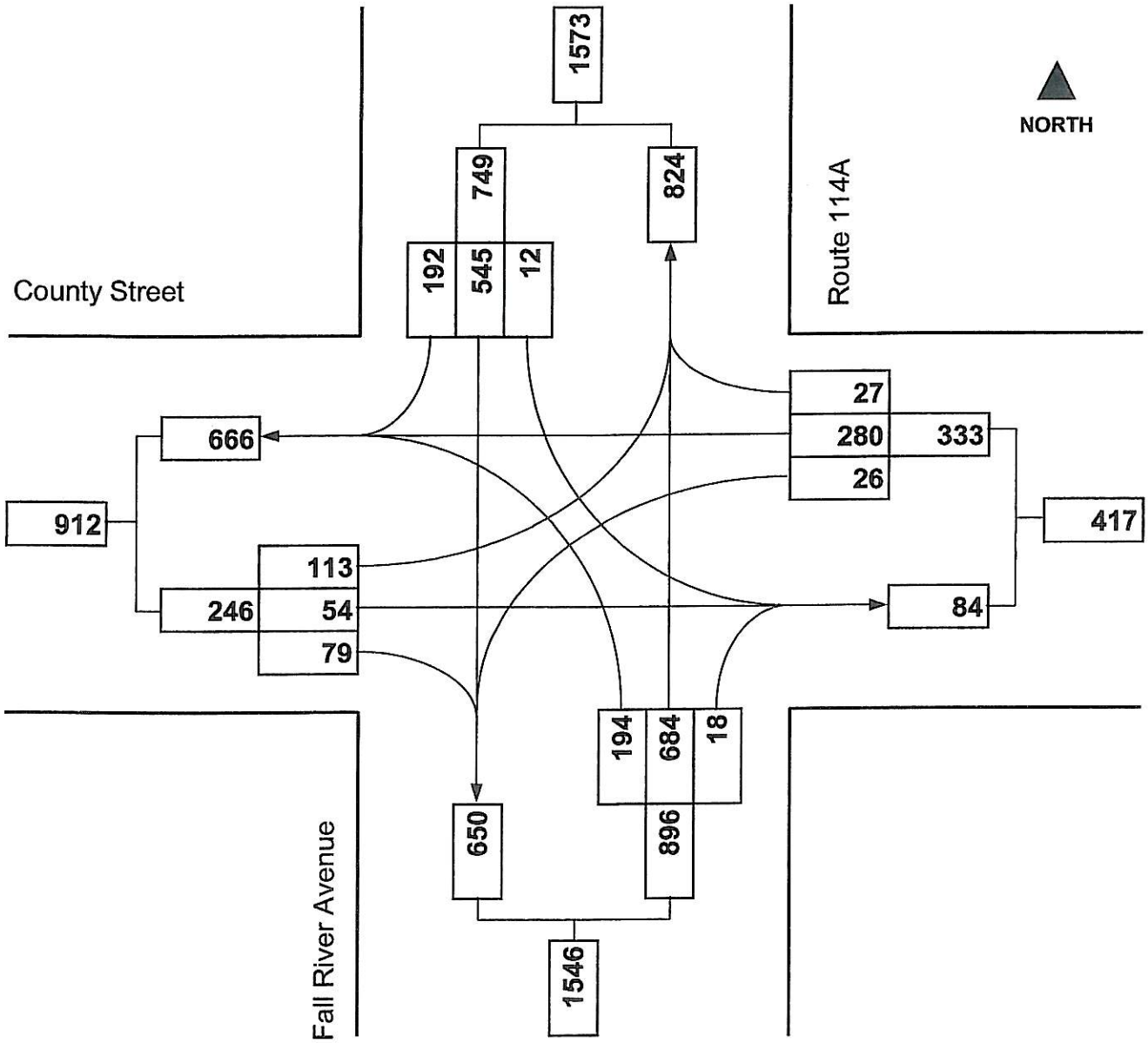
R A B

Professional Engineers

Turning Movement Diagram

Major Street:	Fall River Avenue	**Minor Street:**	County Street
City/Town:	Seekonk, MA	**Day of Week:**	Weekday
Reference No.:	2011-37	**Peak Period:**	7:30-8:30 AM
Existing:	AM Peak	**Future:**	n/a



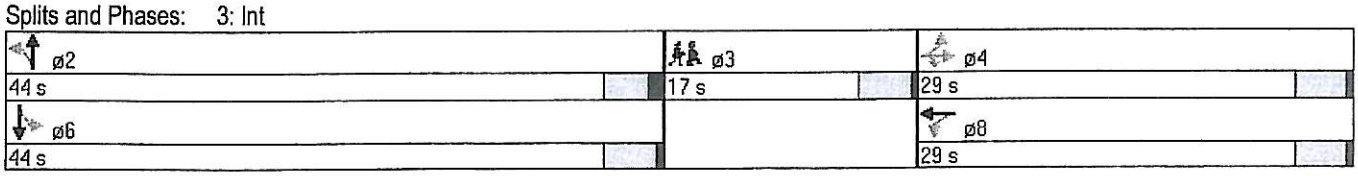
Luther's Corners

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	54	79	26	280	27	194	684	18	12	545	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	150		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1801	1583	0	1835	0	1770	1855	0	0	1796	0
Flt Permitted		0.505			0.971		0.317				0.988	
Satd. Flow (perm)	0	941	1583	0	1789	0	590	1855	0	0	1776	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80		5			2			25	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		319			642			271			168	
Travel Time (s)		7.3			14.6			6.2			3.8	
Lane Group Flow (vph)	0	176	83	0	350	0	204	739	0	0	789	0
Turn Type	custom		custom	Perm			Perm			Perm		
Protected Phases					8			2			6	
Permitted Phases	4	4	4	8			2			6		
Total Split (s)	29.0	29.0	29.0	29.0	29.0	0.0	44.0	44.0	0.0	44.0	44.0	0.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
Act Effct Green (s)		20.5	20.5		20.5		41.3	41.3			41.3	
Actuated g/C Ratio		0.30	0.30		0.30		0.61	0.61			0.61	
v/c Ratio		0.62	0.16		0.64		0.57	0.65			0.72	
Control Delay		30.3	5.4		25.8		17.7	13.3			15.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	
Total Delay		30.3	5.4		25.8		17.7	13.3			15.4	
LOS		C	A		C		B	B			B	
Approach Delay		22.3			25.8			14.3			15.4	
Approach LOS		C			C			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 67.8
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 17.3 Intersection LOS: B
Intersection Capacity Utilization 118.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Int



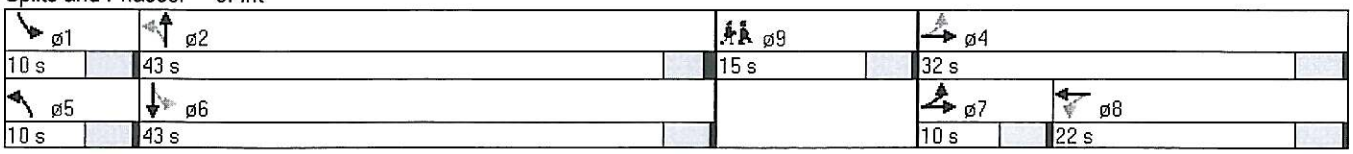
Luther's Corners

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	54	79	26	280	27	194	684	18	12	545	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	150		0	30		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1697	0	0	1835	0	1770	1855	0	1770	1790	0
Flt Permitted	0.185				0.971		0.097			0.205		
Satd. Flow (perm)	345	1697	0	0	1789	0	181	1855	0	382	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		74			4			2			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		319			642			271			168	
Travel Time (s)		7.3			14.6			6.2			3.8	
Lane Group Flow (vph)	119	140	0	0	350	0	204	739	0	13	776	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4 7			8		5	2		1	6	
Permitted Phases	4 7			8			2			6		
Total Split (s)	10.0	42.0	0.0	22.0	22.0	0.0	10.0	43.0	0.0	10.0	43.0	0.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
Act Effct Green (s)	29.0	29.0			19.0		49.4	48.0		46.7	40.0	
Actuated g/C Ratio	0.34	0.34			0.22		0.58	0.56		0.55	0.47	
v/c Ratio	0.51	0.22			0.87		0.86	0.71		0.04	0.91	
Control Delay	27.8	11.2			54.9		50.2	19.4		7.6	37.3	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	27.8	11.2			54.9		50.2	19.4		7.6	37.3	
LOS	C	B			D		D	B		A	D	
Approach Delay		18.8			54.9			26.1			36.8	
Approach LOS		B			D			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 85
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 33.2 Intersection LOS: C
Intersection Capacity Utilization 89.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 3: Int

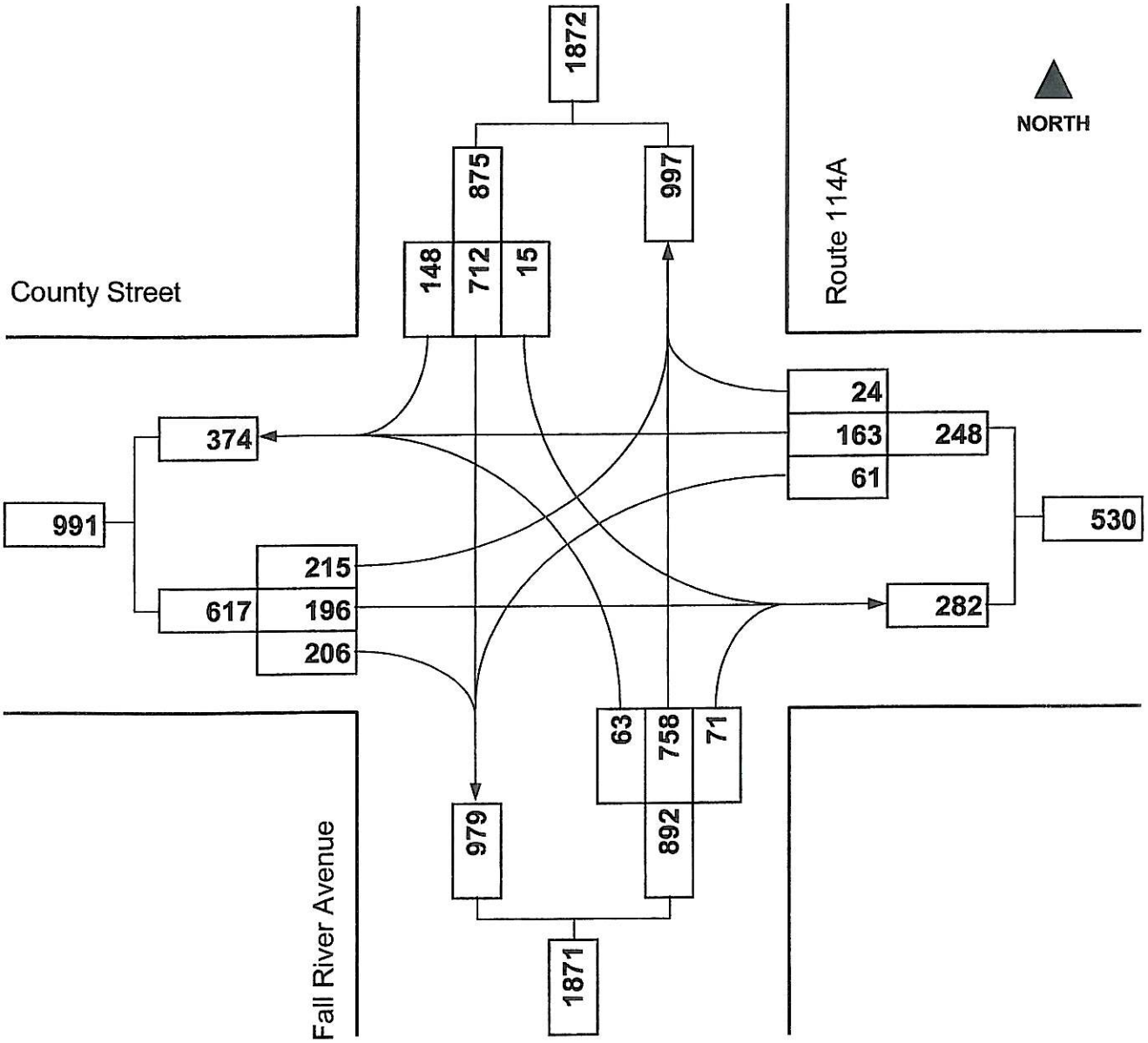


R A B

Professional Engineers

Turning Movement Diagram

Major Street:	Fall River Avenue	**Minor Street:**	County Street
City/Town:	Seekonk, MA	**Day of Week:**	Weekday
Reference No.:	2011-37	**Peak Period:**	4:30-5:30 PM
Existing:	PM Peak	**Future:**	n/a



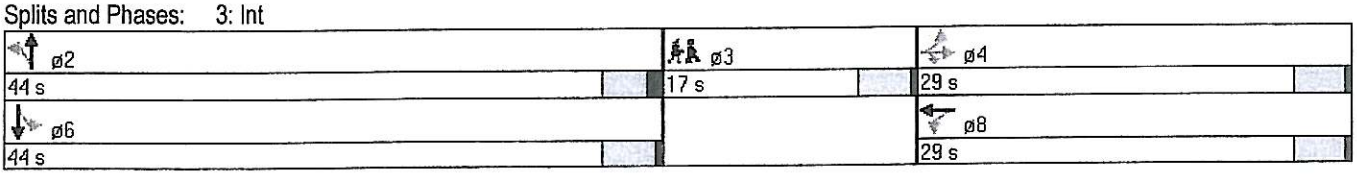
Luther's Corners

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	215	196	206	61	163	24	63	758	71	15	712	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	150		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1816	1583	0	1816	0	1770	1839	0	0	1818	0
Flt Permitted		0.642			0.636		0.242				0.862	
Satd. Flow (perm)	0	1196	1583	0	1169	0	451	1839	0	0	1569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		6			7			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		319			642			271			168	
Travel Time (s)		7.3			14.6			6.2			3.8	
Lane Group Flow (vph)	0	442	222	0	267	0	68	891	0	0	941	0
Turn Type	custom		custom	Perm			Perm			Perm		
Protected Phases					8			2			6	
Permitted Phases	4	4	4	8			2			6		
Total Split (s)	29.0	29.0	29.0	29.0	29.0	0.0	44.0	44.0	0.0	44.0	44.0	0.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
Act Effct Green (s)		26.0	26.0		26.0		41.0	41.0			41.0	
Actuated g/C Ratio		0.36	0.36		0.36		0.56	0.56			0.56	
v/c Ratio		1.04	0.36		0.64		0.27	0.86			1.06	
Control Delay		80.6	12.4		27.3		11.8	24.3			66.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	
Total Delay		80.6	12.4		27.3		11.8	24.3			66.3	
LOS		F	B		C		B	C			E	
Approach Delay		57.8			27.3			23.4			66.3	
Approach LOS		E			C			C			E	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 73
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 46.1 Intersection LOS: D
Intersection Capacity Utilization 104.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 3: Int



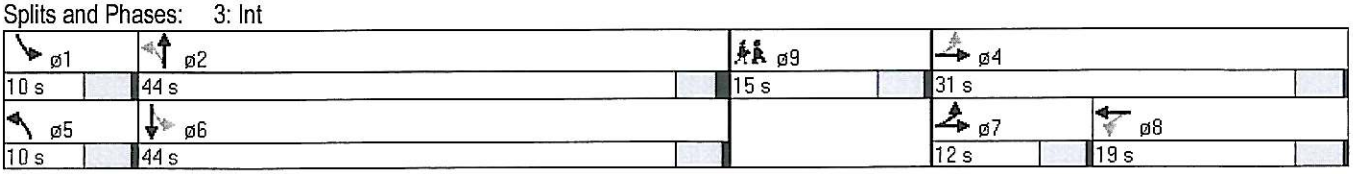
Luther's Corners

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	215	196	206	61	163	24	63	758	71	15	712	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	150		0	30		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1719	0	0	1816	0	1770	1839	0	1770	1814	0
Flt Permitted	0.329				0.765		0.086			0.100		
Satd. Flow (perm)	613	1719	0	0	1406	0	160	1839	0	186	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			5			6			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		319			642			271			168	
Travel Time (s)		7.3			14.6			6.2			3.8	
Lane Group Flow (vph)	226	423	0	0	261	0	66	873	0	16	905	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4 7			8		5	2		1	6	
Permitted Phases	4 7			8			2			6		
Total Split (s)	12.0	43.0	0.0	19.0	19.0	0.0	10.0	44.0	0.0	10.0	44.0	0.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
Act Effct Green (s)	28.3	28.3			16.2		48.3	47.0		46.4	41.1	
Actuated g/C Ratio	0.34	0.34			0.19		0.58	0.56		0.56	0.49	
v/c Ratio	0.68	0.68			0.94		0.29	0.84		0.07	1.00	
Control Delay	33.7	27.8			75.7		10.7	25.3		7.7	54.1	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	33.7	27.8			75.7		10.7	25.3		7.7	54.1	
LOS	C	C			E		B	C		A	D	
Approach Delay		29.8			75.7			24.3			53.3	
Approach LOS		C			E			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 83.2
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 40.1 Intersection LOS: D
Intersection Capacity Utilization 98.7% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 3: Int

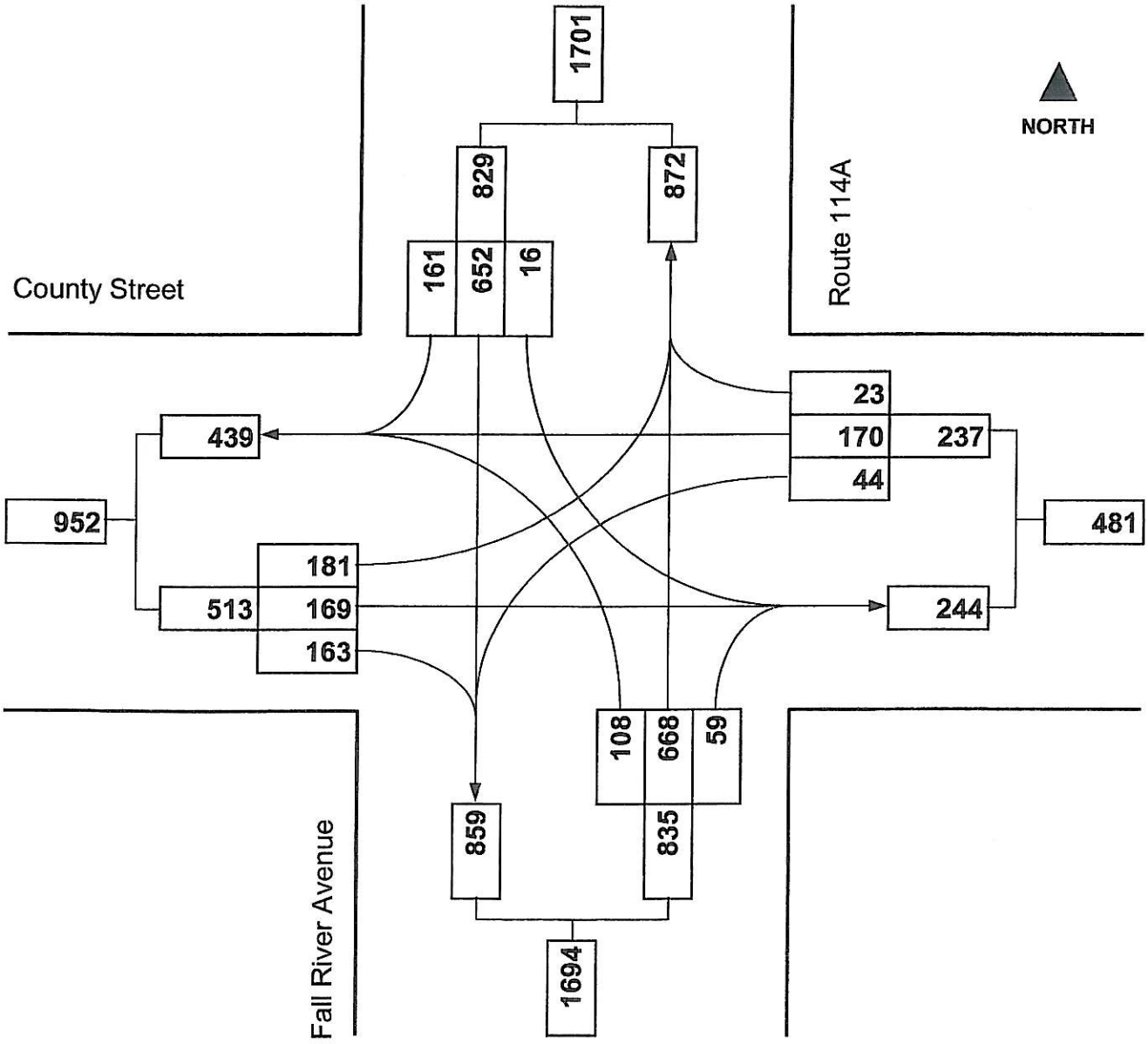


R A B

Professional Engineers

Turning Movement Diagram

Major Street:	Fall River Avenue	**Minor Street:**	County Street
City/Town:	Seekonk, MA	**Day of Week:**	Saturday
Reference No.:	2011-37	**Peak Period:**	12:30-1:30 PM
Existing:	Midday Peak	**Future:**	n/a



Luther's Corners

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	181	169	163	44	170	23	108	668	59	16	652	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	150		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	0	1816	1583	0	1822	0	1770	1840	0	0	1812	0
Flt Permitted		0.651			0.837		0.258				0.983	
Satd. Flow (perm)	0	1213	1583	0	1539	0	481	1840	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78		6			6			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		319			642			271			168	
Travel Time (s)		7.3			14.6			6.2			3.8	
Lane Group Flow (vph)	0	377	175	0	255	0	116	781	0	0	891	0
Turn Type	custom		custom	Perm			Perm			Perm		
Protected Phases					8			2			6	
Permitted Phases	4	4	4	8			2			6		
Total Split (s)	29.0	29.0	29.0	29.0	29.0	0.0	44.0	44.0	0.0	44.0	44.0	0.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
Act Effct Green (s)		26.0	26.0		26.0		41.0	41.0			41.0	
Actuated g/C Ratio		0.36	0.36		0.36		0.56	0.56			0.56	
v/c Ratio		0.87	0.29		0.46		0.43	0.75			0.88	
Control Delay		45.6	11.0		21.0		15.5	17.9			26.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	
Total Delay		45.6	11.0		21.0		15.5	17.9			26.5	
LOS		D	B		C		B	B			C	
Approach Delay		34.6			21.0			17.6			26.5	
Approach LOS		C			C			B			C	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 73
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 24.6 Intersection LOS: C
Intersection Capacity Utilization 111.3% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Int

ø2	ø3	ø4
44 s	17 s	29 s
ø6		ø8
44 s		29 s

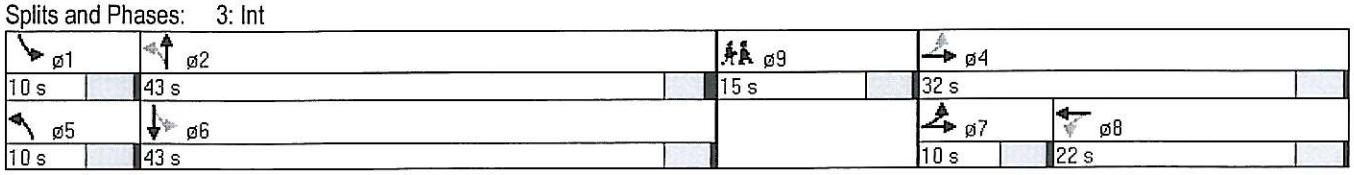
Luther's Corners

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	181	169	163	44	170	23	108	668	59	16	652	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	150		0	30		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1725	0	0	1822	0	1770	1840	0	1770	1807	0
Flt Permitted	0.342				0.879		0.088			0.178		
Satd. Flow (perm)	637	1725	0	0	1616	0	164	1840	0	332	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		49			5			5			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		319			642			271			168	
Travel Time (s)		7.3			14.6			6.2			3.8	
Lane Group Flow (vph)	191	350	0	0	249	0	114	765	0	17	855	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4 7			8		5	2		1	6	
Permitted Phases	4 7			8			2			6		
Total Split (s)	10.0	42.0	0.0	22.0	22.0	0.0	10.0	43.0	0.0	10.0	43.0	0.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0
Act Effct Green (s)	27.8	27.8			17.7		47.4	46.1		45.5	40.3	
Actuated g/C Ratio	0.34	0.34			0.22		0.58	0.56		0.56	0.49	
v/c Ratio	0.61	0.57			0.70		0.49	0.74		0.06	0.95	
Control Delay	30.2	23.5			41.6		17.9	20.3		7.8	43.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	30.2	23.5			41.6		17.9	20.3		7.8	43.5	
LOS	C	C			D		B	C		A	D	
Approach Delay		25.8			41.6			20.0			42.8	
Approach LOS		C			D			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 81.8
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 31.2 Intersection LOS: C
Intersection Capacity Utilization 95.1% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 3: Int



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Appendix C: Project Coordination

Public Workshop Flier

Public Workshop Meeting Minutes

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Public Workshop Flier

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Public Workshop

Join Us

...to Discuss the Future of Luther's Corners Village

at the Seekonk Congregational Church

600 Fall River Avenue • Seekonk, MA

Tuesday • February 28, 2012 • 7:00 PM

Public Workshop

Luther's Corners Village

The Town recently embarked upon an effort to preserve Luther's Corners Village due to its historical significance as one of the locations of the Town's earliest development. First, the Town adopted the Luther's Corners Village Zoning District to:

- **Allow a Mix of Limited Commercial and Residential Uses Consistent with the Appearance of the Village**
- **Preserve the Architectural and Historic Character of the Area**
- **Promote a Pedestrian-Friendly Neighborhood**

Ensuring the proper mix of land uses is only one way to accomplish the aforementioned goals. To evaluate the Village needs regarding future land use and infrastructure, the Town has retained the service of a consultant to examine parking and traffic circulation. In order for this study to accomplish our goals, we are seeking the public's input to see what the desires are for these study items.

When: Tuesday • February 28, 7:00 pm
Where: Seekonk Congregational Church
600 Fall River Avenue • Seekonk, MA

For more information contact:
John P. Hansen, Jr., AICP
Town Planner
508-336-2962

Representatives of DiPrete Engineering and RAB Professional Engineers will be present.

Refreshments will be provided.

Public Workshop Meeting Minutes

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DiPrete Engineering

NOTES OF MEETING

PROJECT	1631-005 Luther's Corners Village
SUBJECT	Public Workshop
DATE	February 28, 2012
TIME	7:00PM
LOCATION	Seekonk Congregational Church, 600 Fall River Avenue, Seekonk, MA
ATTENDEES	John Hansen – Town Planner, Neal Abelson, Chairman of Planning Board, Phoebe Lee Dunn, Planning Board member (Seekonk) Jason Clough – DiPrete Engineering Judy Zimmerman-Reisch – RAB Professional Engineers Various Interested Parties

- Opening by John Hansen.

- John asked for questions, suggestions and comments from audience.

- Charlie Coelho (Owner of D&D)
  - Redevelopment of existing properties is important
  - Are we trying to make the village pedestrian?
  - Traffic patterns have changed since Showcase closed
  - He is open to changes

- Phoebe Lee Dunn
  - Traffic Counts needed.
  - Reduced parking killed businesses
  - Use information from Parking Study from Greenbriar

- Need Parking for redevelopment of businesses.
  - Possible shared parking partnership
  - Question of liability -> Municipal Parking Authority

- Don Doucette with US RT 6 Tourist Association
  - Would like to see streetscaping
  - Benches, awnings, plantings…

- Paul Noury
  - Traffic is main challenge

NOTICE TO PARTICIPANTS: The above is our understanding of the matters discussed. You are requested to review these items and advise, in writing, of any errors or omissions within ten (10) days from document date. If no comments are received, concurrence will be assumed.

- Look at Rear of buildings for parking, benches, etc.
- Disappointed that Village doesn't extend to Luther's Street

- Used to have business in Village
  - Traffic is fast and congested -> Makes people nervous
- Bethany Mechan
  - Suggested a Speed Hump could be used for traffic calming
- Layout will be a challenge -> Buildings are close to street
- Lower speed limit and employ traffic calming measures
- Cars don't stop for Crosswalk
- More Crosswalks and a means to enforce/promote pedestrian safety

NOTICE TO PARTICIPANTS: The above is our understanding of the matters discussed. You are requested to review these items and advise, in writing, of any errors or omissions within ten (10) days from document date. If no comments are received, concurrence will be assumed.

Luther's Corner Village Public Workshop at Seekonk Congregational Church

February 28, 2012

NOTES

Meeting started at 7:10PM

In attendance from Planning : John Hansen – Town Planner, Neal Abelson, Chairman of Planning Board, Phoebe Lee Dunn, Planning Board member.

DiPrete Engineering, Jason Clough

RAB Professional Engineers, Judy Zimmerman-Reisch

John Hansen opened up the meeting with a summary of the Town's effort to preserve Luther's Corners Village District. He noted that a zoning bylaw had been passed recently allowing the village district multiple ways to help preserve the area. He went on to state that the parking and traffic are the biggest problems to overcome. DiPrete Engineering and RAB Engineering were hired to put together a study of possible ways to deal with the traffic and parking.

In conclusion John Hansen opened up the meeting to comments from the audience in hopes of putting these ideas into an action plan.

Audience members comments/ideas and thoughts

Charlie Coelho of 623 Fall River Ave (Dunkin Donuts) asked about the town looking into buying the vacant buildings in and around the area in order to create some much needed off street parking.

L. Dunn PB member and resident of 660 Fall River Ave. noted that the when the state came in and widened to road it took away on street parking which killed the businesses in the area.

Judy Zimmerman-Reisch of RAB Engineering commented that a new traffic study needed to be done in the area because of Greenbrier.

Charlie Coelho commented that business is down, there is less traffic at night since the Showcase Cinema closed down.

Louanne Jennings of 135 Lauren Dr. asked about the size of the district and where it began and ended and commented that the most important things were defiantly the parking and the amount of traffic and the speed of traffic on Fall River Ave. and wondered what could be done about it.

Paul Noury of 663 Fall River Ave. Commented that he has lived in Seekonk 7 years and was a former business owner in the L.C.V.D. and he closed his shop due to traffic and parking issues. He said that the biggest challenge is the busy street and encouraged the planner and the engineers to look at utilizing

the backs of the properties as well as the fronts. He suggested foot paths and decks in the back so they were not right on the street it would look better and be safer for people to walk in the area.

Bethany Mechan of 602 Fall River Ave. suggested a speed bump. She has a business on Atwells Ave. in Providence and a speed bump helped slow the traffic in that area.

Further discussions continued.

In conclusion John Hansen ended the meeting saying that DiPrete and RAB Engineering would be working on studies for parking and look into possible traffic calming ideas in the area.