

Granite State Landfill Development Dalton, New Hampshire

TRAFFIC STUDY

September 2020

Prepared for:

Granite State Landfill, LLC.
1855 Vermont Route 100
Hyde Park, VT 05655

Submitted to:

New Hampshire Department of Transportation
District 1 - Northern Region
641 Main Street, Lancaster NH 03584

Submitted by:

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Thomas A. Errico

9/24/2020

TY·LIN INTERNATIONAL

Introduction and Study Scope of Analysis

Granite State Landfill, LLC. is evaluating an existing industrial site located primarily in Dalton, New Hampshire for use as a solid waste disposal facility, including support infrastructure and renewable energy projects. The site has NH 116 frontage in the Town of Bethlehem and is accessed by an existing site road, Douglas Drive (See **Figure 1**).

This Traffic Study has been prepared in response to discussions at the February 20, 2020 Scoping Meeting for Traffic Impacts of Development at the New Hampshire Department of Transportation (NHDOT) office in Concord. According to discussions at that meeting the following items shall be included in the Study (see **Appendix** for notes and attendees):

- Study Area: The study will include the site driveway / Douglas Drive at NH 116 in Bethlehem and the intersection of US 3 and NH 116 in Whitefield.
- The traffic analysis at the study area intersections should be focused on safely accommodating the proposed trucking traffic and would include turning lane warrants (based on NCHRP methodologies) and truck-turning templates. Although traditional capacity analysis is not necessary at the intersection of Douglas Drive at NH 116, it may be useful in evaluating possible design improvements at the intersection of US 3 and NH 116 in Whitefield.
- Analysis Periods: Weekday AM and PM.
- Opening Year / Future Year: Assumed to be 2023 / 2033
- Background growth / other development: Use 1 percent average annual background growth rate. No other background developments were identified.
- Site Trip Generation / Distribution / Pass-by: An approximate trip generation of 40± trucks per day on an average day and 90± trucks/day on a busy (peak summer day) was provided by Casella, based on current operations at the NCES Bethlehem site. Truck transaction data at the existing site will be examined (including the vehicle classification) to provide a detailed estimate of trip generation at the proposed facility during peak summer conditions.
- Traffic data at the site driveway for the existing uses (gravel pit, asphalt plant, dragstrip) will need to be collected or estimated.
- Design Considerations: NHDOT indicated that the traffic engineer (T.Y. Lin International) should give consideration to the (high) percentage of trucks when examining the need for turn-lanes.
- NHDOT requested that the proposed facility provide adequate internal queueing storage to accommodate trucking demands on site.

Existing Traffic Volumes

Existing traffic volumes along NH 116 in the vicinity of Douglas Drive were obtained from two sources. NHDOT conducts periodic traffic counts and according to their database the Average Annual Daily traffic volume on NH 116 in the vicinity of the site was 5,000 daily vehicles in 2015 (the count was performed at the Bethlehem town line). From an analysis perspective the focus is on peak hour conditions and for this study it has been identified as the Weekday AM and PM peak hours. Peak hour traffic volumes on NH 116 at Douglas Drive were estimated according to a traffic count conducted in Whitefield. 12-hour intersection turning movement counts were

performed at the US 3/NH 116 intersection on September 12 and 13, 2019 (see **Appendix**). Based upon the traffic counts the following AM and PM peak hour volumes were recorded on NH 116 south of US 3.

- Thursday September 12, 2019
 - AM Peak Hour (7:00-8:00AM)
 - NH 116 northbound = 189 vehicles
 - NH 116 southbound = 355 vehicles
 - PM Peak Hour (3:00-4:00PM)
 - NH 116 northbound = 372 vehicles
 - NH 116 southbound = 275 vehicles
- Friday September 13, 2019
 - AM Peak Hour (7:00-8:00AM)
 - NH 116 northbound = 182 vehicles
 - NH 116 southbound = 320 vehicles
 - PM Peak Hour (3:00-4:00PM)
 - NH 116 northbound = 357 vehicles
 - NH 116 southbound = 247 vehicles

Site Generated Traffic Volumes

To estimate traffic generated by the proposed project existing traffic information was obtained from the North Country Landfill site in Bethlehem. **Tables 1 and 2** document recorded truck traffic volume from the North Country Landfill site.

Table 1 Vehicles Scaled over 22 business days of July 2019									
Vehicle Type	Hour Vehicle Scaled Into the Facility								
	6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	10 - 11 AM	11 - 12 PM	12 - 1 PM	1 - 2 PM	2 - 3 PM
TT	184	156	101	96	124	113	112	131	76
Roll-off	18	24	47	52	47	40	26	42	32
Packer	1	19	16	21	22	28	13	20	20
Passenger	2	15	23	22	34	22	28	29	15
10 wheel Dump	0	1	2	1	2	1	2	1	1
Total	205	215	189	192	229	204	181	223	144
Hourly	9	10	9	9	10	9	8	10	7

Table 2 Vehicles Scaled over 23 business days of August 2019									
Vehicle Type	Hour Vehicle Scaled Into the Facility								
	6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	10 - 11 AM	11 - 12 PM	12 - 1 PM	1 - 2 PM	2 - 3 PM
TT	138	189	72	86	126	169	144	114	46
Roll-off	25	37	56	55	51	46	39	32	37
Packer	1	22	19	27	11	15	29	32	15
Passenger	1	16	18	23	32	36	29	26	21
10 wheel Dump	1	3	6	5	7	5	6	6	8
Total	166	267	171	196	227	271	247	210	127
Hourly	7	12	7	9	10	12	11	9	6

The proposed landfill operation is expected to average about 102 truck trips per day (20% above the Bethlehem fill rates), of which 50 trucks would be larger vehicles such as 18 wheeler semi-tractor trailers (FHWA WB-67 type). The landfill is expected to operate from about 6:00AM to 5:00PM during weekdays and some occasional Saturdays, with traffic intentionally spread out throughout the day to aid in quick, efficient unloading operations. During a peak hour about 18 vehicles would be expected to enter and 18 vehicles exit. This level of traffic is only a 3.8% increase in the AM peak hour and 4.9% in the PM peak hour northerly from Whitefield on NH 116.

The routing of trucks to and from the site was based upon origins and destinations to and from I-93 and most appropriate non-interstate routing considering community impacts and roadway infrastructure constraints. The proposed truck route for origins and destinations to and from the south on I-93 is via Exit 35 on I-93 to US 3 northerly and to NH 116 in Whitefield. The truck route for origins and destinations to and from the north on I-93 (and I-91) is via Exit 40 on I-93 to US 302 easterly, to US 3 northerly and to NH 116 in Whitefield. A graphic depicting the proposed routing plan is provided in the **Appendix**.

There will be some localized vehicles that originate from the greater Littleton area from the south on NH 116. Anticipated **daily** landfill related traffic originating from NH 116 from the south includes:

- Front Load/Rear Load/Side Load: 8 vehicles
- Roll Off: 8 vehicles
- Utility Vehicle: 5 vehicles
- Deliveries (ups/napa/wb mason, etc.): 3 vehicles
- Fuel Delivery: 1 vehicle
- Total Daily: 25 vehicles (or 3 vehicles entering and 3 vehicles exiting during a peak hour)

Figure 2 depicts the Weekday AM and PM peak hour Site Trip Generation volumes generated at the NH 116/Douglas Drive intersection.

Future Build Traffic Volumes

Future traffic volumes at the site driveway were estimated based on existing landfill generated traffic volumes at the North Country Landfill site and background traffic growth on NH 116 (per direction at the scoping meeting an annual growth rate of 1% was assumed).

Existing Site Traffic Generation

The site is currently operated as a commercial/industrial facility that includes two sand and gravel mining operations, a rock quarry, processing of roadway gravels and stone, and an asphalt plant. The owner lives in a house on the property. The site is also permitted for a drag strip, although construction is not complete, and the project is dormant. The owner has a driveway permit which is provided in the **Appendix**. Facilities are active about 30 weeks a year, with about 50 round trips a weekday for trucks hauling soil and asphalt materials. The site owner indicates the site has a permit for 200 to 250 trips per day, or 1,000 trips per week, to account for traffic associated with the business operations and drag strip. Given that this Study is evaluating traffic during the Weekday peak hours, only traffic associated with the commercial/industrial facility was included. For the purposes of the traffic analysis it was assumed that 5 trucks enter, and 5 trucks exit during the Weekday AM and PM peak hours.

Background Growth

The project is anticipated to open in 2026 and the analysis assumes a 10-year future volume scenario. The existing traffic volumes recorded in 2019 were increased by 17% to estimate base 2036 traffic volumes. The following presents the future volumes

- AM Peak Hour (7:00-8:00AM)
 - NH 116 northbound = 189 vehicles x 1.17 = **221 vehicles**
 - NH 116 southbound = 355 vehicles x 1.17 = **415 vehicles**
- PM Peak Hour (3:00-4:00PM)
 - NH 116 northbound = 372 vehicles x 1.17 = **435 vehicles**
 - NH 116 southbound = 275 vehicles x 1.17 = **322 vehicles**

Figure 3 depicts the 2036 Build Traffic volumes during the Weekday AM and PM peak hour at the NH 116/Douglas Drive intersection.

Site Driveway Design Review

The key design elements that were reviewed for the proposed project to ensure safe and efficient movements entering and exiting the site included the need for turn lanes (left-turn and right-turn deceleration lanes), sight distance and internal truck queue storage to address waiting trucks.

NH 116 Left-Turn Lane

Left-turn movements entering the site are anticipated to be minor. As noted on **Figure 3** only 7 vehicles are anticipated to turn left during the AM peak hour and 7 vehicles during the PM peak hour. Per discussions with NHDOT staff, the evaluation of the need for a dedicated left-turn lane was based upon guidance contained in the publication National Cooperative Highway Research Program (NCHRP) 457. **Figures 4 and 5** depict the warrant threshold (for 60MPH) contained in the NCHRP 457 report and as noted a left-turn lane on NH 116 is not warranted.

NH 116 Right-Turn Lane

Given the proposed truck routing plan, a right-turn deceleration lane is proposed. The design of the lane is based upon guidance from the publication A Policy on Geometric Design of Highways and Streets, 8th Edition, 2018, AASHTO. According to the publication, the lane shall provide a total deceleration length of 505 feet (inclusive of both deceleration full lane length plus taper). This length is based on speeds of 55MPH, which is slightly above the posted speed limit of 50MPH. Assuming a right-turn lane width of 12 feet, the suggested taper rate is 1:15 or 180 feet. Accordingly, the full lane length shall be 325 feet plus a taper of 180 feet. A plan located in the **Appendix** depicts the conceptual design plan for the right-turn lane.

Douglas Drive Sight Distance

Sight distance requirements were also based on the AASHTO publication noted previously. AASHTO notes the following without any adjustment for grade and speeds for 50MPH.

- For 50MPH and the design vehicle is a truck, the sight distance requirement is 850 feet for a vehicle turning left from the minor street (Douglas Drive).
- For 50MPH and the design vehicle is a truck, the sight distance requirement is 775 feet for a vehicle turning right from the minor street (Douglas Drive).
- Field measurements are based on a height-of-eye of 7.5 feet (a truck) to a height-of-object of 3.5 feet. The measurement is taken from a spot 14.5 feet from the edge of travel way (the white edge line).

Horizons Engineering performed a field survey to measure available sight distance. A plan is located in the **Appendix** and depicts the field measurements. Based on the survey there is acceptable sight distance looking left (891 feet provided with a requirement of 850 feet). For right-turn movements, the required distance is slightly higher than measured (775 feet versus 752 feet). Some tree/brush clearing on the inside of the curve north of the site could be performed to meet the standard.

Truck Queue Storage

To accommodate trucks that may be arriving prior to site opening, an internal truck queuing area is proposed. As noted on the graphic in the **Appendix**, an area that can accommodate up to 24 large trucks is being provided to ensure off-site truck parking is avoided.

US 3 and NH 116 Design Review

An “Auto-Turn” truck turning evaluation was conducted at the US 3 and NH 116 intersection to confirm that current intersection geometric conditions allow for large truck turns from NH 116 to and from US 3. Graphics located in the **Appendix** depict a WB-67 truck navigating the intersection. According to the analysis, large trucks are able to make the right-turn from NH 116 to US 3 southbound and from US 3 northbound to NH 116. No improvements are required for truck turns.

APPENDIX

NHDOT Scoping Meeting Notes

SCOPING MEETING FOR TRAFFIC IMPACTS OF DEVELOPMENT

Date: February 20, 2020

Town/City: Dalton

Location / District: NH 116 / District 1

Consultant / Developer: CMA / Casella

Size & Type of Development: 1,900-acre Solid Waste Facility

Site Access: Proposed on NH 116 via existing driveway on Douglas Dr. in Bethlehem. The general consensus was that the proposed trucking route along US 3 through Whitefield was preferable to other alternatives (such as through downtown Littleton).

Phasing: The applicant is looking to obtain a driveway permit for the complete build-out in one phase, but development within the site will occur incrementally (160± acres at time). NHDOT District 1 noted they may have to reissue the driveway permit in the future if the volume of vehicles exceeds the permitted amount. Within the ten-year forecast period of this traffic study, trucking volumes generated by the proposed site are not expected to increase beyond the existing operations at the NCES Site (Bethlehem).

Study Area: The study will include the site driveway / Douglas Drive at NH 116 in Bethlehem and the intersection of US 3 and NH 116 in Whitefield.

The traffic analysis at the study area intersections should be focused on safely accommodating the proposed trucking traffic and would include turning lane warrants (based on NCHRP methodologies) and truck-turning templates. Although traditional capacity analysis is not necessary at the intersection of Douglas Drive at NH 116, it may be useful in evaluating possible design improvements at the intersection of US 3 and NH 116 in Whitefield.

Analysis Periods: Weekday AM and PM.

Opening Year / Future Year: Assumed to be 2023 / 2033

Additional data: The Dalton site is expected to mirror the existing operations at the NCES Bethlehem waste site. Operating hours of site will be from 6AM-6PM, as per the DES Solid Waste Permit. Trucks are allowed on-site at 6:30AM, but waste is received between 7AM-3PM. Although trucking activity occurs throughout the day, there is an early morning and afternoon peak in trucking volumes. It was noted that the site does not operate on weekends, except after snow days or midweek holidays.

Background growth / other development: Use 1 percent average annual background growth rate. No other background developments were identified.

Site Trip Generation / Distribution / Pass-by: An approximate trip generation of 40± trucks per day on an average day and 90± trucks/day on a busy (peak summer day) was provided by Casella, based on current operations at the NCES Bethlehem site. Truck transaction data at the existing site will be examined (including the vehicle classification) to provide a detailed estimate of trip generation at the proposed facility during peak summer conditions.

Traffic data at the site driveway for the existing uses (gravel pit, asphalt plant, dragstrip) will need to be collected or estimated.

Casella indicated that they enforce the trucking route to and from the existing NCES facility in Bethlehem and will enforce the proposed trucking route for all long haul trucks utilizing the Dalton facility. It is expected that only some smaller local waste delivery trucks would access and egress the site to and from the west along NH 116 through Littleton.

Design Considerations: NHDOT indicated that the traffic engineer (T.Y.Lin.) should give consideration to the (high) percentage of trucks when examining the need for turn-lanes.

NHDOT District 1 indicated that waste delivery trucks are currently observed parking along or adjacent to the state highway system - presumably waiting for entry into the existing NCES facility in Bethlehem. As such, NHDOT requested that the proposed facility provide adequate internal queueing storage to accommodate trucking demands on site.

Other Issues: The North Country Council (NCC) letter to Nicholas Sanders was distributed at the scoping meeting (attached). NHDOT noted that the development team should follow-up with the town of Whitefield and NCC regarding their concerns on roadway conditions and safety. The development team indicated that they would utilize classification data along the proposed trucking route in combination with their trucking projections to assess their impact. Additionally, the development team plans to reach out to NHDOT Materials and Research (Eric Thibodeau - (603) 271-1750 - eric.thibodeau@dot.nh.gov) to see what pavement condition data along the proposed truck route is available in an effort to address the concerns raised by NCC.

Submitted by: Nick Sanders

NBS

Date: 3/3/2020

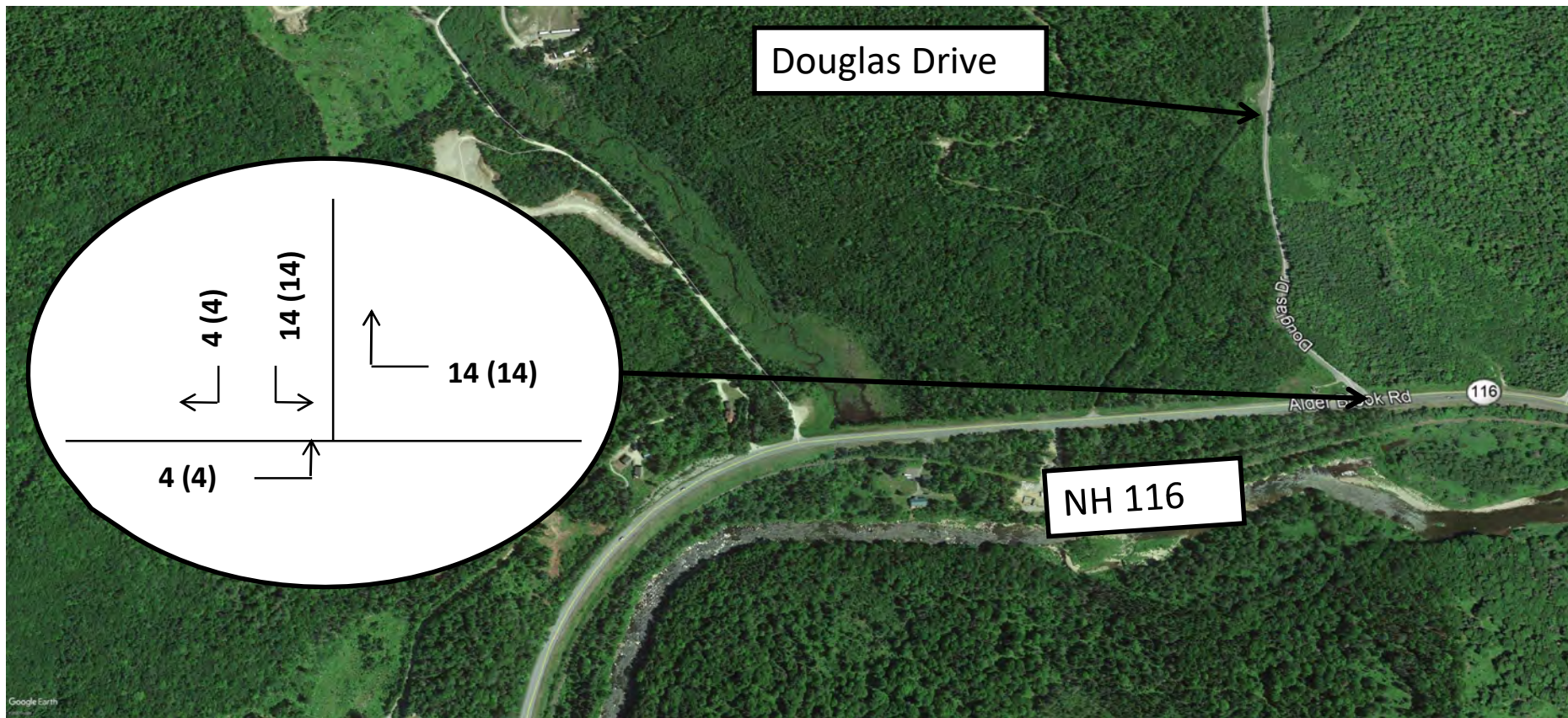
cc: All Attendees (Attached)

Figures



Granite State Landfill Development Project, Dalton, New Hampshire
Figure 1 – Site Location

September 2020



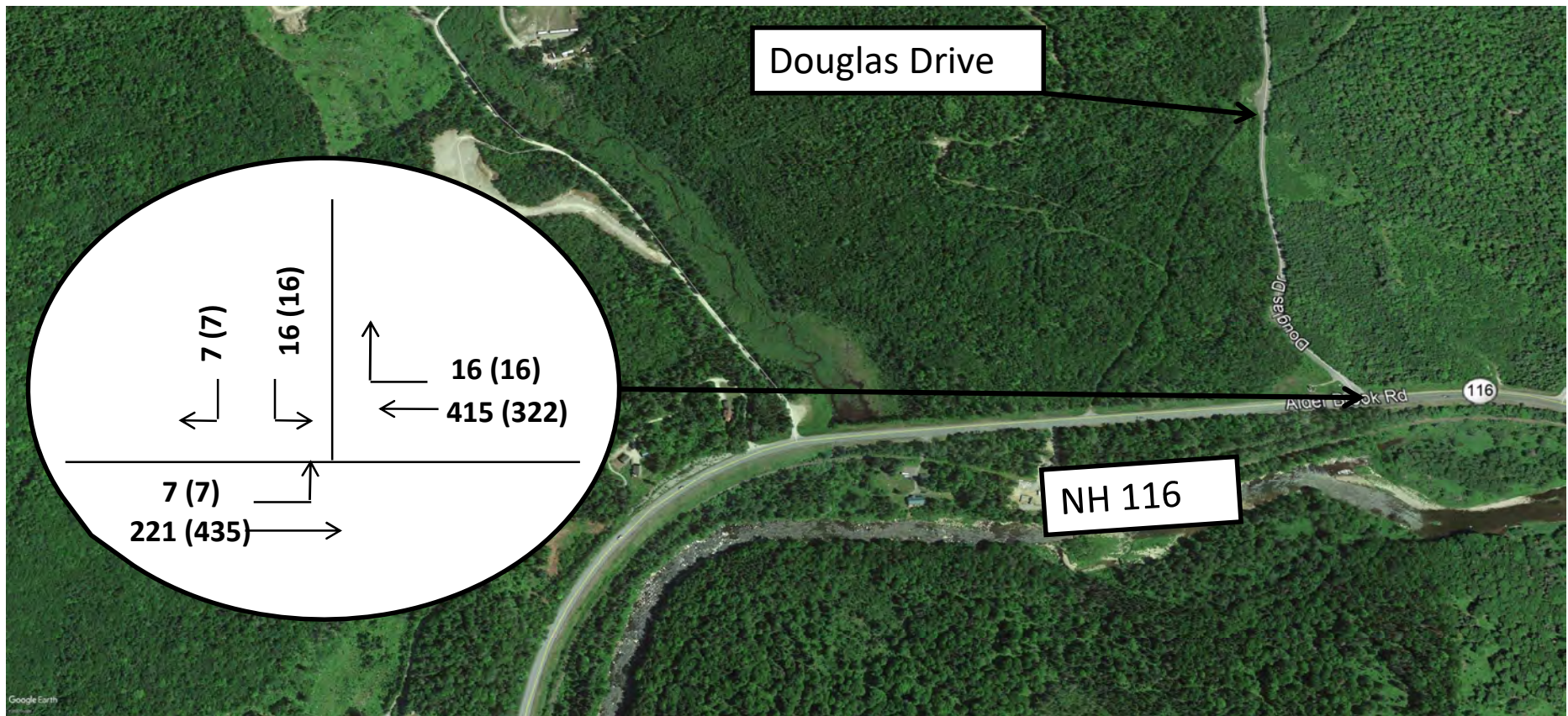
Granite State Landfill Development Project, Dalton, New Hampshire

Figure 2 – Trip Generation Assignment

xxx- Weekday AM Peak Hour

(xxx) – Weekday PM Peak Hour

September 2020



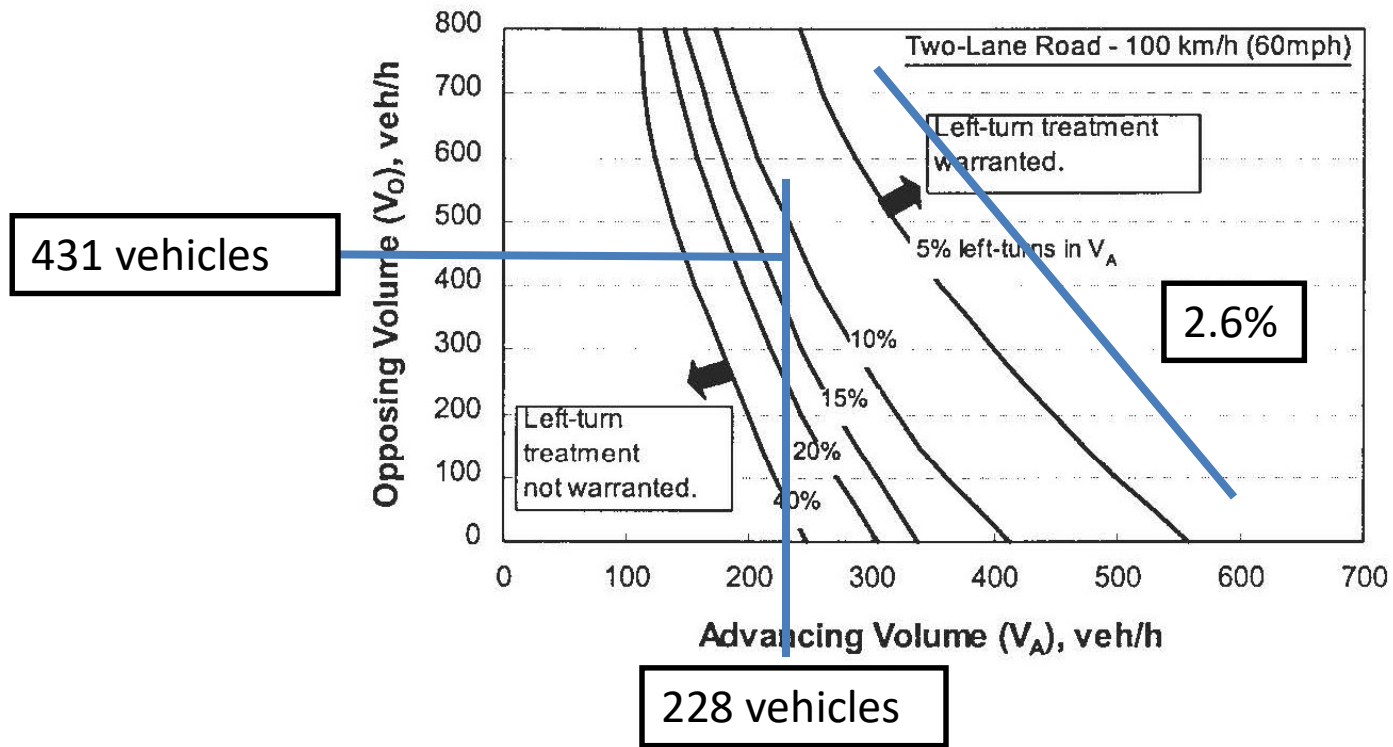
Granite State Landfill Development Project, Dalton, New Hampshire

Figure 3 – 2036 Build Traffic Volumes

xxx- Weekday AM Peak Hour

(xxx) – Weekday PM Peak Hour

September 2020

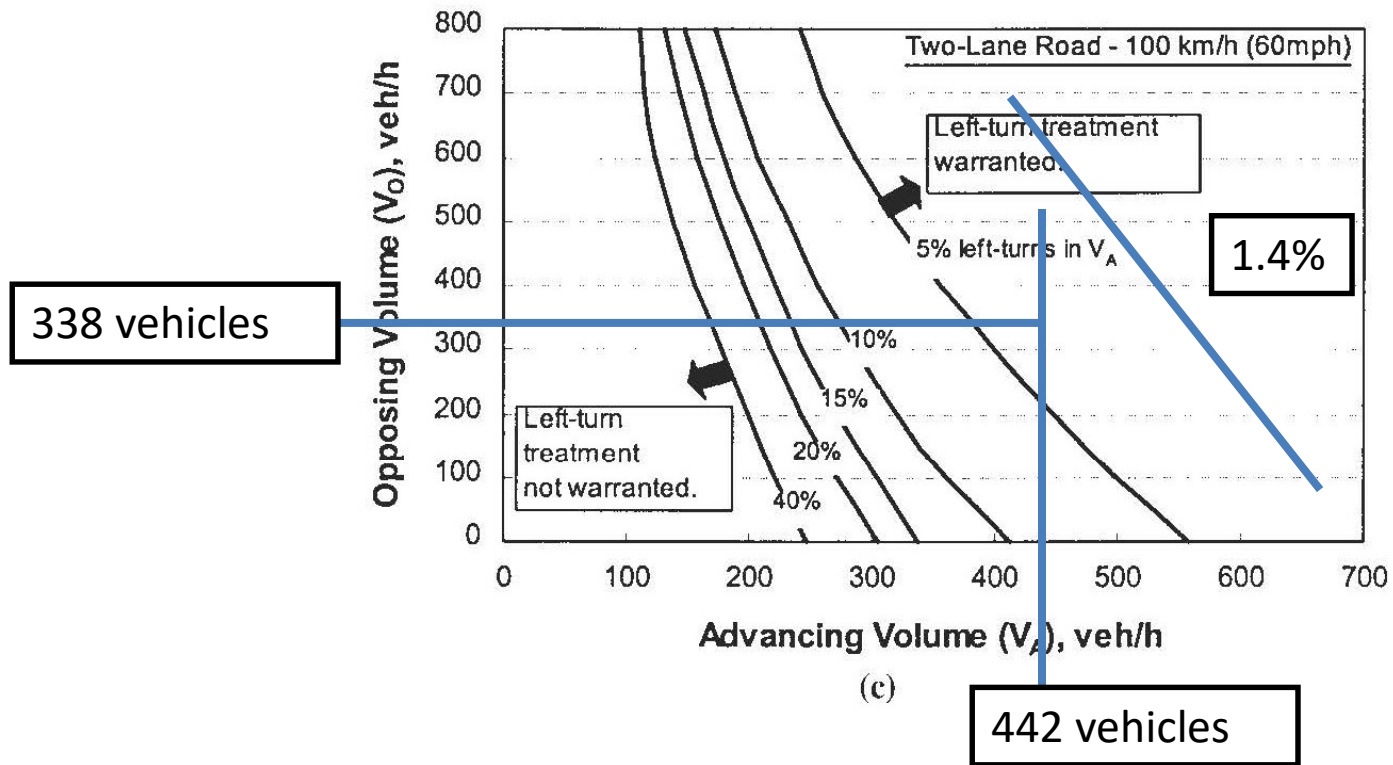


Note: When $V_o < 400$ veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h ($V_A > 400$ veh/h).

Granite State Landfill Development Project, Dalton, New Hampshire
 Figure 4 – Left-Turn Lane Warrant Criteria AM Peak Hour

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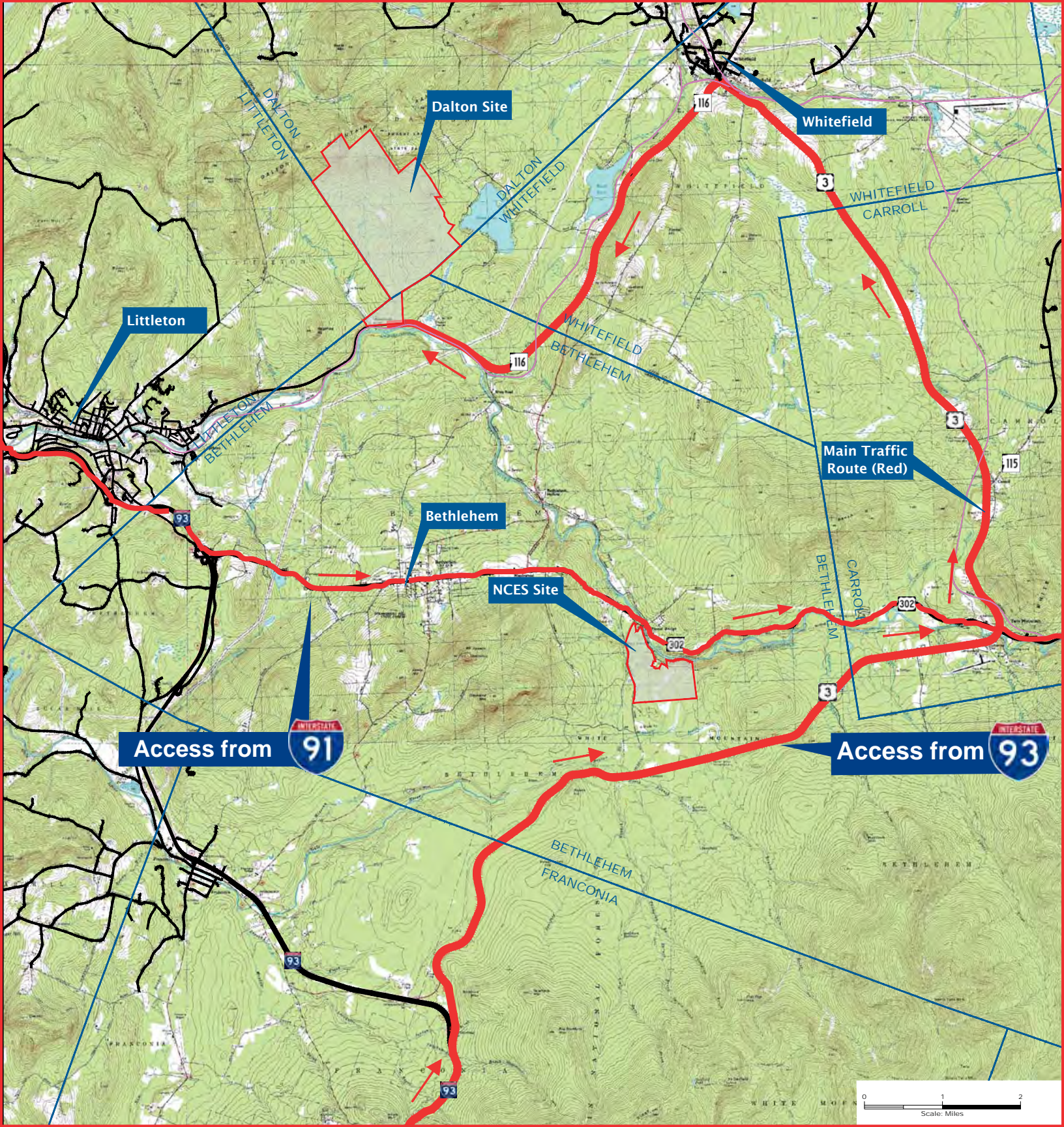


Note: When $V_o < 400$ veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_a) in the same direction as the left-turning traffic exceeds 400 veh/h ($V_a > 400$ veh/h).

Granite State Landfill Development Project, Dalton, New Hampshire
 Figure 5 – Left-Turn Lane Warrant Criteria PM Peak Hour

September 2020

Truck Routing Plan



Dalton Site

Whitefield

Littleton

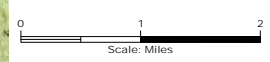
Main Traffic Route (Red)

Bethlehem

NCES Site

Access from 

Access from 



Traffic Counts

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:00 AM	0	25	22	0	0	0	7	10	0	7	0	5	76
06:15 AM	0	24	46	0	0	0	7	12	0	12	0	12	113
06:30 AM	0	27	50	0	0	0	12	21	0	23	0	10	143
06:45 AM	0	24	52	0	0	0	8	28	0	22	0	6	140
Total	0	100	170	0	0	0	34	71	0	64	0	33	472
07:00 AM	0	39	64	0	0	0	11	49	0	39	0	12	214
07:15 AM	0	72	78	0	0	0	17	53	0	33	1	17	271
07:30 AM	1	60	79	0	0	0	25	43	0	29	0	10	247
07:45 AM	0	35	63	0	0	1	18	32	0	35	1	12	197
Total	1	206	284	0	0	1	71	177	0	136	2	51	929
08:00 AM	2	37	57	0	0	1	10	23	1	25	0	9	165
08:15 AM	1	36	50	0	0	2	6	36	0	27	0	2	160
08:30 AM	0	31	39	1	0	1	7	38	3	32	0	9	161
08:45 AM	0	29	36	1	0	2	9	23	1	37	0	3	141
Total	3	133	182	2	0	6	32	120	5	121	0	23	627
09:00 AM	2	33	37	1	0	1	6	28	1	34	0	11	154
09:15 AM	0	25	44	0	0	1	11	24	0	35	1	9	150
09:30 AM	1	31	51	0	0	4	15	36	0	26	0	5	169
09:45 AM	0	33	49	0	0	0	9	31	0	37	3	6	168
Total	3	122	181	1	0	6	41	119	1	132	4	31	641
10:00 AM	1	34	43	0	0	3	6	31	0	36	1	10	165
10:15 AM	0	30	50	0	0	0	6	51	0	33	0	13	183
10:30 AM	0	20	52	0	0	0	11	23	0	32	0	6	144

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 2

Groups Printed- Cars - Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10:45 AM	0	34	37	0	0	0	14	20	0	45	0	4	154
Total	1	118	182	0	0	3	37	125	0	146	1	33	646
11:00 AM	0	33	47	0	0	0	12	22	1	42	0	6	163
11:15 AM	0	29	52	1	0	0	9	30	0	38	0	3	162
11:30 AM	0	31	37	0	2	0	6	30	0	36	1	7	150
11:45 AM	0	26	34	0	0	0	7	28	0	47	2	5	149
Total	0	119	170	1	2	0	34	110	1	163	3	21	624
12:00 PM	0	24	53	0	0	1	12	29	0	55	1	3	178
12:15 PM	0	26	52	0	0	0	6	25	0	60	1	20	190
12:30 PM	0	22	51	0	0	1	8	34	0	48	1	11	176
12:45 PM	1	35	43	0	0	0	9	37	1	64	1	11	202
Total	1	107	199	0	0	2	35	125	1	227	4	45	746
01:00 PM	0	25	36	0	0	2	8	43	1	48	0	11	174
01:15 PM	2	15	36	1	0	1	8	27	1	38	0	13	142
01:30 PM	0	20	43	1	0	2	11	38	2	50	1	9	177
01:45 PM	0	25	42	0	0	0	7	26	0	52	0	11	163
Total	2	85	157	2	0	5	34	134	4	188	1	44	656
02:00 PM	0	24	41	0	0	0	7	41	0	49	0	8	170
02:15 PM	0	52	48	0	0	0	11	34	0	45	0	14	204
02:30 PM	0	53	42	0	0	0	8	42	0	67	0	11	223
02:45 PM	1	46	33	0	0	0	6	28	0	71	1	10	196
Total	1	175	164	0	0	0	32	145	0	232	1	43	793
03:00 PM	1	49	54	0	1	0	13	74	0	58	0	12	262
03:15 PM	1	31	62	0	0	0	10	40	0	88	0	13	245

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 3

Groups Printed- Cars - Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
03:30 PM	0	32	51	1	0	1	11	41	0	85	0	16	238
03:45 PM	0	49	61	0	0	1	12	49	1	87	0	13	273
Total	2	161	228	1	1	2	46	204	1	318	0	54	1018
04:00 PM	0	30	65	0	0	0	12	45	0	71	1	10	234
04:15 PM	0	25	51	0	0	1	7	44	0	72	0	17	217
04:30 PM	0	22	54	0	0	0	10	48	0	82	0	20	236
04:45 PM	0	36	46	0	0	0	8	29	0	82	1	10	212
Total	0	113	216	0	0	1	37	166	0	307	2	57	899
05:00 PM	0	17	55	0	0	0	11	43	0	70	0	17	213
05:15 PM	0	31	41	0	0	0	11	38	0	78	1	16	216
05:30 PM	0	33	45	0	0	0	10	57	0	71	1	10	227
05:45 PM	2	30	55	1	0	1	10	22	0	69	0	13	203
Total	2	111	196	1	0	1	42	160	0	288	2	56	859
Grand Total	16	1550	2329	8	3	27	475	1656	13	2322	20	491	8910
Apprch %	0.4	39.8	59.8	21.1	7.9	71.1	22.2	77.2	0.6	82	0.7	17.3	
Total %	0.2	17.4	26.1	0.1	0	0.3	5.3	18.6	0.1	26.1	0.2	5.5	
Cars	16	1463	2244	8	3	26	450	1555	11	2230	19	463	8488
% Cars	100	94.4	96.4	100	100	96.3	94.7	93.9	84.6	96	95	94.3	95.3
Trucks	0	87	85	0	0	1	25	101	2	92	1	28	422
% Trucks	0	5.6	3.6	0	0	3.7	5.3	6.1	15.4	4	5	5.7	4.7

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 4

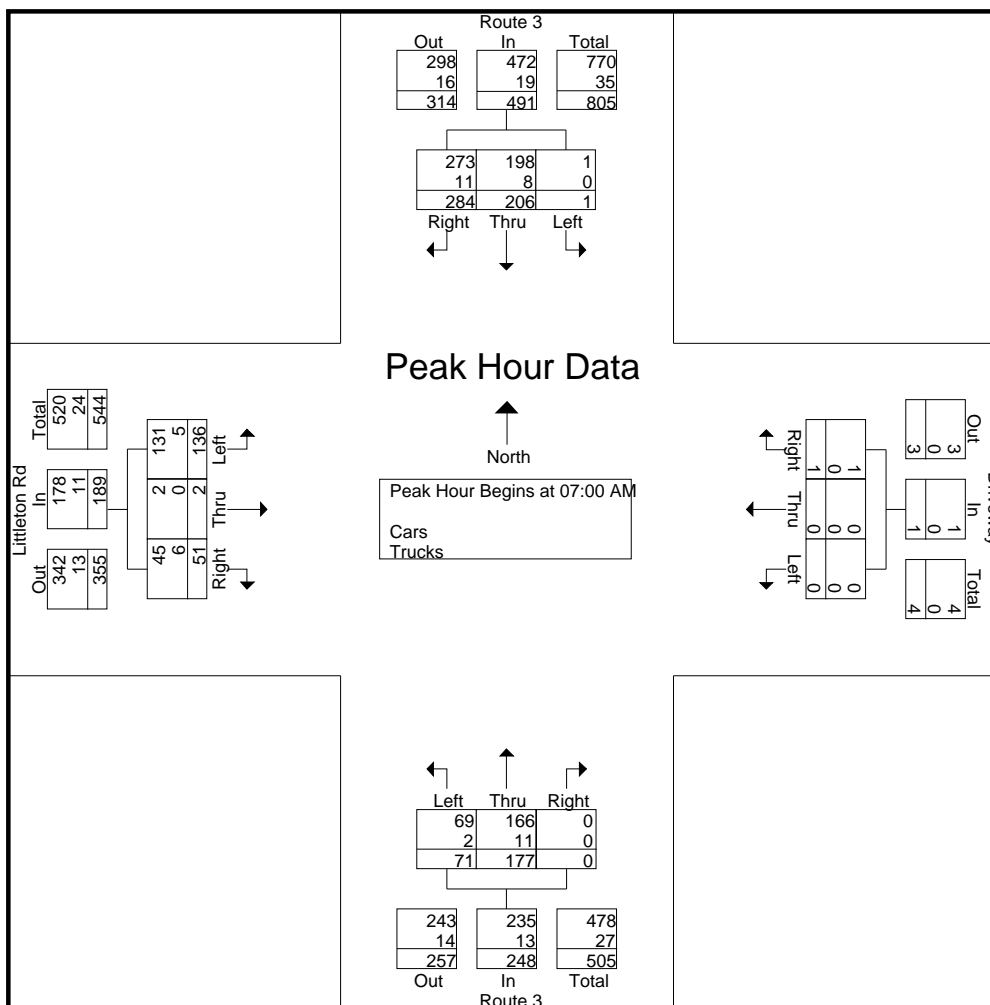
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	39	64	103	0	0	0	0	11	49	0	60	39	0	12	51	214
07:15 AM	0	72	78	150	0	0	0	0	17	53	0	70	33	1	17	51	271
07:30 AM	1	60	79	140	0	0	0	0	25	43	0	68	29	0	10	39	247
07:45 AM	0	35	63	98	0	0	1	1	18	32	0	50	35	1	12	48	197
Total Volume	1	206	284	491	0	0	1	1	71	177	0	248	136	2	51	189	929
% App. Total	0.2	42	57.8		0	0	100		28.6	71.4	0		72	1.1	27		
PHF	.250	.715	.899	.818	.000	.000	.250	.250	.710	.835	.000	.886	.872	.500	.750	.926	.857
Cars	1	198	273	472	0	0	1	1	69	166	0	235	131	2	45	178	886
% Cars	100	96.1	96.1	96.1	0	0	100	100	97.2	93.8	0	94.8	96.3	100	88.2	94.2	95.4
Trucks	0	8	11	19	0	0	0	0	2	11	0	13	5	0	6	11	43
% Trucks	0	3.9	3.9	3.9	0	0	0	0	2.8	6.2	0	5.2	3.7	0	11.8	5.8	4.6

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 5



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

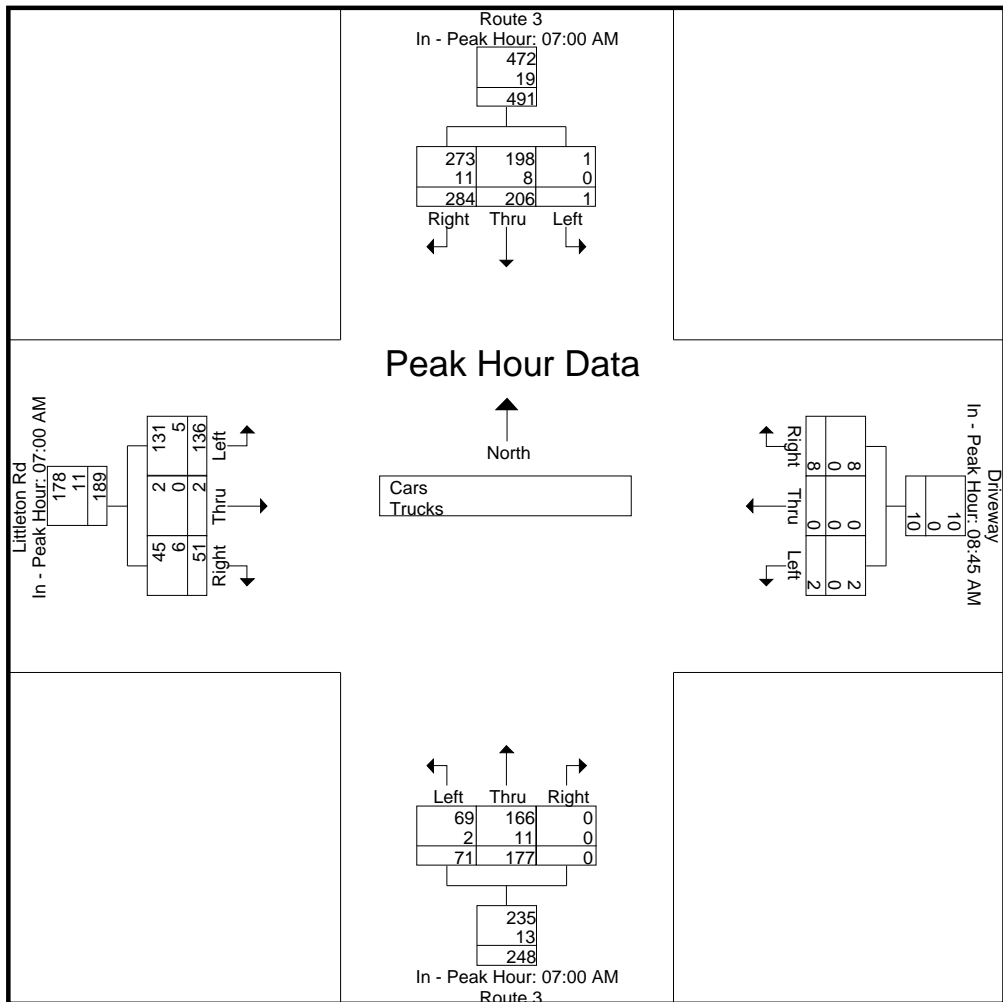
Peak Hour for Each Approach Begins at:

	07:00 AM				08:45 AM				07:00 AM				07:00 AM			
+0 mins.	0	39	64	103	1	0	2	3	11	49	0	60	39	0	12	51
+15 mins.	0	72	78	150	1	0	1	2	17	53	0	70	33	1	17	51
+30 mins.	1	60	79	140	0	0	1	1	25	43	0	68	29	0	10	39
+45 mins.	0	35	63	98	0	0	4	4	18	32	0	50	35	1	12	48
Total Volume	1	206	284	491	2	0	8	10	71	177	0	248	136	2	51	189
% App. Total	0.2	42	57.8		20	0	80		28.6	71.4	0		72	1.1	27	
PHF	.250	.715	.899	.818	.500	.000	.500	.625	.710	.835	.000	.886	.872	.500	.750	.926

Accurate Counts

978-664-2565

Cars	1	198	273	472	2	0	8	10	69	166	0	235	131	2	45	178
% Cars	100	96.1	96.1	96.1	100	0	100	100	97.2	93.8	0	94.8	96.3	100	88.2	94.2
Trucks	0	8	11	19	0	0	0	0	2	11	0	13	5	0	6	11
% Trucks	0	3.9	3.9	3.9	0	0	0	0	2.8	6.2	0	5.2	3.7	0	11.8	5.8



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 7

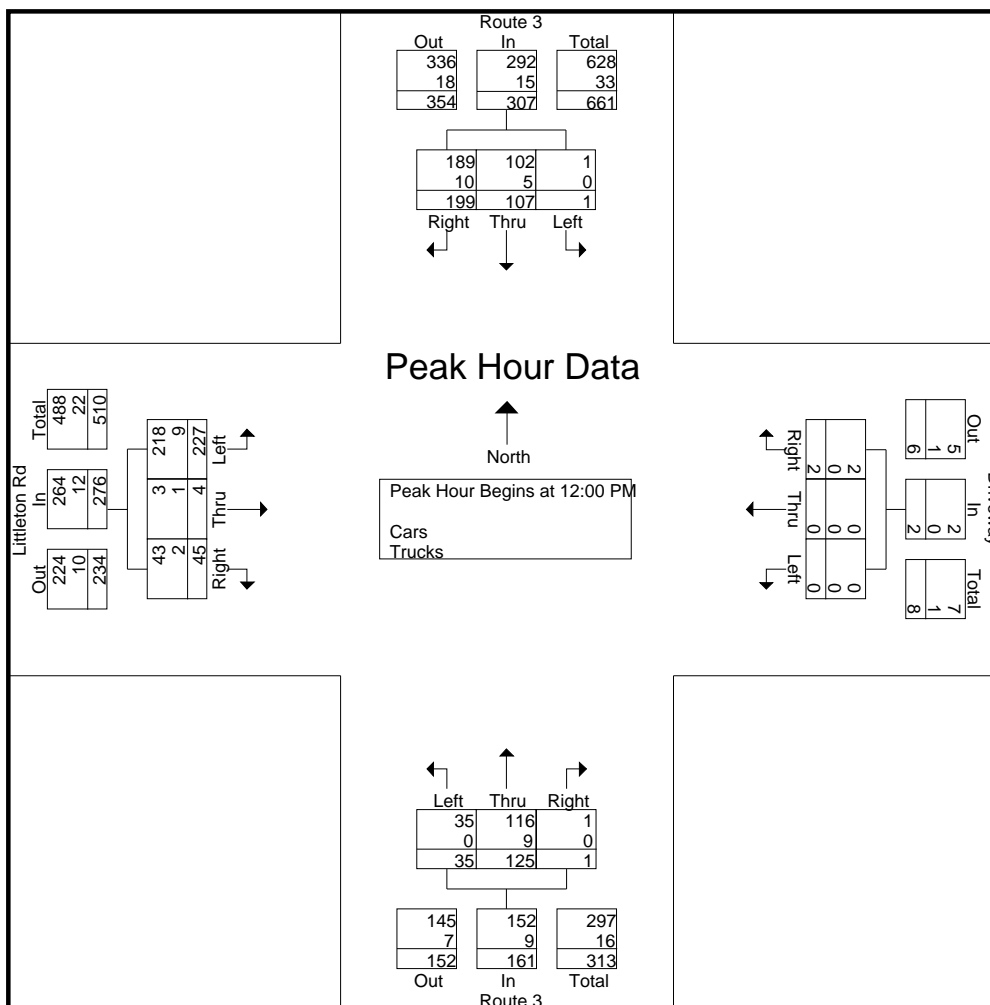
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	24	53	77	0	0	1	1	12	29	0	41	55	1	3	59	178
12:15 PM	0	26	52	78	0	0	0	0	6	25	0	31	60	1	20	81	190
12:30 PM	0	22	51	73	0	0	1	1	8	34	0	42	48	1	11	60	176
12:45 PM	1	35	43	79	0	0	0	0	9	37	1	47	64	1	11	76	202
Total Volume	1	107	199	307	0	0	2	2	35	125	1	161	227	4	45	276	746
% App. Total	0.3	34.9	64.8		0	0	100		21.7	77.6	0.6		82.2	1.4	16.3		
PHF	.250	.764	.939	.972	.000	.000	.500	.500	.729	.845	.250	.856	.887	1.00	.563	.852	.923
Cars	1	102	189	292	0	0	2	2	35	116	1	152	218	3	43	264	710
% Cars	100	95.3	95.0	95.1	0	0	100	100	100	92.8	100	94.4	96.0	75.0	95.6	95.7	95.2
Trucks	0	5	10	15	0	0	0	0	0	9	0	9	9	1	2	12	36
% Trucks	0	4.7	5.0	4.9	0	0	0	0	0	7.2	0	5.6	4.0	25.0	4.4	4.3	4.8

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 8



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

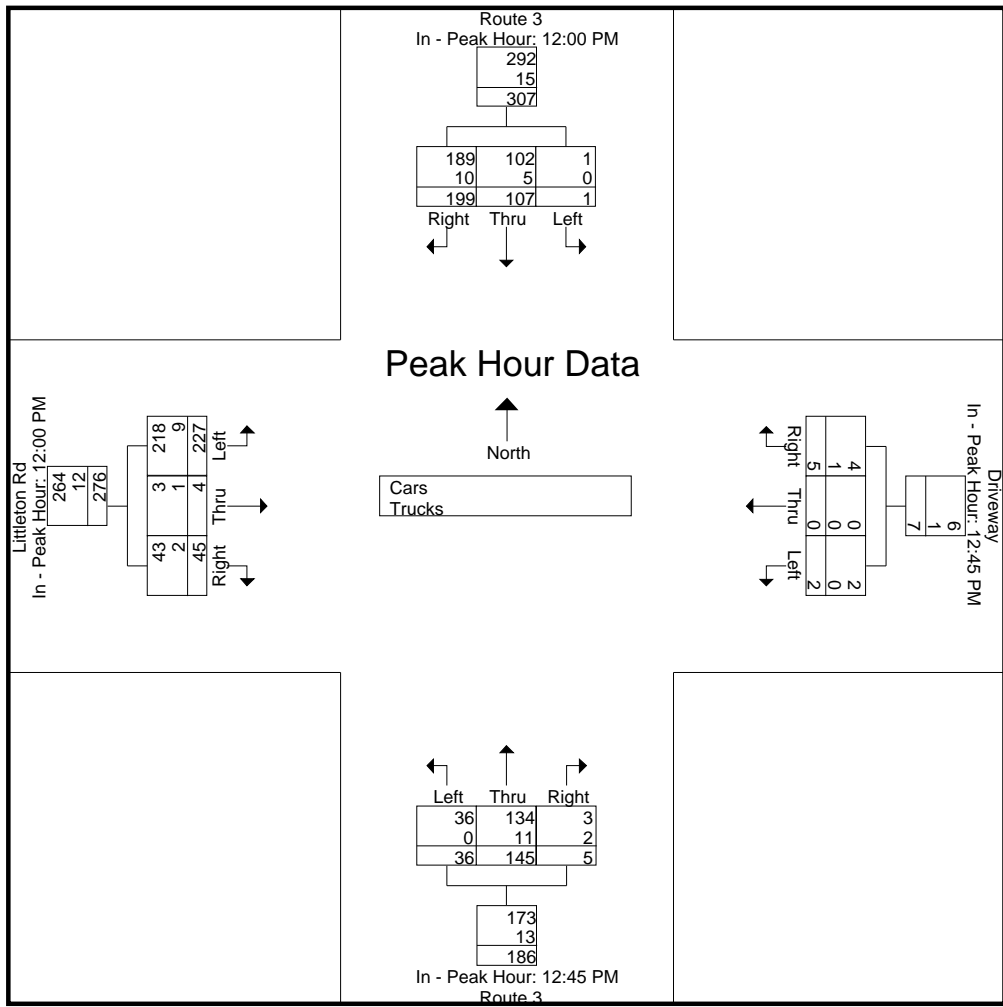
Peak Hour for Each Approach Begins at:

	12:00 PM				12:45 PM				12:45 PM				12:00 PM			
+0 mins.	0	24	53	77	0	0	0	0	9	37	1	47	55	1	3	59
+15 mins.	0	26	52	78	0	0	2	2	8	43	1	52	60	1	20	81
+30 mins.	0	22	51	73	1	0	1	2	8	27	1	36	48	1	11	60
+45 mins.	1	35	43	79	1	0	2	3	11	38	2	51	64	1	11	76
Total Volume	1	107	199	307	2	0	5	7	36	145	5	186	227	4	45	276
% App. Total	0.3	34.9	64.8		28.6	0	71.4		19.4	78	2.7		82.2	1.4	16.3	
PHF	.250	.764	.939	.972	.500	.000	.625	.583	.818	.843	.625	.894	.887	1.000	.563	.852

Accurate Counts

978-664-2565

Cars	1	102	189	292	2	0	4	6	36	134	3	173	218	3	43	264
% Cars	100	95.3	95	95.1	100	0	80	85.7	100	92.4	60	93	96	75	95.6	95.7
Trucks	0	5	10	15	0	0	1	1	0	11	2	13	9	1	2	12
% Trucks	0	4.7	5	4.9	0	0	20	14.3	0	7.6	40	7	4	25	4.4	4.3



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 10

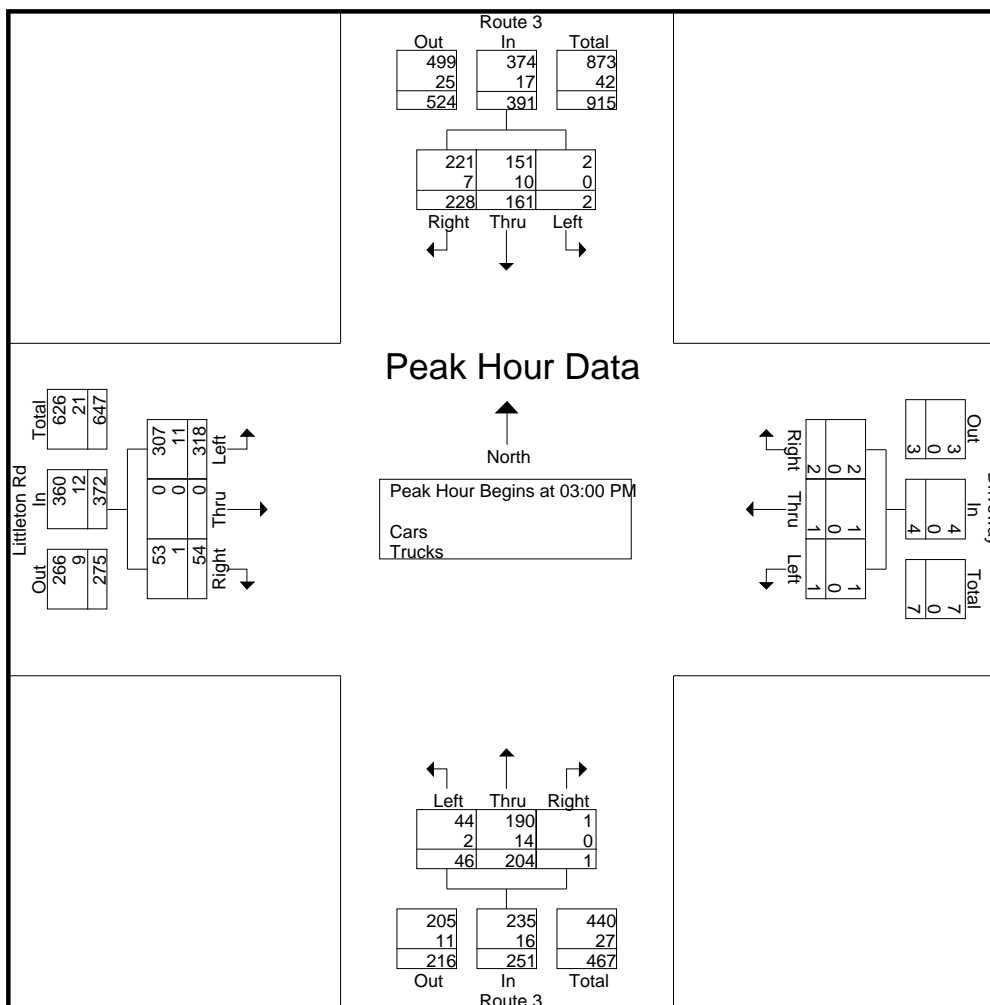
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	1	49	54	104	0	1	0	1	13	74	0	87	58	0	12	70	262
03:15 PM	1	31	62	94	0	0	0	0	10	40	0	50	88	0	13	101	245
03:30 PM	0	32	51	83	1	0	1	2	11	41	0	52	85	0	16	101	238
03:45 PM	0	49	61	110	0	0	1	1	12	49	1	62	87	0	13	100	273
Total Volume	2	161	228	391	1	1	2	4	46	204	1	251	318	0	54	372	1018
% App. Total	0.5	41.2	58.3		25	25	50		18.3	81.3	0.4		85.5	0	14.5		
PHF	.500	.821	.919	.889	.250	.250	.500	.500	.885	.689	.250	.721	.903	.000	.844	.921	.932
Cars	2	151	221	374	1	1	2	4	44	190	1	235	307	0	53	360	973
% Cars	100	93.8	96.9	95.7	100	100	100	100	95.7	93.1	100	93.6	96.5	0	98.1	96.8	95.6
Trucks	0	10	7	17	0	0	0	0	2	14	0	16	11	0	1	12	45
% Trucks	0	6.2	3.1	4.3	0	0	0	0	4.3	6.9	0	6.4	3.5	0	1.9	3.2	4.4

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 11



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

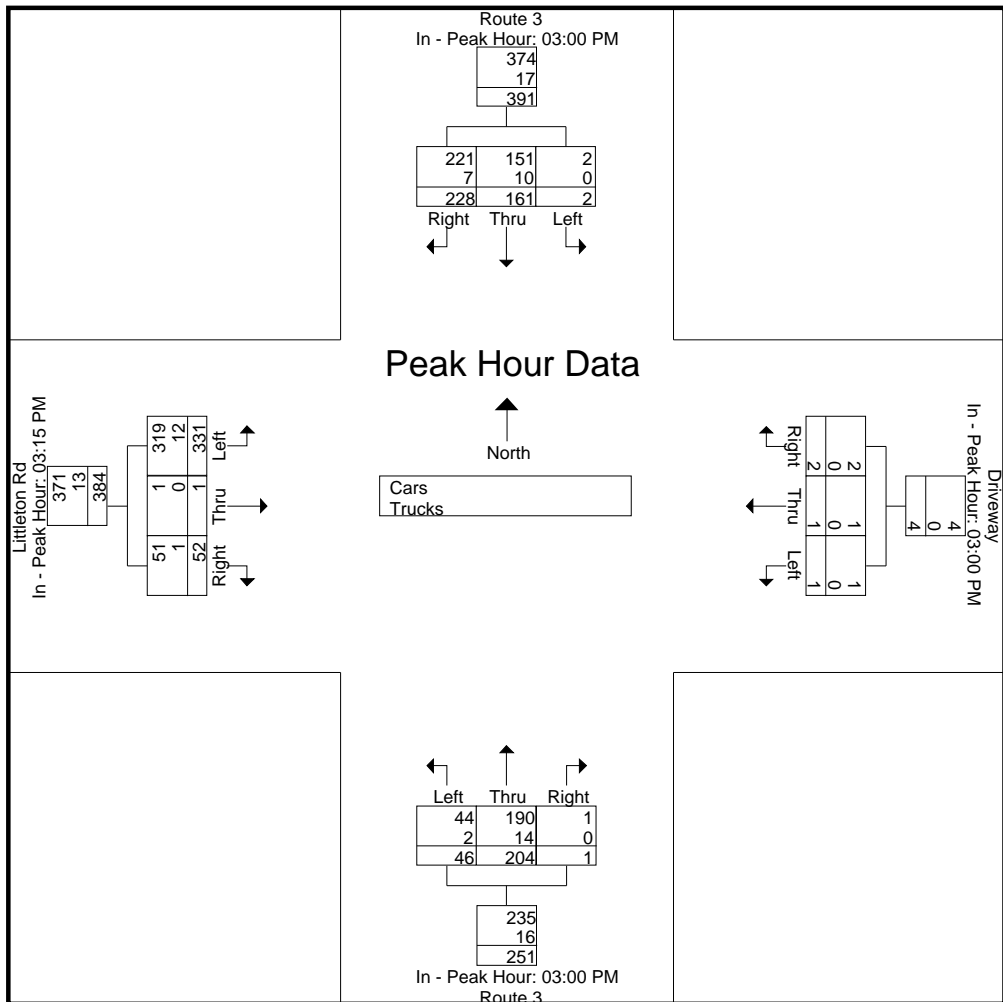
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:15 PM			
+0 mins.	1	49	54	104	0	1	0	1	13	74	0	87	88	0	13	101
+15 mins.	1	31	62	94	0	0	0	0	10	40	0	50	85	0	16	101
+30 mins.	0	32	51	83	1	0	1	2	11	41	0	52	87	0	13	100
+45 mins.	0	49	61	110	0	0	1	1	12	49	1	62	71	1	10	82
Total Volume	2	161	228	391	1	1	2	4	46	204	1	251	331	1	52	384
% App. Total	0.5	41.2	58.3		25	25	50		18.3	81.3	0.4		86.2	0.3	13.5	
PHF	.500	.821	.919	.889	.250	.250	.500	.500	.885	.689	.250	.721	.940	.250	.813	.950

Accurate Counts

978-664-2565

Cars	2	151	221	374	1	1	2	4	44	190	1	235	319	1	51	371
% Cars	100	93.8	96.9	95.7	100	100	100	100	95.7	93.1	100	93.6	96.4	100	98.1	96.6
Trucks	0	10	7	17	0	0	0	0	2	14	0	16	12	0	1	13
% Trucks	0	6.2	3.1	4.3	0	0	0	0	4.3	6.9	0	6.4	3.6	0	1.9	3.4



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 13

Groups Printed- Cars

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:00 AM	0	24	22	0	0	0	7	10	0	6	0	4	73
06:15 AM	0	24	44	0	0	0	7	11	0	12	0	12	110
06:30 AM	0	24	48	0	0	0	11	19	0	23	0	7	132
06:45 AM	0	23	49	0	0	0	8	23	0	21	0	6	130
Total	0	95	163	0	0	0	33	63	0	62	0	29	445
07:00 AM	0	37	63	0	0	0	11	45	0	38	0	9	203
07:15 AM	0	68	76	0	0	0	16	48	0	32	1	17	258
07:30 AM	1	58	76	0	0	0	24	41	0	27	0	8	235
07:45 AM	0	35	58	0	0	1	18	32	0	34	1	11	190
Total	1	198	273	0	0	1	69	166	0	131	2	45	886
08:00 AM	2	35	55	0	0	1	10	23	1	23	0	8	158
08:15 AM	1	34	47	0	0	2	6	34	0	25	0	2	151
08:30 AM	0	29	39	1	0	1	7	35	3	30	0	8	153
08:45 AM	0	28	36	1	0	2	9	21	1	31	0	3	132
Total	3	126	177	2	0	6	32	113	5	109	0	21	594
09:00 AM	2	32	34	1	0	1	4	27	1	33	0	11	146
09:15 AM	0	24	40	0	0	1	7	22	0	34	1	7	136
09:30 AM	1	29	48	0	0	4	15	34	0	24	0	5	160
09:45 AM	0	30	47	0	0	0	7	31	0	35	3	6	159
Total	3	115	169	1	0	6	33	114	1	126	4	29	601
10:00 AM	1	32	40	0	0	3	5	29	0	33	1	10	154
10:15 AM	0	28	49	0	0	0	6	47	0	31	0	10	171
10:30 AM	0	19	51	0	0	0	11	22	0	29	0	6	138
10:45 AM	0	31	36	0	0	0	13	19	0	43	0	4	146
Total	1	110	176	0	0	3	35	117	0	136	1	30	609

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 14

Groups Printed- Cars

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	32	45	0	0	0	11	20	1	42	0	3	154
11:15 AM	0	28	50	1	0	0	9	29	0	36	0	3	156
11:30 AM	0	31	36	0	2	0	5	29	0	34	1	7	145
11:45 AM	0	23	33	0	0	0	6	28	0	44	2	4	140
Total	0	114	164	1	2	0	31	106	1	156	3	17	595
12:00 PM	0	23	51	0	0	1	12	25	0	51	1	3	167
12:15 PM	0	26	47	0	0	0	6	25	0	59	1	20	184
12:30 PM	0	21	50	0	0	1	8	32	0	47	0	9	168
12:45 PM	1	32	41	0	0	0	9	34	1	61	1	11	191
Total	1	102	189	0	0	2	35	116	1	218	3	43	710
01:00 PM	0	23	32	0	0	2	8	42	1	47	0	11	166
01:15 PM	2	13	36	1	0	1	8	25	1	33	0	12	132
01:30 PM	0	19	42	1	0	1	11	33	0	48	1	9	165
01:45 PM	0	22	41	0	0	0	7	23	0	52	0	11	156
Total	2	77	151	2	0	4	34	123	2	180	1	43	619
02:00 PM	0	24	38	0	0	0	6	39	0	49	0	7	163
02:15 PM	0	51	46	0	0	0	9	31	0	44	0	13	194
02:30 PM	0	48	40	0	0	0	7	37	0	63	0	10	205
02:45 PM	1	42	31	0	0	0	6	27	0	66	1	10	184
Total	1	165	155	0	0	0	28	134	0	222	1	40	746
03:00 PM	1	45	53	0	1	0	11	67	0	56	0	12	246
03:15 PM	1	29	59	0	0	0	10	38	0	86	0	12	235
03:30 PM	0	30	48	1	0	1	11	39	0	82	0	16	228
03:45 PM	0	47	61	0	0	1	12	46	1	83	0	13	264
Total	2	151	221	1	1	2	44	190	1	307	0	53	973

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 15

Groups Printed- Cars

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	28	65	0	0	0	11	44	0	68	1	10	227
04:15 PM	0	23	49	0	0	1	7	42	0	70	0	17	209
04:30 PM	0	19	53	0	0	0	9	48	0	81	0	20	230
04:45 PM	0	34	46	0	0	0	8	27	0	81	1	10	207
Total	0	104	213	0	0	1	35	161	0	300	2	57	873
05:00 PM	0	16	55	0	0	0	11	39	0	67	0	17	205
05:15 PM	0	28	41	0	0	0	10	37	0	76	1	16	209
05:30 PM	0	33	44	0	0	0	10	54	0	71	1	10	223
05:45 PM	2	29	53	1	0	1	10	22	0	69	0	13	200
Total	2	106	193	1	0	1	41	152	0	283	2	56	837
Grand Total	16	1463	2244	8	3	26	450	1555	11	2230	19	463	8488
Apprch %	0.4	39.3	60.3	21.6	8.1	70.3	22.3	77.1	0.5	82.2	0.7	17.1	
Total %	0.2	17.2	26.4	0.1	0	0.3	5.3	18.3	0.1	26.3	0.2	5.5	

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 16

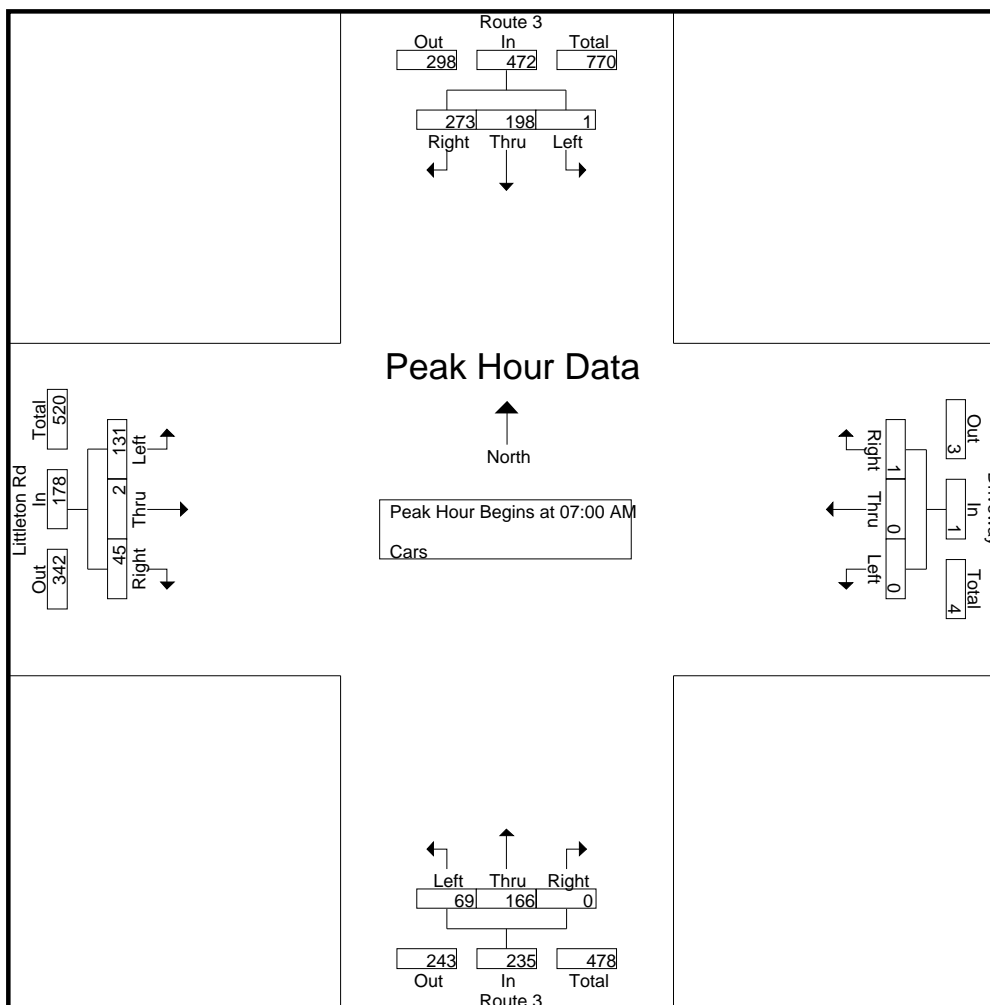
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	37	63	100	0	0	0	0	11	45	0	56	38	0	9	47	203
07:15 AM	0	68	76	144	0	0	0	0	16	48	0	64	32	1	17	50	258
07:30 AM	1	58	76	135	0	0	0	0	24	41	0	65	27	0	8	35	235
07:45 AM	0	35	58	93	0	0	1	1	18	32	0	50	34	1	11	46	190
Total Volume	1	198	273	472	0	0	1	1	69	166	0	235	131	2	45	178	886
% App. Total	0.2	41.9	57.8		0	0	100		29.4	70.6	0		73.6	1.1	25.3		
PHF	.250	.728	.898	.819	.000	.000	.250	.250	.719	.865	.000	.904	.862	.500	.662	.890	.859

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 17



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

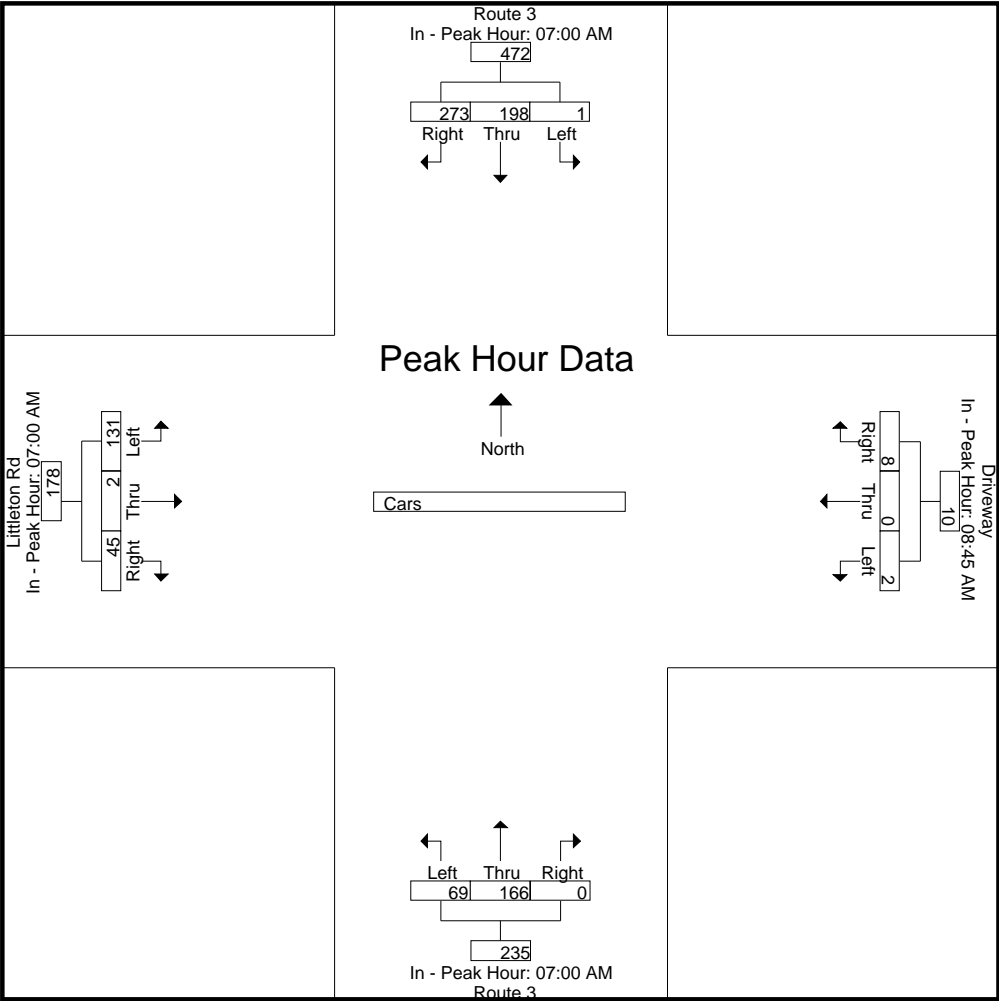
	07:00 AM				08:45 AM				07:00 AM				07:00 AM			
+0 mins.	0	37	63	100	1	0	2	3	11	45	0	56	38	0	9	47
+15 mins.	0	68	76	144	1	0	1	2	16	48	0	64	32	1	17	50
+30 mins.	1	58	76	135	0	0	1	1	24	41	0	65	27	0	8	35
+45 mins.	0	35	58	93	0	0	4	4	18	32	0	50	34	1	11	46
Total Volume	1	198	273	472	2	0	8	10	69	166	0	235	131	2	45	178
% App. Total	0.2	41.9	57.8		20	0	80		29.4	70.6	0		73.6	1.1	25.3	
PHF	.250	.728	.898	.819	.500	.000	.500	.625	.719	.865	.000	.904	.862	.500	.662	.890

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 18



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 19

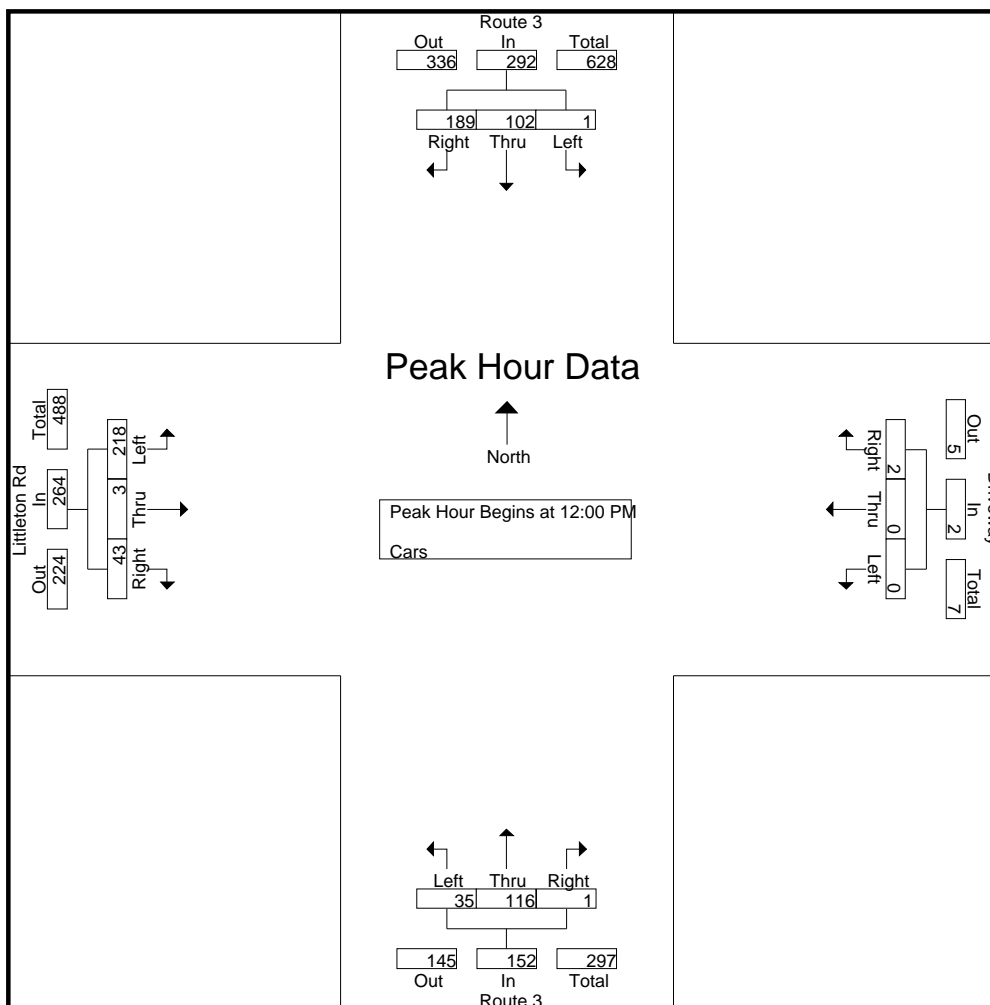
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	23	51	74	0	0	1	1	12	25	0	37	51	1	3	55	167
12:15 PM	0	26	47	73	0	0	0	0	6	25	0	31	59	1	20	80	184
12:30 PM	0	21	50	71	0	0	1	1	8	32	0	40	47	0	9	56	168
12:45 PM	1	32	41	74	0	0	0	0	9	34	1	44	61	1	11	73	191
Total Volume	1	102	189	292	0	0	2	2	35	116	1	152	218	3	43	264	710
% App. Total	0.3	34.9	64.7		0	0	100		23	76.3	0.7		82.6	1.1	16.3		
PHF	.250	.797	.926	.986	.000	.000	.500	.500	.729	.853	.250	.864	.893	.750	.538	.825	.929

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 20



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

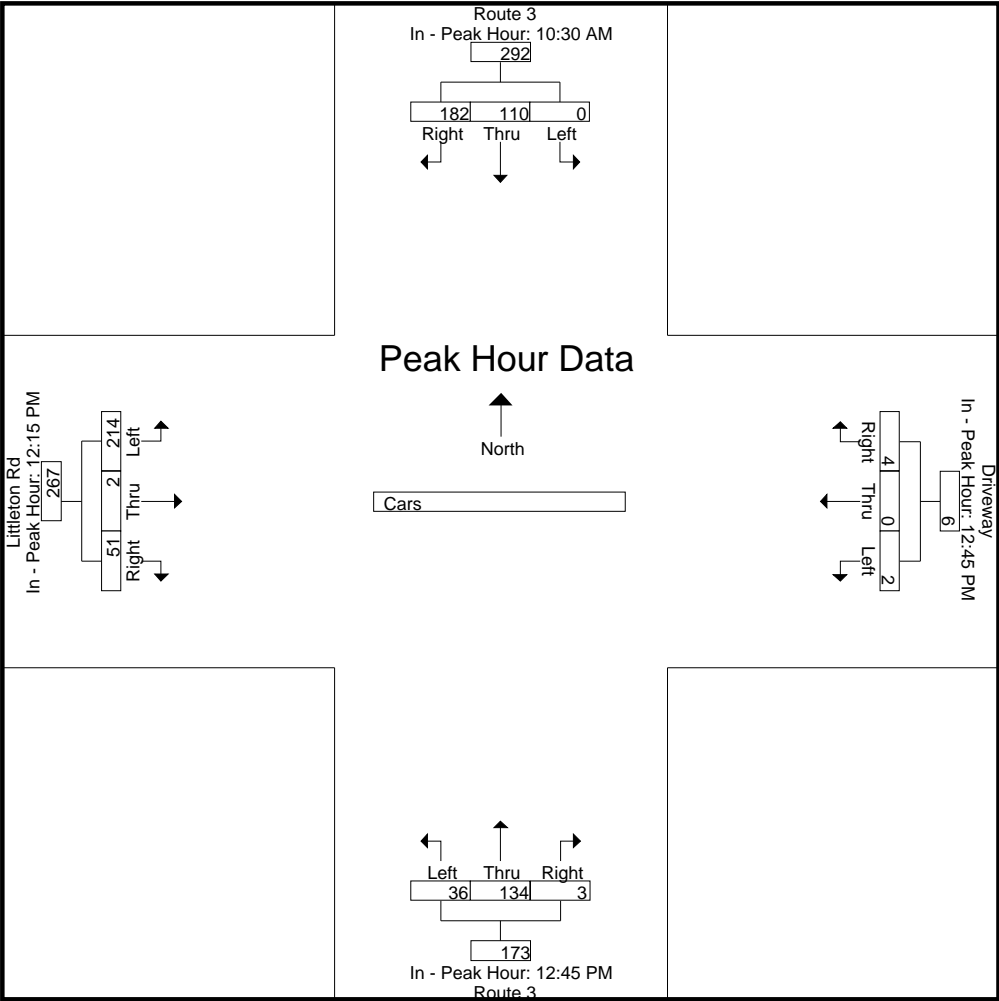
	10:30 AM				12:45 PM				12:45 PM				12:15 PM			
+0 mins.	0	19	51	70	0	0	0	0	9	34	1	44	59	1	20	80
+15 mins.	0	31	36	67	0	0	2	2	8	42	1	51	47	0	9	56
+30 mins.	0	32	45	77	1	0	1	2	8	25	1	34	61	1	11	73
+45 mins.	0	28	50	78	1	0	1	2	11	33	0	44	47	0	11	58
Total Volume	0	110	182	292	2	0	4	6	36	134	3	173	214	2	51	267
% App. Total	0	37.7	62.3		33.3	0	66.7		20.8	77.5	1.7		80.1	0.7	19.1	
PHF	.000	.859	.892	.936	.500	.000	.500	.750	.818	.798	.750	.848	.877	.500	.638	.834

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 21



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 22

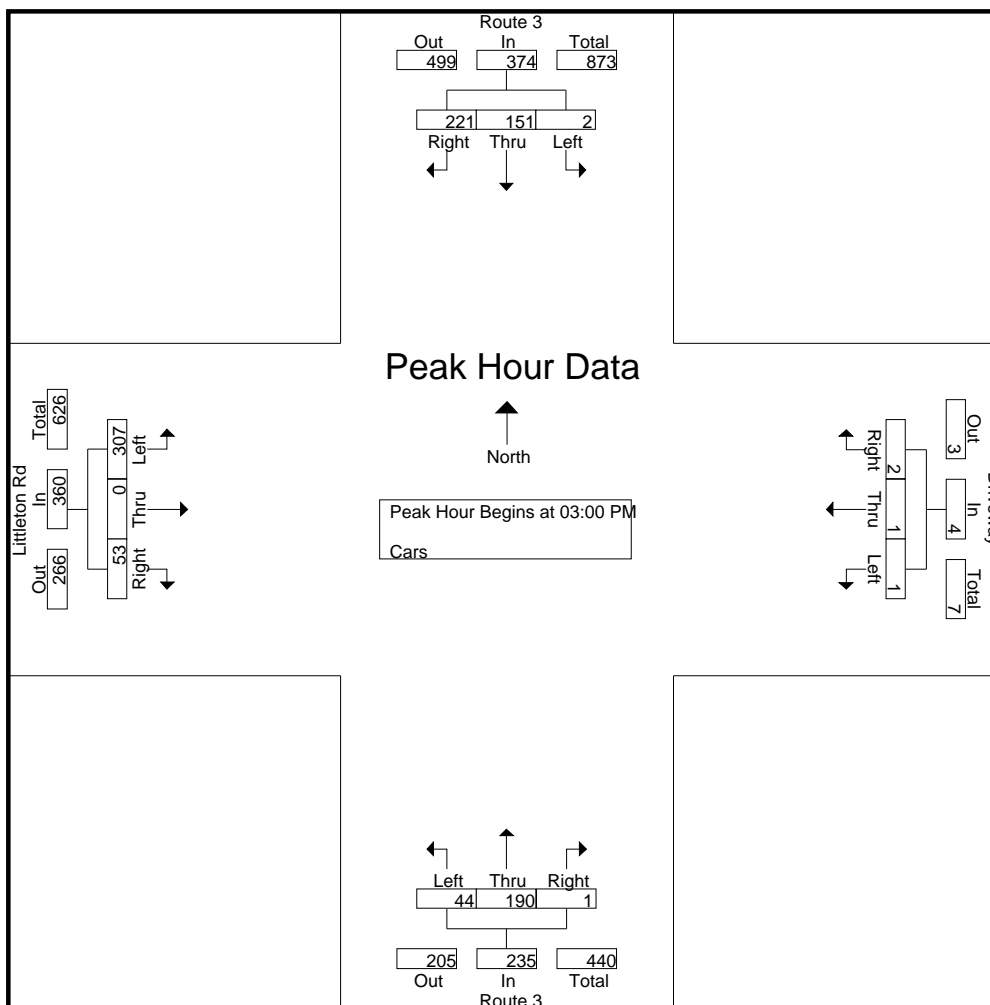
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	1	45	53	99	0	1	0	1	11	67	0	78	56	0	12	68	246
03:15 PM	1	29	59	89	0	0	0	0	10	38	0	48	86	0	12	98	235
03:30 PM	0	30	48	78	1	0	1	2	11	39	0	50	82	0	16	98	228
03:45 PM	0	47	61	108	0	0	1	1	12	46	1	59	83	0	13	96	264
Total Volume	2	151	221	374	1	1	2	4	44	190	1	235	307	0	53	360	973
% App. Total	0.5	40.4	59.1		25	25	50		18.7	80.9	0.4		85.3	0	14.7		
PHF	.500	.803	.906	.866	.250	.250	.500	.500	.917	.709	.250	.753	.892	.000	.828	.918	.921

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 23



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

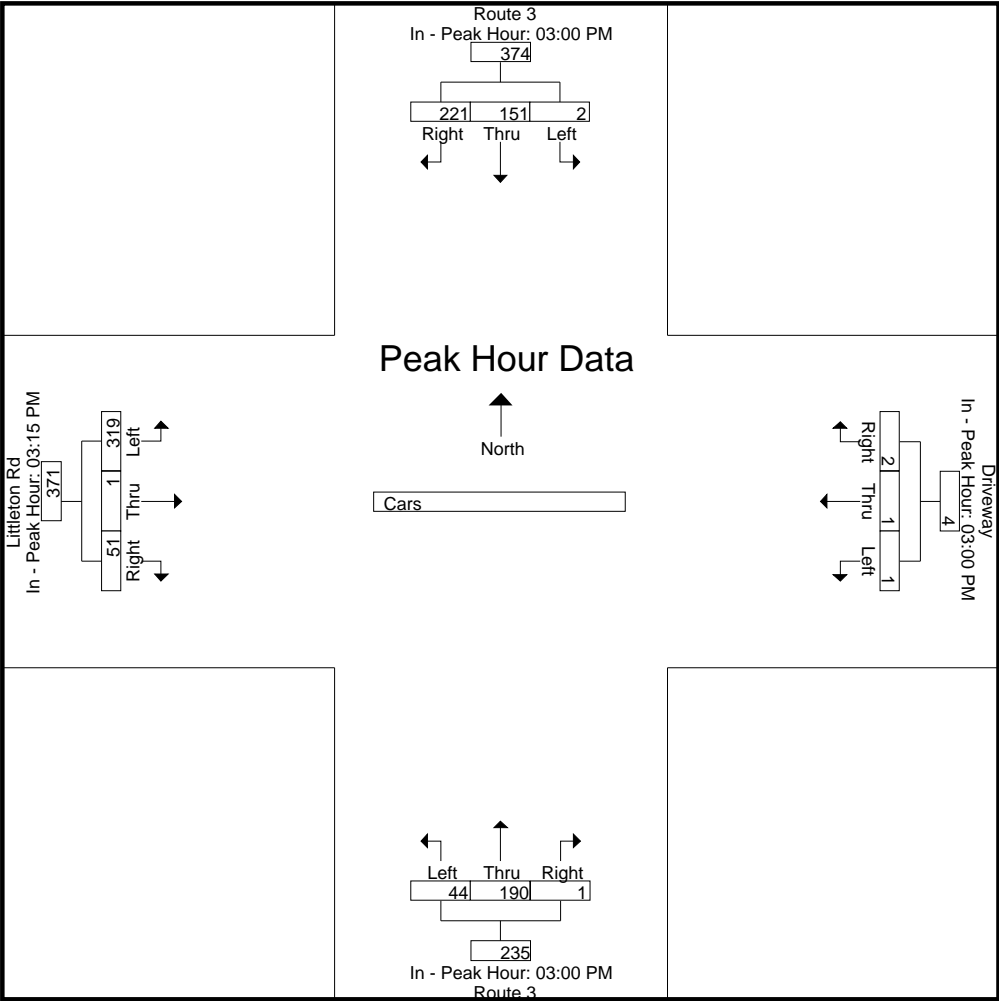
	03:00 PM				03:00 PM				03:00 PM				03:15 PM			
+0 mins.	1	45	53	99	0	1	0	1	11	67	0	78	86	0	12	98
+15 mins.	1	29	59	89	0	0	0	0	10	38	0	48	82	0	16	98
+30 mins.	0	30	48	78	1	0	1	2	11	39	0	50	83	0	13	96
+45 mins.	0	47	61	108	0	0	1	1	12	46	1	59	68	1	10	79
Total Volume	2	151	221	374	1	1	2	4	44	190	1	235	319	1	51	371
% App. Total	0.5	40.4	59.1		25	25	50		18.7	80.9	0.4		86	0.3	13.7	
PHF	.500	.803	.906	.866	.250	.250	.500	.500	.917	.709	.250	.753	.927	.250	.797	.946

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 24



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 25

Groups Printed- Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:00 AM	0	1	0	0	0	0	0	0	0	1	0	1	3
06:15 AM	0	0	2	0	0	0	0	1	0	0	0	0	3
06:30 AM	0	3	2	0	0	0	1	2	0	0	0	3	11
06:45 AM	0	1	3	0	0	0	0	5	0	1	0	0	10
Total	0	5	7	0	0	0	1	8	0	2	0	4	27
07:00 AM	0	2	1	0	0	0	0	4	0	1	0	3	11
07:15 AM	0	4	2	0	0	0	1	5	0	1	0	0	13
07:30 AM	0	2	3	0	0	0	1	2	0	2	0	2	12
07:45 AM	0	0	5	0	0	0	0	0	0	1	0	1	7
Total	0	8	11	0	0	0	2	11	0	5	0	6	43
08:00 AM	0	2	2	0	0	0	0	0	0	2	0	1	7
08:15 AM	0	2	3	0	0	0	0	2	0	2	0	0	9
08:30 AM	0	2	0	0	0	0	0	3	0	2	0	1	8
08:45 AM	0	1	0	0	0	0	0	2	0	6	0	0	9
Total	0	7	5	0	0	0	0	7	0	12	0	2	33
09:00 AM	0	1	3	0	0	0	2	1	0	1	0	0	8
09:15 AM	0	1	4	0	0	0	4	2	0	1	0	2	14
09:30 AM	0	2	3	0	0	0	0	2	0	2	0	0	9
09:45 AM	0	3	2	0	0	0	2	0	0	2	0	0	9
Total	0	7	12	0	0	0	8	5	0	6	0	2	40
10:00 AM	0	2	3	0	0	0	1	2	0	3	0	0	11
10:15 AM	0	2	1	0	0	0	0	4	0	2	0	3	12
10:30 AM	0	1	1	0	0	0	0	1	0	3	0	0	6
10:45 AM	0	3	1	0	0	0	1	1	0	2	0	0	8
Total	0	8	6	0	0	0	2	8	0	10	0	3	37

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 26

Groups Printed- Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	1	2	0	0	0	1	2	0	0	0	3	9
11:15 AM	0	1	2	0	0	0	0	1	0	2	0	0	6
11:30 AM	0	0	1	0	0	0	1	1	0	2	0	0	5
11:45 AM	0	3	1	0	0	0	1	0	0	3	0	1	9
Total	0	5	6	0	0	0	3	4	0	7	0	4	29
12:00 PM	0	1	2	0	0	0	0	4	0	4	0	0	11
12:15 PM	0	0	5	0	0	0	0	0	0	1	0	0	6
12:30 PM	0	1	1	0	0	0	0	2	0	1	1	2	8
12:45 PM	0	3	2	0	0	0	0	3	0	3	0	0	11
Total	0	5	10	0	0	0	0	9	0	9	1	2	36
01:00 PM	0	2	4	0	0	0	0	1	0	1	0	0	8
01:15 PM	0	2	0	0	0	0	0	2	0	5	0	1	10
01:30 PM	0	1	1	0	0	1	0	5	2	2	0	0	12
01:45 PM	0	3	1	0	0	0	0	3	0	0	0	0	7
Total	0	8	6	0	0	1	0	11	2	8	0	1	37
02:00 PM	0	0	3	0	0	0	1	2	0	0	0	1	7
02:15 PM	0	1	2	0	0	0	2	3	0	1	0	1	10
02:30 PM	0	5	2	0	0	0	1	5	0	4	0	1	18
02:45 PM	0	4	2	0	0	0	0	1	0	5	0	0	12
Total	0	10	9	0	0	0	4	11	0	10	0	3	47
03:00 PM	0	4	1	0	0	0	2	7	0	2	0	0	16
03:15 PM	0	2	3	0	0	0	0	2	0	2	0	1	10
03:30 PM	0	2	3	0	0	0	0	2	0	3	0	0	10
03:45 PM	0	2	0	0	0	0	0	3	0	4	0	0	9
Total	0	10	7	0	0	0	2	14	0	11	0	1	45

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 27

Groups Printed- Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	2	0	0	0	0	1	1	0	3	0	0	7
04:15 PM	0	2	2	0	0	0	0	2	0	2	0	0	8
04:30 PM	0	3	1	0	0	0	1	0	0	1	0	0	6
04:45 PM	0	2	0	0	0	0	0	2	0	1	0	0	5
Total	0	9	3	0	0	0	2	5	0	7	0	0	26
05:00 PM	0	1	0	0	0	0	0	4	0	3	0	0	8
05:15 PM	0	3	0	0	0	0	1	1	0	2	0	0	7
05:30 PM	0	0	1	0	0	0	0	3	0	0	0	0	4
05:45 PM	0	1	2	0	0	0	0	0	0	0	0	0	3
Total	0	5	3	0	0	0	1	8	0	5	0	0	22
Grand Total	0	87	85	0	0	1	25	101	2	92	1	28	422
Apprch %	0	50.6	49.4	0	0	100	19.5	78.9	1.6	76	0.8	23.1	
Total %	0	20.6	20.1	0	0	0.2	5.9	23.9	0.5	21.8	0.2	6.6	

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 28

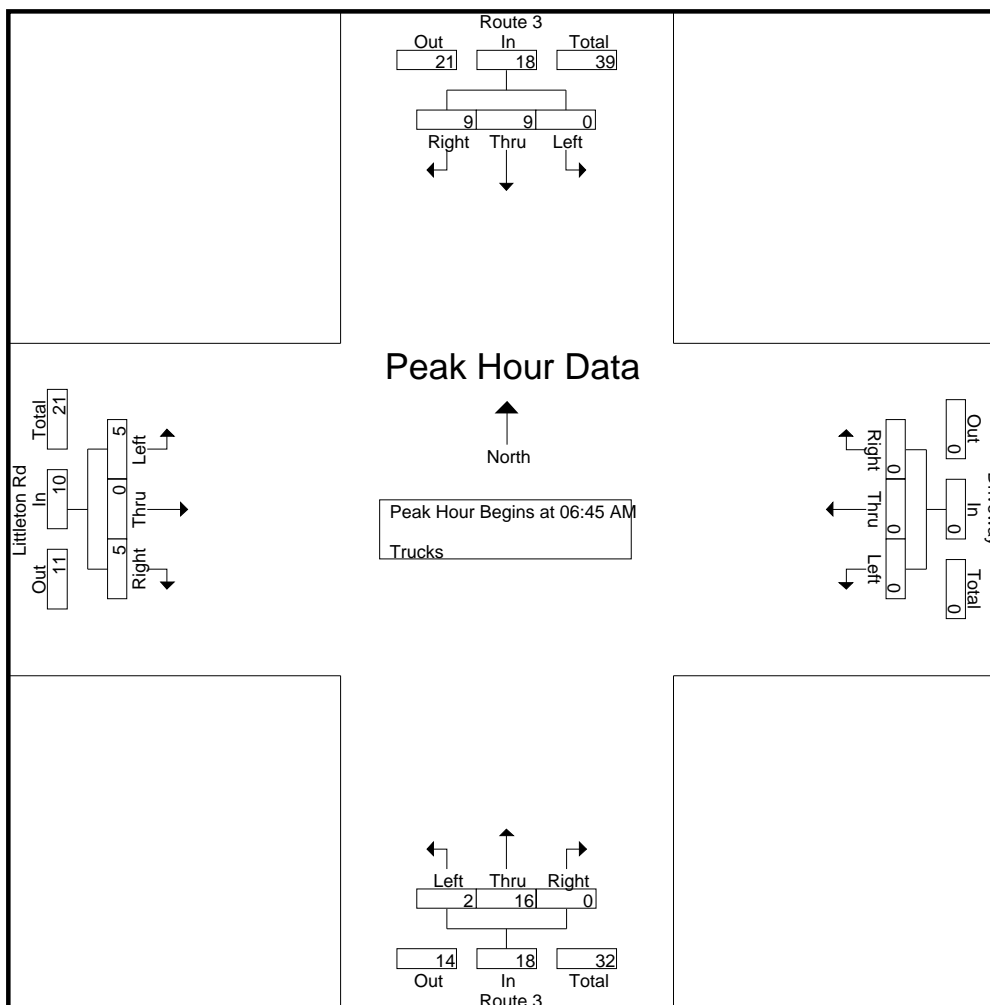
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	0	1	3	4	0	0	0	0	0	5	0	5	1	0	0	1	10
07:00 AM	0	2	1	3	0	0	0	0	0	4	0	4	1	0	3	4	11
07:15 AM	0	4	2	6	0	0	0	0	1	5	0	6	1	0	0	1	13
07:30 AM	0	2	3	5	0	0	0	0	1	2	0	3	2	0	2	4	12
Total Volume	0	9	9	18	0	0	0	0	2	16	0	18	5	0	5	10	46
% App. Total	0	50	50		0	0	0		11.1	88.9	0		50	0	50		
PHF	.000	.563	.750	.750	.000	.000	.000	.000	.500	.800	.000	.750	.625	.000	.417	.625	.885

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 29



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

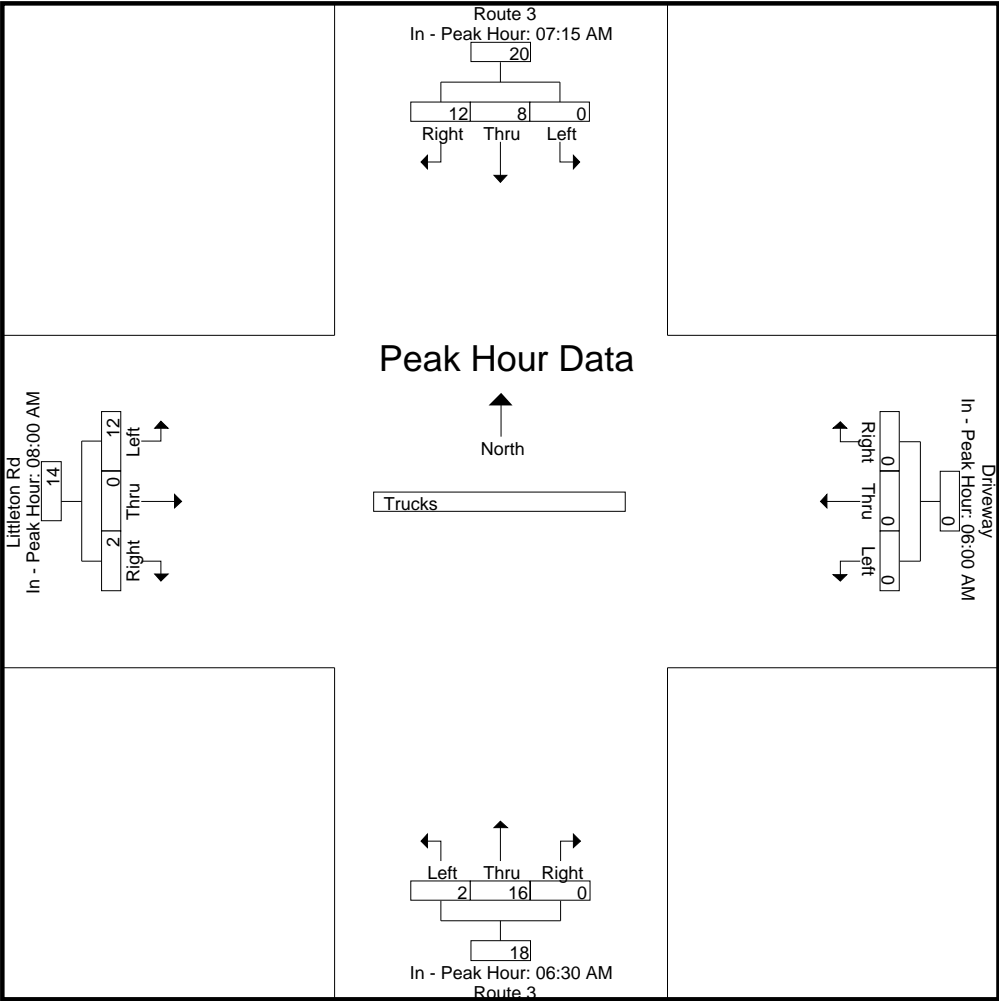
	07:15 AM				06:00 AM				06:30 AM				08:00 AM			
+0 mins.	0	4	2	6	0	0	0	0	1	2	0	3	2	0	1	3
+15 mins.	0	2	3	5	0	0	0	0	0	5	0	5	2	0	0	2
+30 mins.	0	0	5	5	0	0	0	0	0	4	0	4	2	0	1	3
+45 mins.	0	2	2	4	0	0	0	0	1	5	0	6	6	0	0	6
Total Volume	0	8	12	20	0	0	0	0	2	16	0	18	12	0	2	14
% App. Total	0	40	60		0	0	0		11.1	88.9	0		85.7	0	14.3	
PHF	.000	.500	.600	.833	.000	.000	.000	.000	.500	.800	.000	.750	.500	.000	.500	.583

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 30



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 31

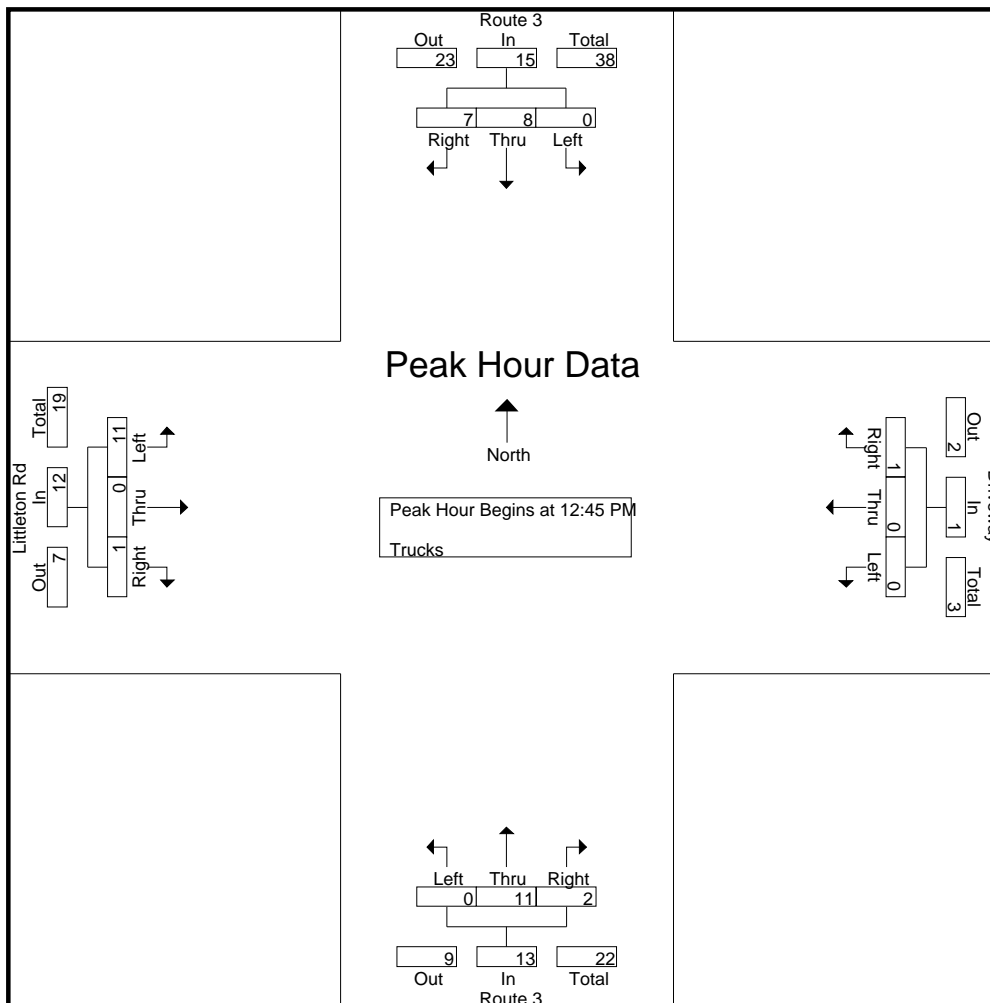
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:45 PM																	
12:45 PM	0	3	2	5	0	0	0	0	0	3	0	3	3	0	0	3	11
01:00 PM	0	2	4	6	0	0	0	0	0	1	0	1	1	0	0	1	8
01:15 PM	0	2	0	2	0	0	0	0	0	2	0	2	5	0	1	6	10
01:30 PM	0	1	1	2	0	0	1	1	0	5	2	7	2	0	0	2	12
Total Volume	0	8	7	15	0	0	1	1	0	11	2	13	11	0	1	12	41
% App. Total	0	53.3	46.7		0	0	100		0	84.6	15.4		91.7	0	8.3		
PHF	.000	.667	.438	.625	.000	.000	.250	.250	.000	.550	.250	.464	.550	.000	.250	.500	.854

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 32



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

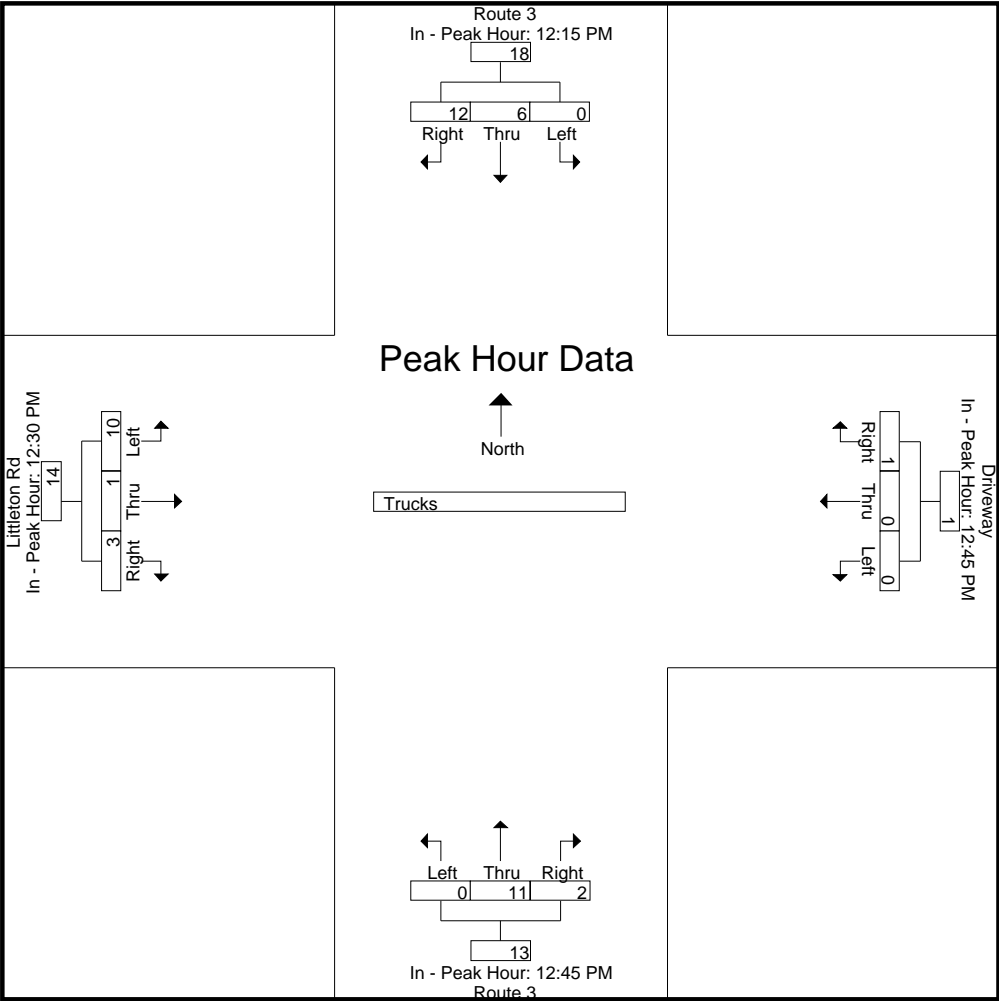
	12:15 PM				12:45 PM				12:45 PM				12:30 PM			
+0 mins.	0	0	5	5	0	0	0	0	0	3	0	3	1	1	2	4
+15 mins.	0	1	1	2	0	0	0	0	0	1	0	1	3	0	0	3
+30 mins.	0	3	2	5	0	0	0	0	0	2	0	2	1	0	0	1
+45 mins.	0	2	4	6	0	0	1	1	0	5	2	7	5	0	1	6
Total Volume	0	6	12	18	0	0	1	1	0	11	2	13	10	1	3	14
% App. Total	0	33.3	66.7		0	0	100		0	84.6	15.4		71.4	7.1	21.4	
PHF	.000	.500	.600	.750	.000	.000	.250	.250	.000	.550	.250	.464	.500	.250	.375	.583

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 33



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 34

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:15 PM																	
02:15 PM	0	1	2	3	0	0	0	0	2	3	0	5	1	0	1	2	10
02:30 PM	0	5	2	7	0	0	0	0	1	5	0	6	4	0	1	5	18
02:45 PM	0	4	2	6	0	0	0	0	0	1	0	1	5	0	0	5	12
03:00 PM	0	4	1	5	0	0	0	0	2	7	0	9	2	0	0	2	16
Total Volume	0	14	7	21	0	0	0	0	5	16	0	21	12	0	2	14	56
% App. Total	0	66.7	33.3		0	0	0		23.8	76.2	0		85.7	0	14.3		
PHF	.000	.700	.875	.750	.000	.000	.000	.000	.625	.571	.000	.583	.600	.000	.500	.700	.778

Accurate Counts

978-664-2565

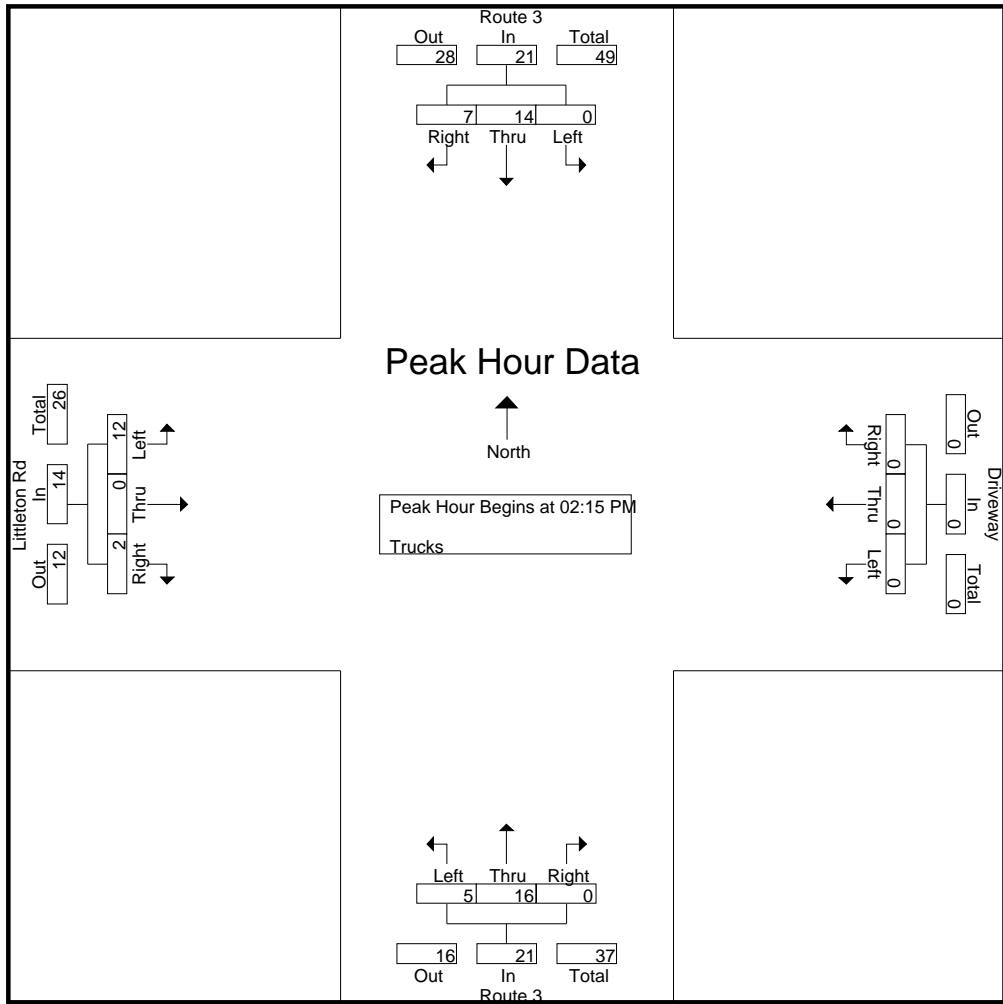
File Name : 18320912

Site Code : 18320001

Start Date : 9/12/2019

Page No : 35

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

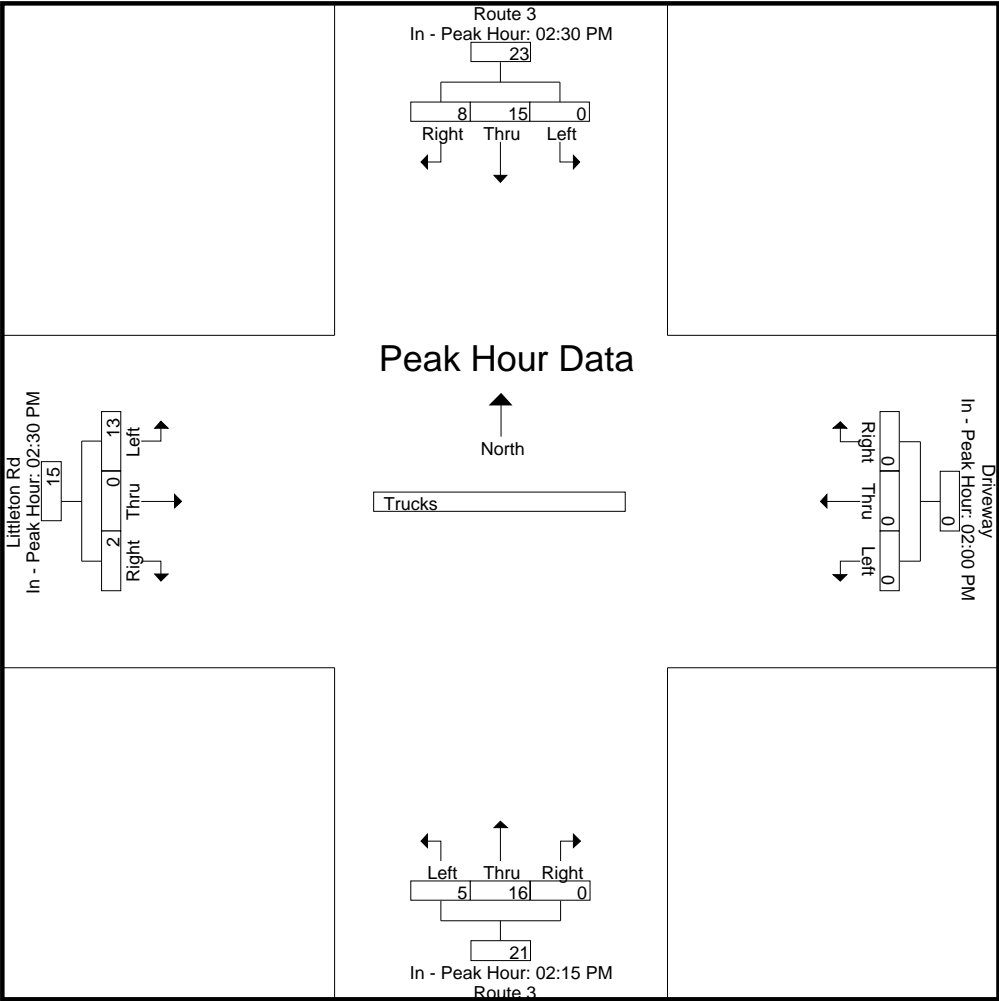
	02:30 PM				02:00 PM				02:15 PM				02:30 PM			
+0 mins.	0	5	2	7	0	0	0	0	2	3	0	5	4	0	1	5
+15 mins.	0	4	2	6	0	0	0	0	1	5	0	6	5	0	0	5
+30 mins.	0	4	1	5	0	0	0	0	0	1	0	1	2	0	0	2
+45 mins.	0	2	3	5	0	0	0	0	2	7	0	9	2	0	1	3
Total Volume	0	15	8	23	0	0	0	0	5	16	0	21	13	0	2	15
% App. Total	0	65.2	34.8		0	0	0		23.8	76.2	0		86.7	0	13.3	
PHF	.000	.750	.667	.821	.000	.000	.000	.000	.625	.571	.000	.583	.650	.000	.500	.750

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 36



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 37

Groups Printed- Bikes Peds

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	3	0	3
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
08:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	1	2	3
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2
09:15 AM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3	0	3
09:30 AM	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3	0	3
09:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0	2
Total	0	0	0	2	0	0	0	3	0	0	0	5	0	0	0	0	10	0	10
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 38

Groups Printed- Bikes Peds

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	4	0	4
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	4	0	4
01:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
01:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
01:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2
Total	0	0	0	1	0	0	0	3	0	0	0	2	0	0	0	0	6	0	6
02:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
02:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3	0	3
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	4
Total	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	2	10	0	10
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3	0	3
03:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	6	0	6
04:00 PM	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	5	0	5
04:15 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3	0	3

Accurate Counts

978-664-2565

File Name : 18320912

Site Code : 18320001

Start Date : 9/12/2019

Page No : 39

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

Groups Printed- Bikes Peds

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
04:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2
04:45 PM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3	0	3
Total	0	0	0	0	0	0	0	5	0	0	0	7	0	0	0	1	13	0	13
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
Grand Total	0	0	0	4	0	0	0	32	0	0	0	21	1	0	1	5	62	2	64
Apprch %	0	0	0		0	0	0		0	0	0		50	0	50				
Total %	0	0	0		0	0	0		0	0	0		50	0	50		96.9	3.1	

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 40

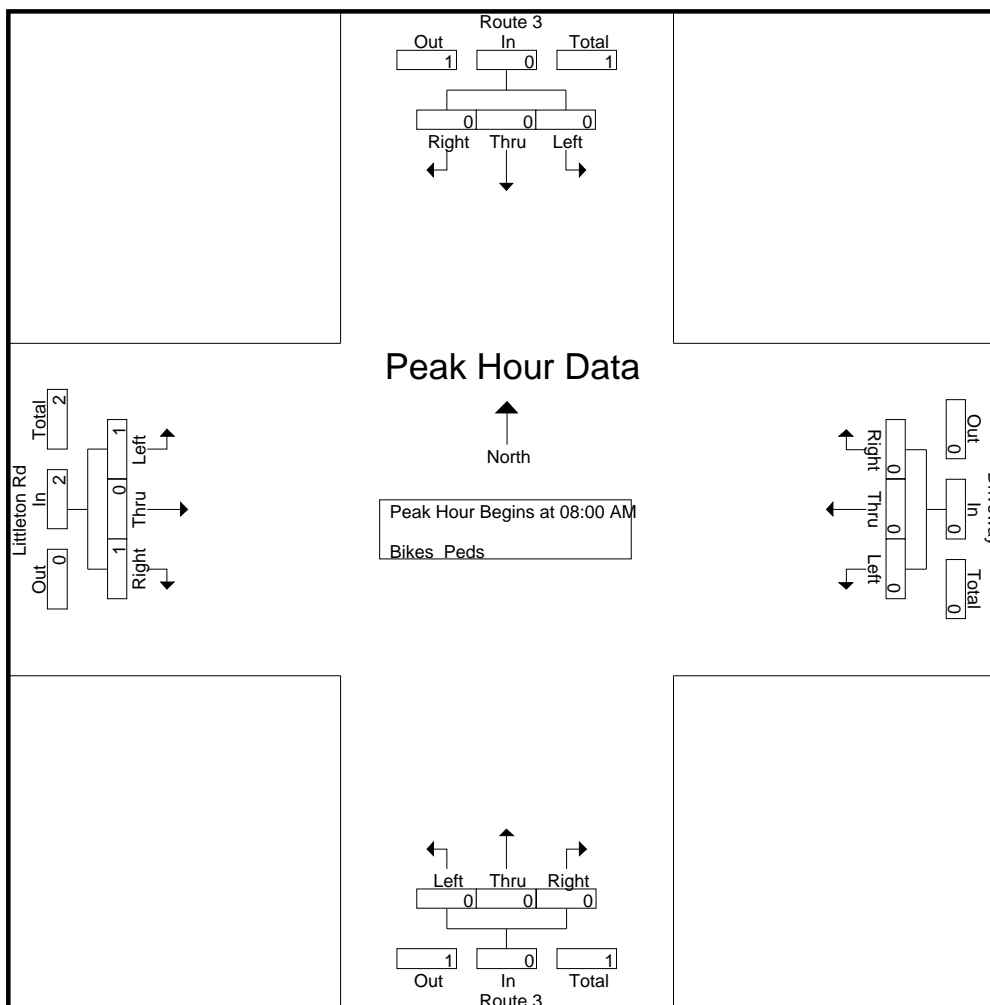
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	50	0	50		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250	.250

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 41



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

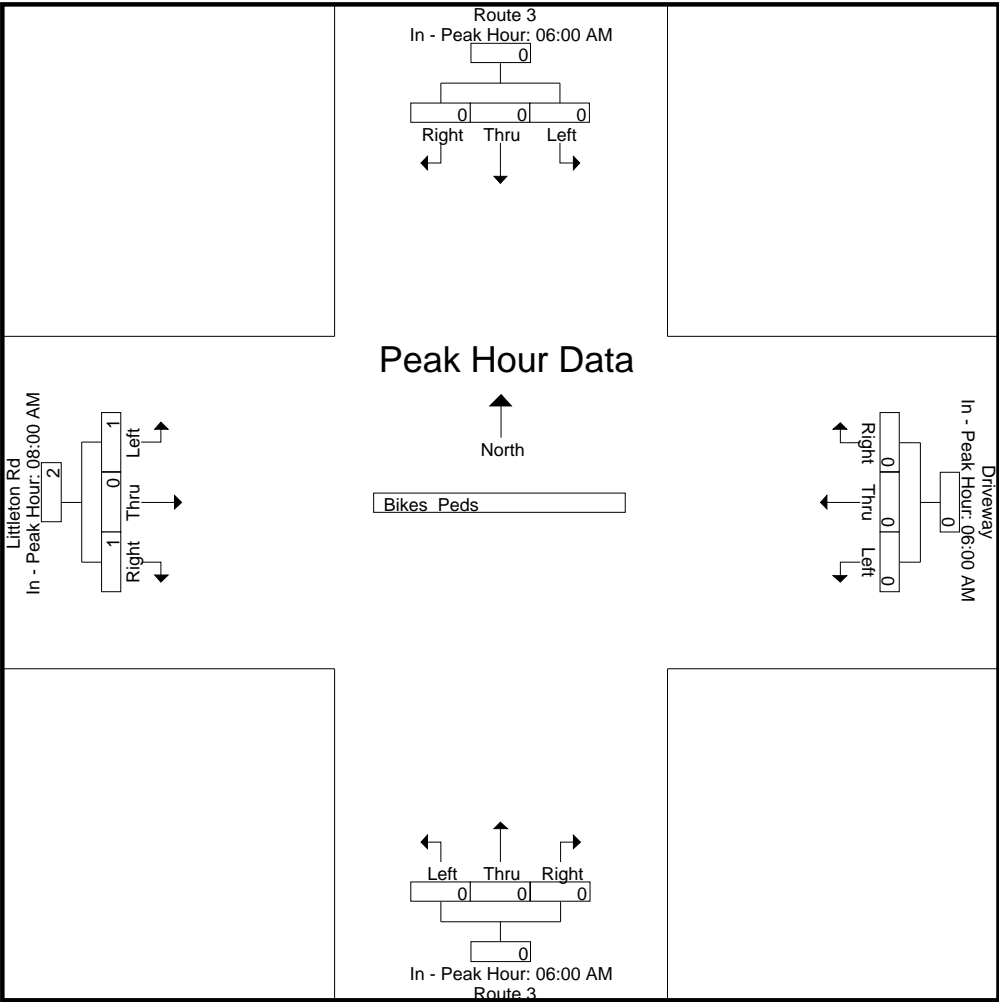
	06:00 AM				06:00 AM				06:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	50	0	50	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 42



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 43

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 10:00 AM																	
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

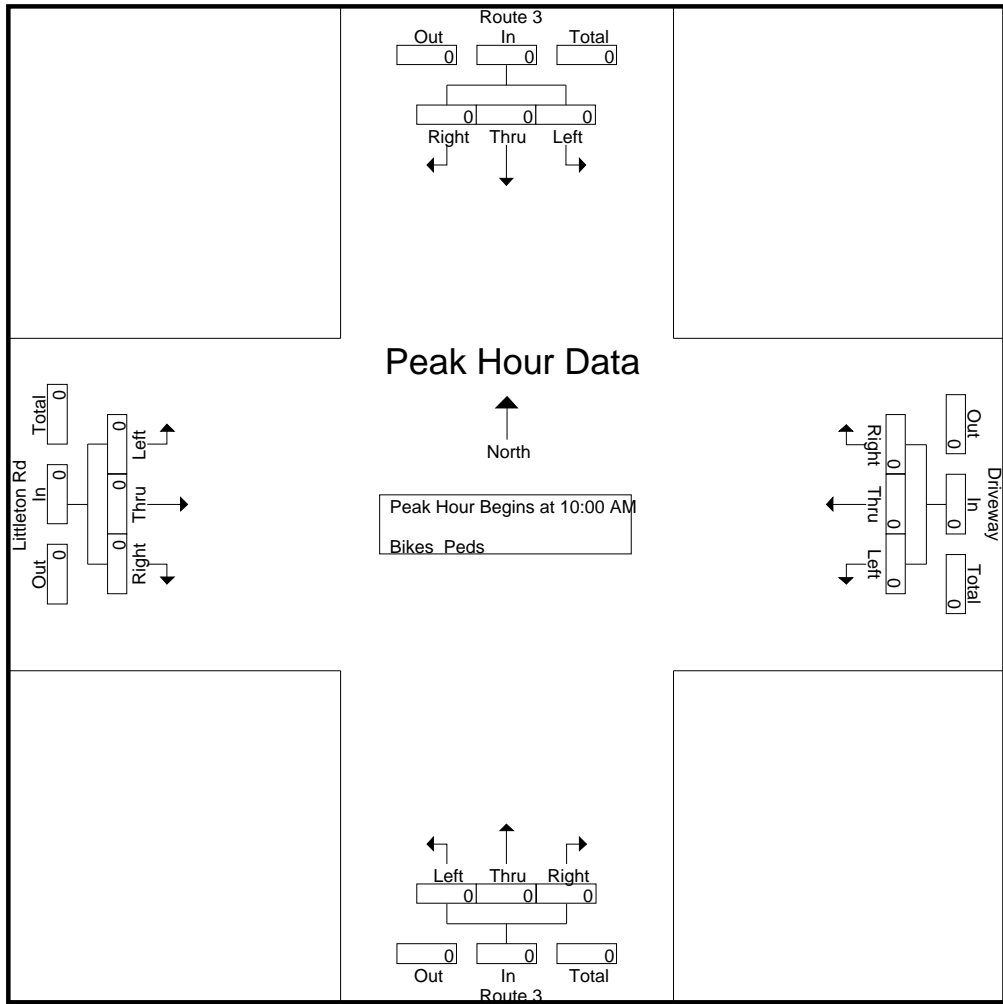
File Name : 18320912

Site Code : 18320001

Start Date : 9/12/2019

Page No : 44

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

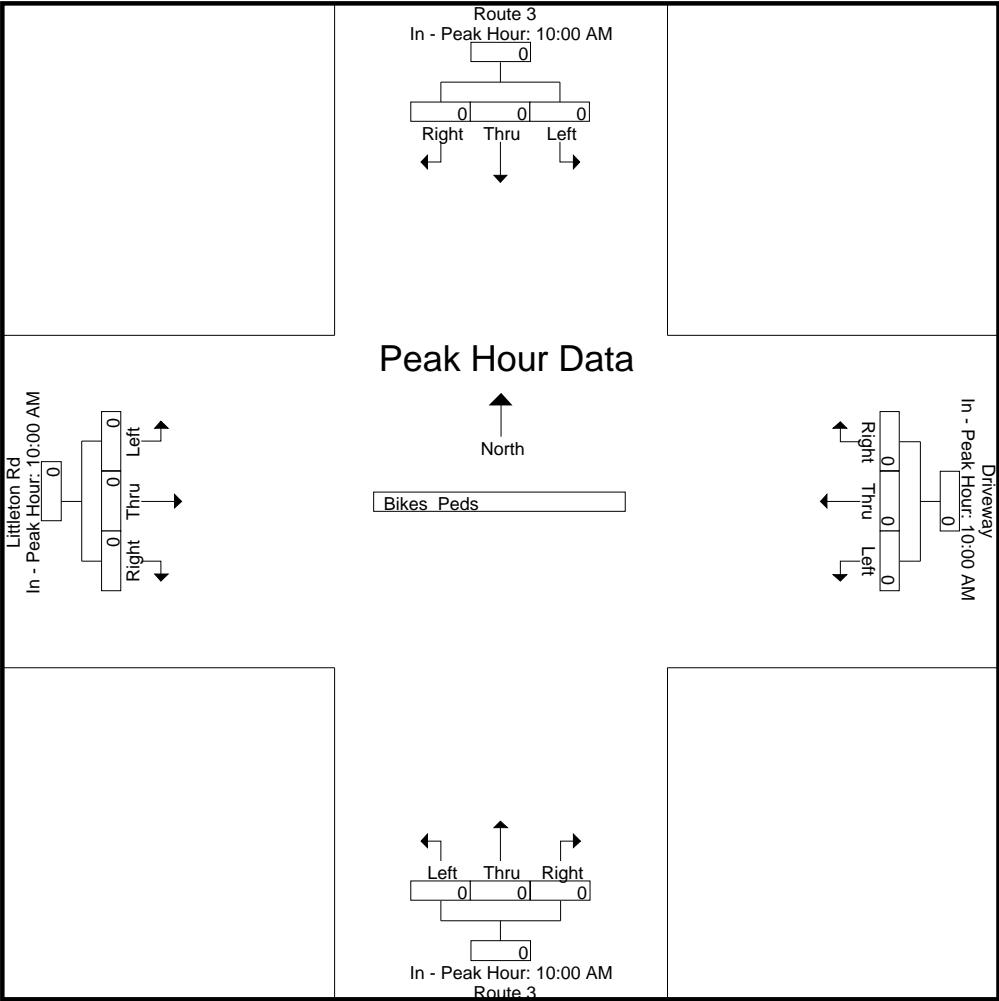
	10:00 AM				10:00 AM				10:00 AM				10:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 45



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 46

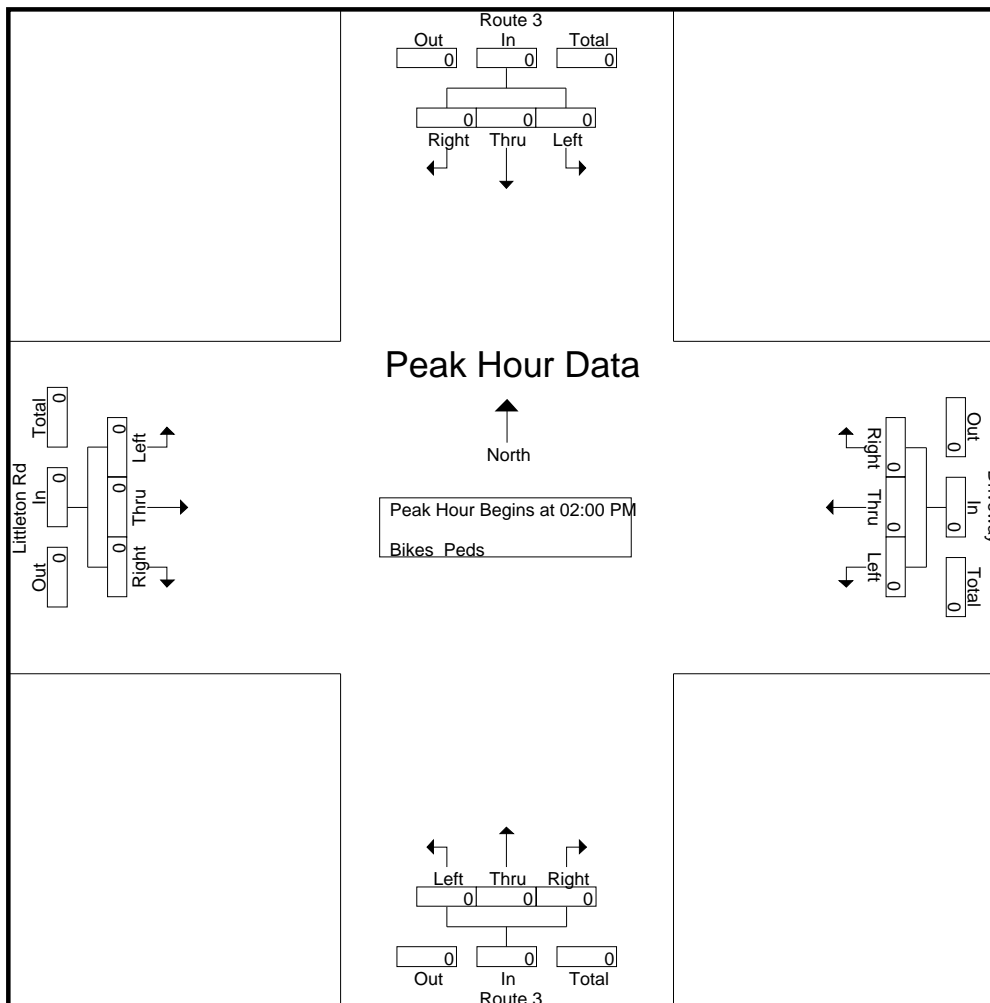
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320912
 Site Code : 18320001
 Start Date : 9/12/2019
 Page No : 47



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

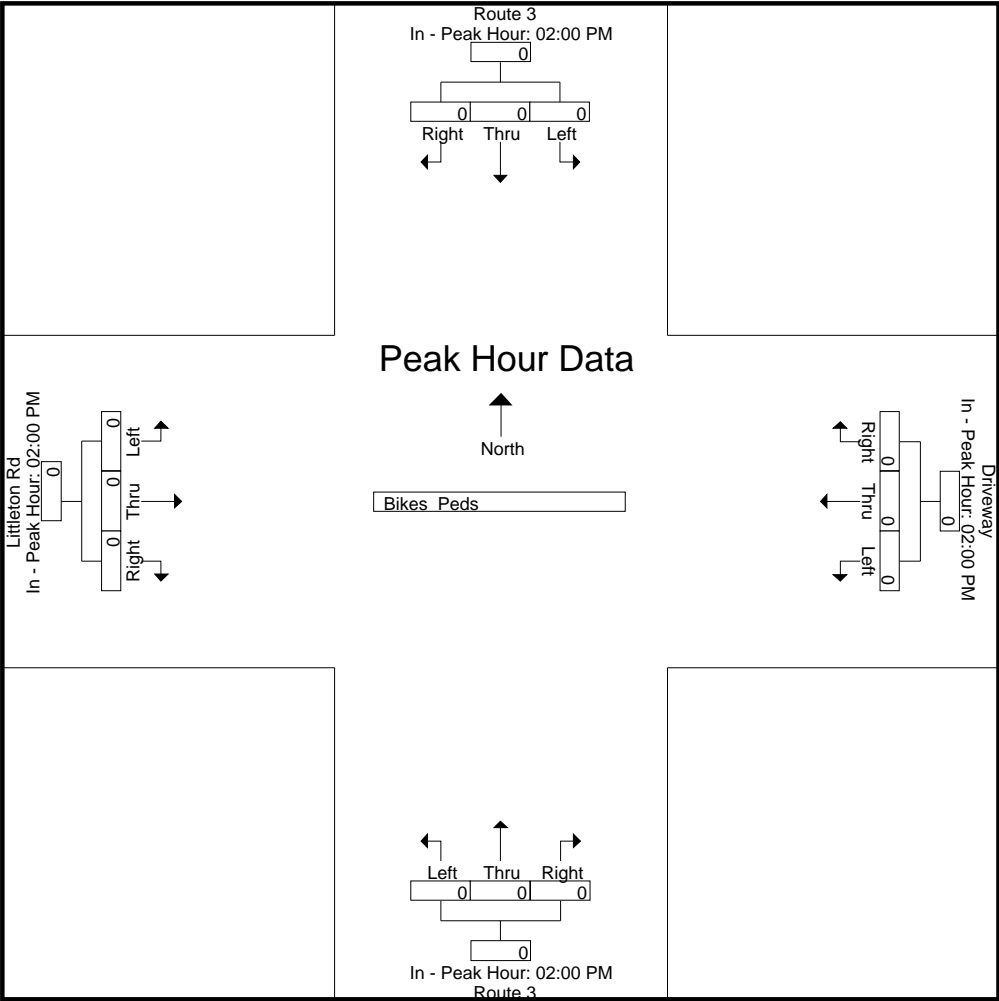
	02:00 PM				02:00 PM				02:00 PM				02:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320912
Site Code : 18320001
Start Date : 9/12/2019
Page No : 48



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:00 AM	0	19	33	0	0	0	9	15	0	19	0	2	97
06:15 AM	0	23	36	0	0	0	6	11	0	16	0	13	105
06:30 AM	2	30	49	0	0	0	14	16	1	23	0	7	142
06:45 AM	0	24	53	0	1	1	10	21	0	18	2	8	138
Total	2	96	171	0	1	1	39	63	1	76	2	30	482
07:00 AM	0	32	57	0	0	0	15	22	0	29	0	17	172
07:15 AM	0	71	66	0	0	0	15	49	0	33	1	13	248
07:30 AM	0	66	65	0	0	1	22	47	0	34	0	9	244
07:45 AM	0	45	62	0	0	0	18	38	0	31	0	15	209
Total	0	214	250	0	0	1	70	156	0	127	1	54	873
08:00 AM	2	30	55	0	0	2	16	26	1	27	0	12	171
08:15 AM	1	38	52	1	1	0	11	28	0	18	0	12	162
08:30 AM	0	14	42	0	0	0	10	30	0	27	1	8	132
08:45 AM	0	28	62	0	0	1	10	31	1	32	0	4	169
Total	3	110	211	1	1	3	47	115	2	104	1	36	634
09:00 AM	0	25	32	0	0	0	4	35	1	34	0	14	145
09:15 AM	0	33	49	0	0	1	10	21	1	30	0	16	161
09:30 AM	1	36	35	0	0	0	10	25	0	35	0	8	150
09:45 AM	0	33	46	0	0	0	5	36	0	35	0	11	166
Total	1	127	162	0	0	1	29	117	2	134	0	49	622
10:00 AM	0	31	37	0	0	2	2	34	1	43	0	11	161
10:15 AM	0	33	51	0	0	0	15	38	1	41	0	9	188
10:30 AM	1	36	64	0	0	0	9	29	0	41	0	10	190

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 2

Groups Printed- Cars - Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10:45 AM	0	40	31	0	0	1	8	23	0	38	0	14	155
Total	1	140	183	0	0	3	34	124	2	163	0	44	694
11:00 AM	2	34	43	1	0	0	15	34	0	40	0	16	185
11:15 AM	1	28	47	0	0	1	13	30	0	45	1	6	172
11:30 AM	0	39	44	0	0	1	12	30	0	61	1	18	206
11:45 AM	0	41	48	1	1	1	7	47	0	50	1	11	208
Total	3	142	182	2	1	3	47	141	0	196	3	51	771
12:00 PM	0	29	44	0	0	0	8	42	0	69	0	13	205
12:15 PM	0	17	40	0	0	0	5	36	0	49	1	9	157
12:30 PM	1	36	44	0	0	0	8	44	0	38	1	11	183
12:45 PM	2	32	46	0	0	2	7	39	1	31	1	10	171
Total	3	114	174	0	0	2	28	161	1	187	3	43	716
01:00 PM	1	24	54	0	0	0	10	44	0	57	1	13	204
01:15 PM	1	32	35	1	3	1	5	36	2	41	0	14	171
01:30 PM	1	42	46	0	0	0	16	42	0	51	0	13	211
01:45 PM	0	43	35	0	0	1	8	39	0	53	0	17	196
Total	3	141	170	1	3	2	39	161	2	202	1	57	782
02:00 PM	0	35	37	0	0	0	9	43	0	47	1	11	183
02:15 PM	1	36	54	1	0	1	9	53	0	50	1	7	213
02:30 PM	0	37	38	0	0	0	6	45	0	65	1	18	210
02:45 PM	0	41	31	0	0	0	5	50	2	81	1	13	224
Total	1	149	160	1	0	1	29	191	2	243	4	49	830
03:00 PM	0	57	40	1	1	0	17	88	0	62	0	10	276
03:15 PM	1	37	40	0	0	1	17	73	0	78	1	21	269

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 3

Groups Printed- Cars - Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
03:30 PM	0	37	57	0	0	2	16	66	1	68	1	14	262
03:45 PM	1	35	49	0	0	0	10	72	0	88	1	13	269
Total	2	166	186	1	1	3	60	299	1	296	3	58	1076
04:00 PM	2	31	50	0	0	2	11	72	0	87	0	12	267
04:15 PM	1	36	53	0	0	0	9	49	0	82	0	19	249
04:30 PM	0	26	53	0	1	2	8	70	1	90	2	22	275
04:45 PM	0	28	45	0	0	0	9	70	1	75	1	12	241
Total	3	121	201	0	1	4	37	261	2	334	3	65	1032
05:00 PM	0	35	40	0	0	1	11	52	0	84	0	18	241
05:15 PM	1	27	44	0	0	1	13	65	0	64	1	20	236
05:30 PM	0	12	52	1	0	0	6	54	0	72	0	16	213
05:45 PM	0	29	31	0	0	0	11	67	1	57	0	10	206
Total	1	103	167	1	0	2	41	238	1	277	1	64	896
Grand Total	23	1623	2217	7	8	26	500	2027	16	2339	22	600	9408
Apprch %	0.6	42	57.4	17.1	19.5	63.4	19.7	79.7	0.6	79	0.7	20.3	
Total %	0.2	17.3	23.6	0.1	0.1	0.3	5.3	21.5	0.2	24.9	0.2	6.4	
Cars	22	1557	2152	7	8	26	482	1949	16	2265	22	574	9080
% Cars	95.7	95.9	97.1	100	100	100	96.4	96.2	100	96.8	100	95.7	96.5
Trucks	1	66	65	0	0	0	18	78	0	74	0	26	328
% Trucks	4.3	4.1	2.9	0	0	0	3.6	3.8	0	3.2	0	4.3	3.5

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 4

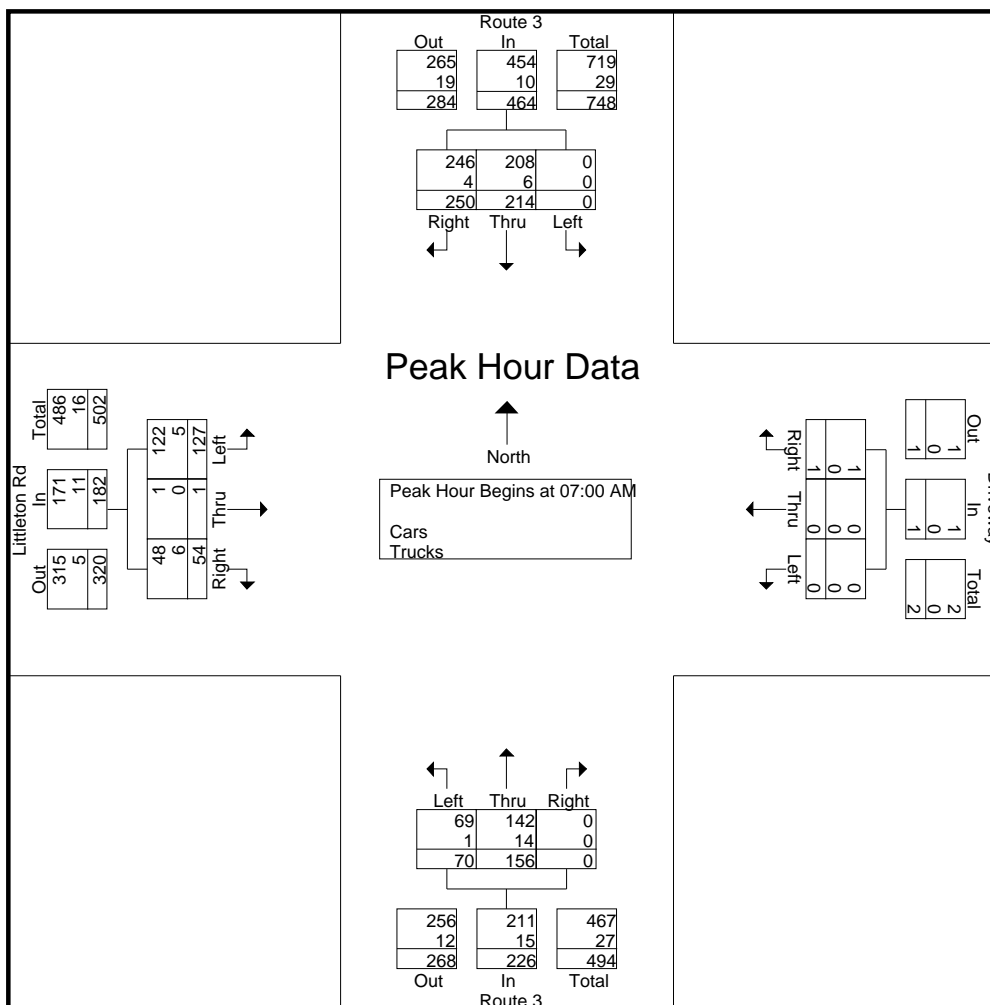
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	32	57	89	0	0	0	0	15	22	0	37	29	0	17	46	172
07:15 AM	0	71	66	137	0	0	0	0	15	49	0	64	33	1	13	47	248
07:30 AM	0	66	65	131	0	0	1	1	22	47	0	69	34	0	9	43	244
07:45 AM	0	45	62	107	0	0	0	0	18	38	0	56	31	0	15	46	209
Total Volume	0	214	250	464	0	0	1	1	70	156	0	226	127	1	54	182	873
% App. Total	0	46.1	53.9		0	0	100		31	69	0		69.8	0.5	29.7		
PHF	.000	.754	.947	.847	.000	.000	.250	.250	.795	.796	.000	.819	.934	.250	.794	.968	.880
Cars	0	208	246	454	0	0	1	1	69	142	0	211	122	1	48	171	837
% Cars	0	97.2	98.4	97.8	0	0	100	100	98.6	91.0	0	93.4	96.1	100	88.9	94.0	95.9
Trucks	0	6	4	10	0	0	0	0	1	14	0	15	5	0	6	11	36
% Trucks	0	2.8	1.6	2.2	0	0	0	0	1.4	9.0	0	6.6	3.9	0	11.1	6.0	4.1

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 5



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

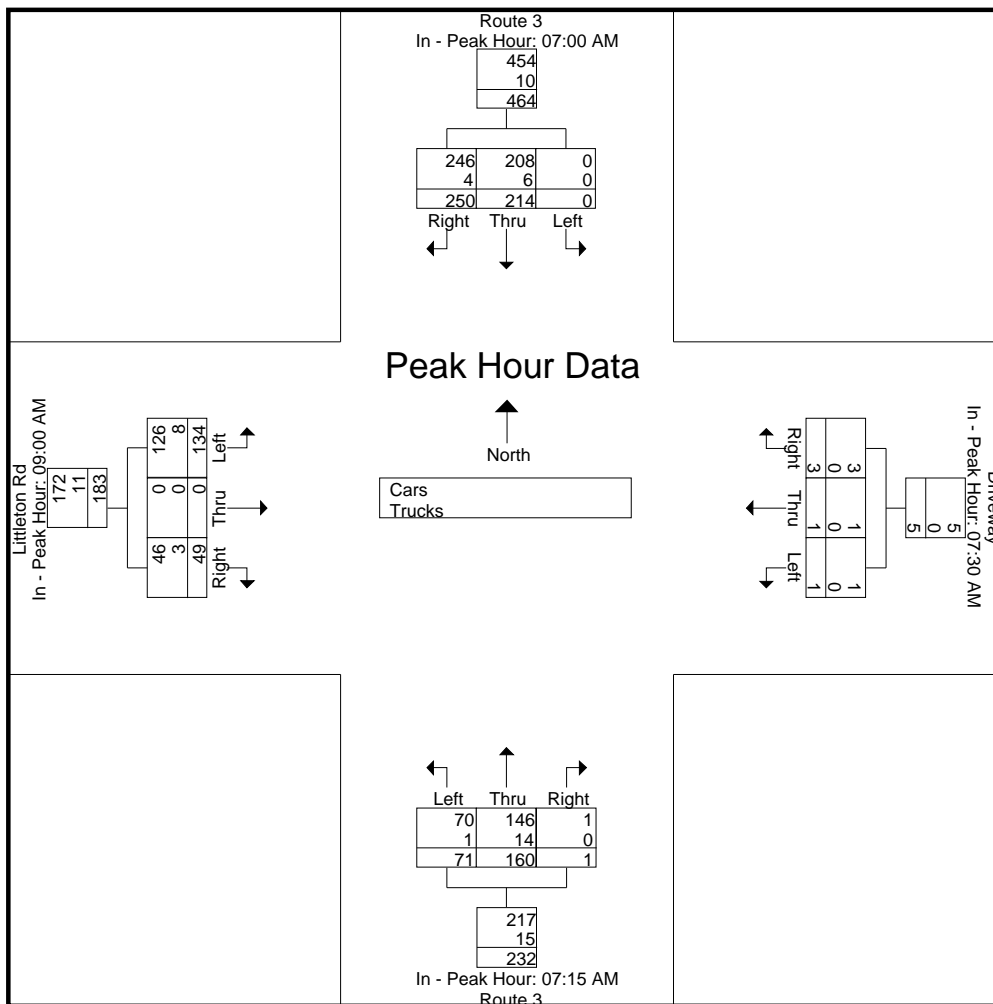
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				09:00 AM			
+0 mins.	0	32	57	89	0	0	1	1	15	49	0	64	34	0	14	48
+15 mins.	0	71	66	137	0	0	0	0	22	47	0	69	30	0	16	46
+30 mins.	0	66	65	131	0	0	2	2	18	38	0	56	35	0	8	43
+45 mins.	0	45	62	107	1	1	0	2	16	26	1	43	35	0	11	46
Total Volume	0	214	250	464	1	1	3	5	71	160	1	232	134	0	49	183
% App. Total	0	46.1	53.9		20	20	60		30.6	69	0.4		73.2	0	26.8	
PHF	.000	.754	.947	.847	.250	.250	.375	.625	.807	.816	.250	.841	.957	.000	.766	.953

Accurate Counts

978-664-2565

Cars	0	208	246	454	1	1	3	5	70	146	1	217	126	0	46	172
% Cars	0	97.2	98.4	97.8	100	100	100	100	98.6	91.2	100	93.5	94	0	93.9	94
Trucks	0	6	4	10	0	0	0	0	1	14	0	15	8	0	3	11
% Trucks	0	2.8	1.6	2.2	0	0	0	0	1.4	8.8	0	6.5	6	0	6.1	6



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 7

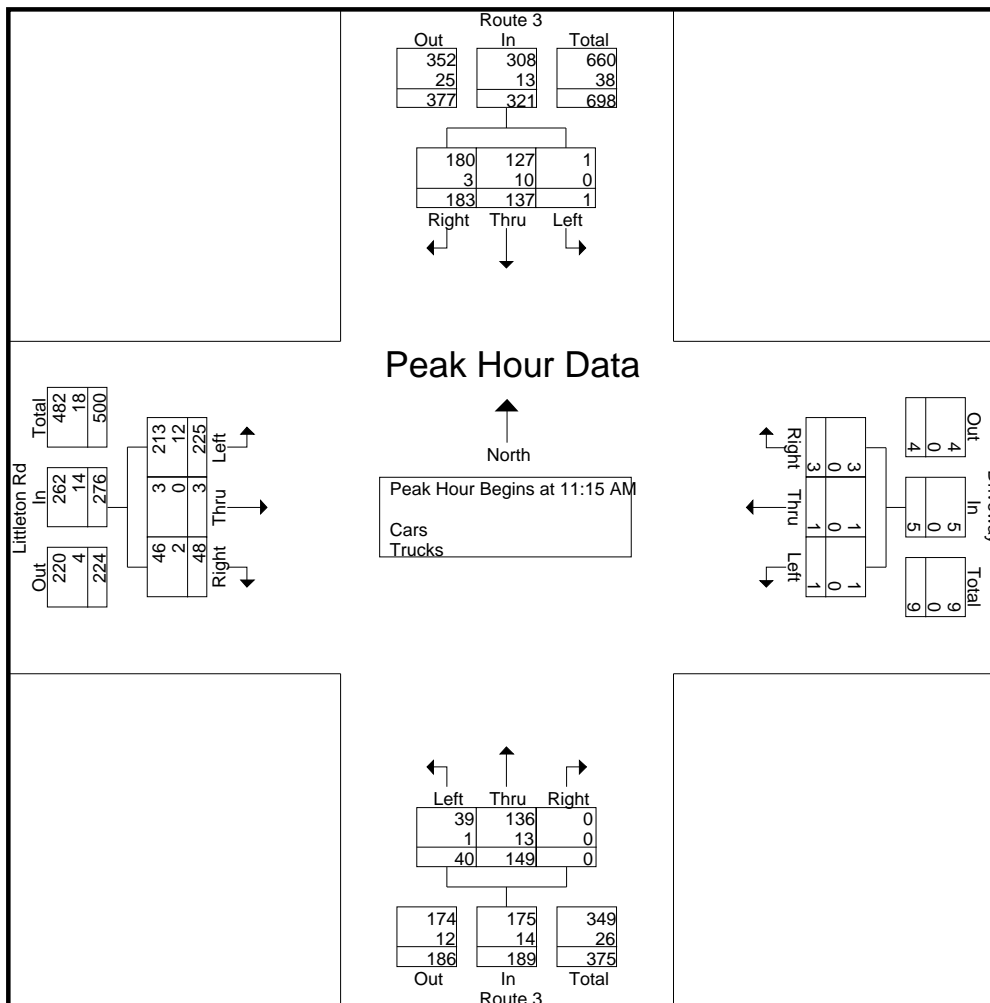
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:15 AM																	
11:15 AM	1	28	47	76	0	0	1	1	13	30	0	43	45	1	6	52	172
11:30 AM	0	39	44	83	0	0	1	1	12	30	0	42	61	1	18	80	206
11:45 AM	0	41	48	89	1	1	1	3	7	47	0	54	50	1	11	62	208
12:00 PM	0	29	44	73	0	0	0	0	8	42	0	50	69	0	13	82	205
Total Volume	1	137	183	321	1	1	3	5	40	149	0	189	225	3	48	276	791
% App. Total	0.3	42.7	57		20	20	60		21.2	78.8	0		81.5	1.1	17.4		
PHF	.250	.835	.953	.902	.250	.250	.750	.417	.769	.793	.000	.875	.815	.750	.667	.841	.951
Cars	1	127	180	308	1	1	3	5	39	136	0	175	213	3	46	262	750
% Cars	100	92.7	98.4	96.0	100	100	100	100	97.5	91.3	0	92.6	94.7	100	95.8	94.9	94.8
Trucks	0	10	3	13	0	0	0	0	1	13	0	14	12	0	2	14	41
% Trucks	0	7.3	1.6	4.0	0	0	0	0	2.5	8.7	0	7.4	5.3	0	4.2	5.1	5.2

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 8



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

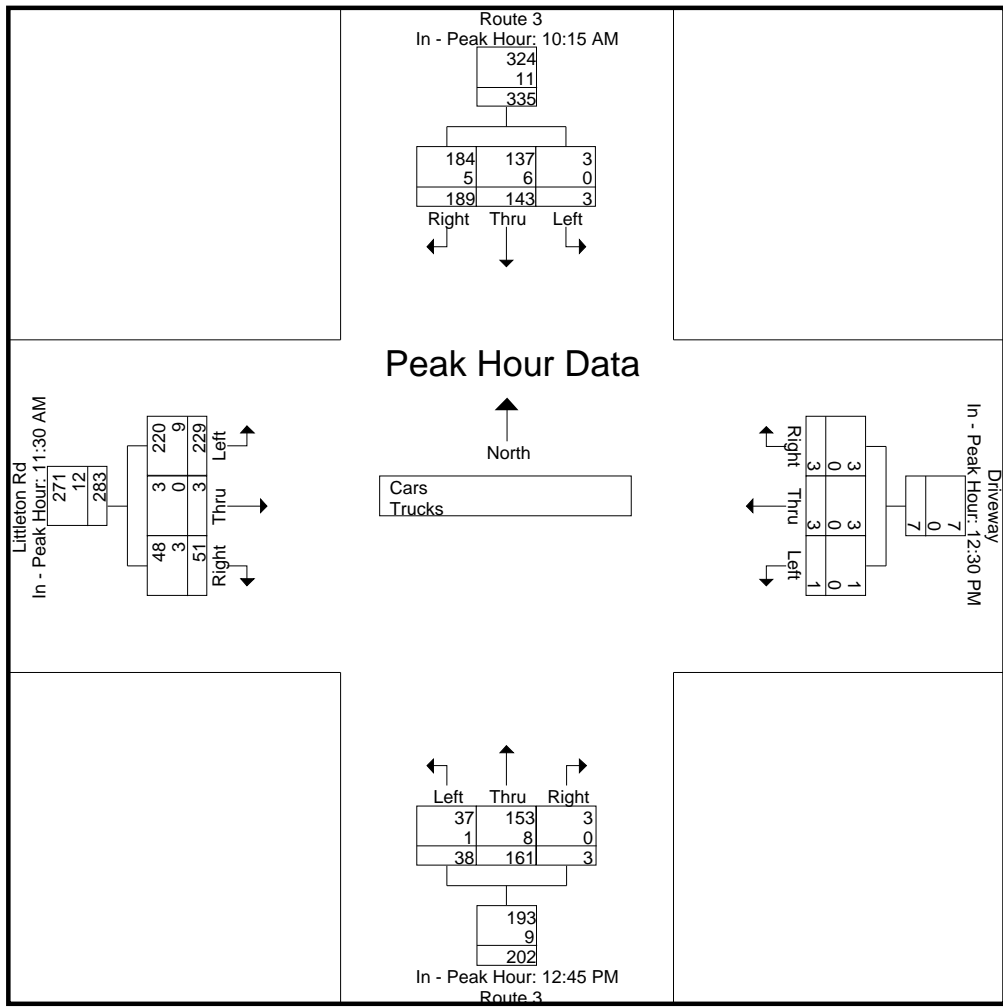
Peak Hour for Each Approach Begins at:

	10:15 AM				12:30 PM				12:45 PM				11:30 AM			
+0 mins.	0	33	51	84	0	0	0	0	7	39	1	47	61	1	18	80
+15 mins.	1	36	64	101	0	0	2	2	10	44	0	54	50	1	11	62
+30 mins.	0	40	31	71	0	0	0	0	5	36	2	43	69	0	13	82
+45 mins.	2	34	43	79	1	3	1	5	16	42	0	58	49	1	9	59
Total Volume	3	143	189	335	1	3	3	7	38	161	3	202	229	3	51	283
% App. Total	0.9	42.7	56.4		14.3	42.9	42.9		18.8	79.7	1.5		80.9	1.1	18	
PHF	.375	.894	.738	.829	.250	.250	.375	.350	.594	.915	.375	.871	.830	.750	.708	.863

Accurate Counts

978-664-2565

Cars	3	137	184	324	1	3	3	7	37	153	3	193	220	3	48	271
% Cars	100	95.8	97.4	96.7	100	100	100	100	97.4	95	100	95.5	96.1	100	94.1	95.8
Trucks	0	6	5	11	0	0	0	0	1	8	0	9	9	0	3	12
% Trucks	0	4.2	2.6	3.3	0	0	0	0	2.6	5	0	4.5	3.9	0	5.9	4.2



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 10

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	57	40	97	1	1	0	2	17	88	0	105	62	0	10	72	276
03:15 PM	1	37	40	78	0	0	1	1	17	73	0	90	78	1	21	100	269
03:30 PM	0	37	57	94	0	0	2	2	16	66	1	83	68	1	14	83	262
03:45 PM	1	35	49	85	0	0	0	0	10	72	0	82	88	1	13	102	269
Total Volume	2	166	186	354	1	1	3	5	60	299	1	360	296	3	58	357	1076
% App. Total	0.6	46.9	52.5		20	20	60		16.7	83.1	0.3		82.9	0.8	16.2		
PHF	.500	.728	.816	.912	.250	.250	.375	.625	.882	.849	.250	.857	.841	.750	.690	.875	.975
Cars	2	157	181	340	1	1	3	5	59	291	1	351	290	3	57	350	1046
% Cars	100	94.6	97.3	96.0	100	100	100	100	98.3	97.3	100	97.5	98.0	100	98.3	98.0	97.2
Trucks	0	9	5	14	0	0	0	0	1	8	0	9	6	0	1	7	30
% Trucks	0	5.4	2.7	4.0	0	0	0	0	1.7	2.7	0	2.5	2.0	0	1.7	2.0	2.8

Accurate Counts

978-664-2565

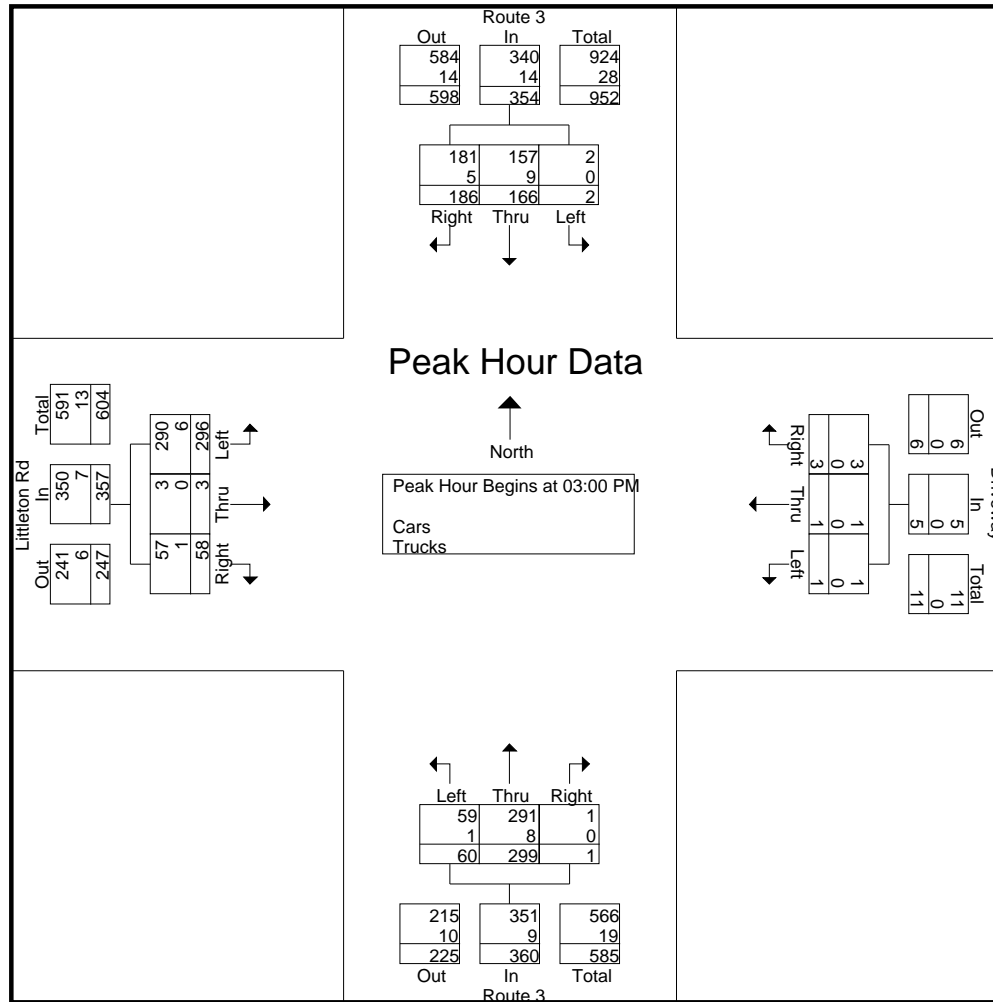
File Name : 18320913

Site Code : 18320001

Start Date : 9/13/2019

Page No : 11

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

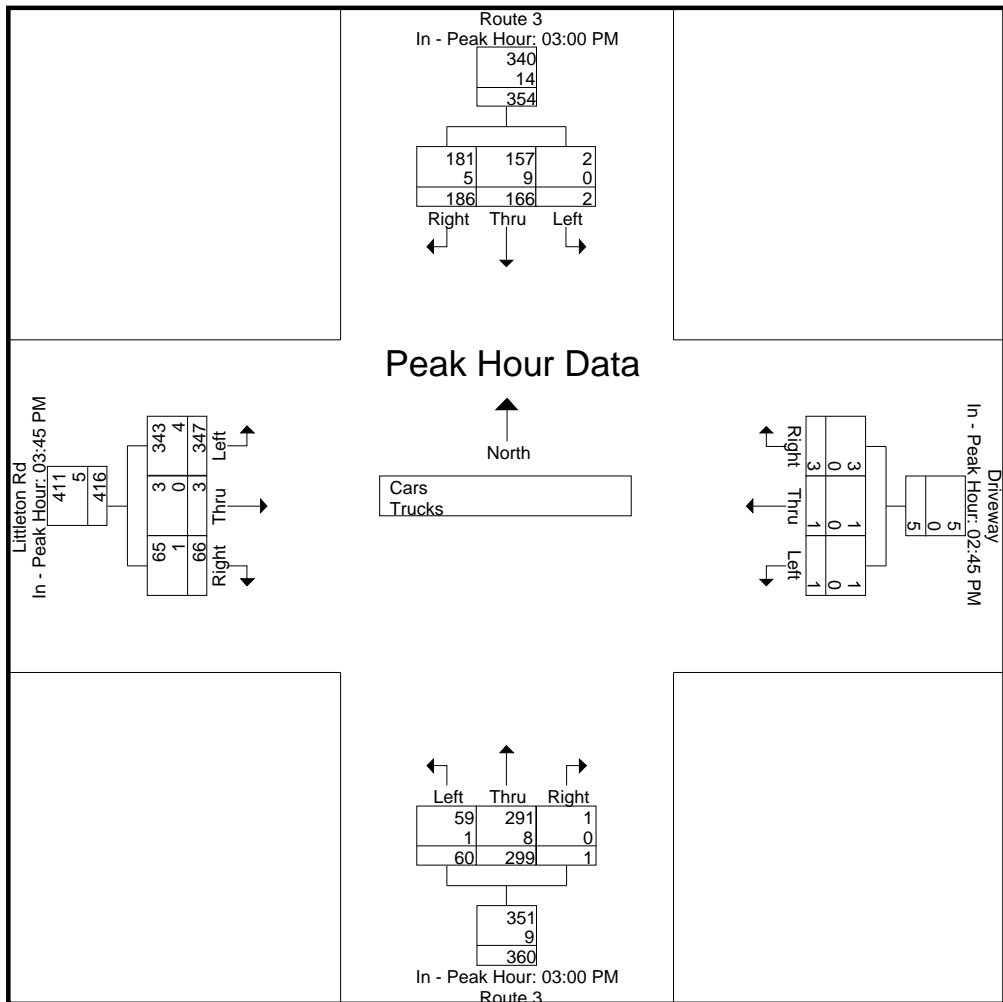
Peak Hour for Each Approach Begins at:

	03:00 PM				02:45 PM				03:00 PM				03:45 PM			
+0 mins.	0	57	40	97	0	0	0	0	17	88	0	105	88	1	13	102
+15 mins.	1	37	40	78	1	1	0	2	17	73	0	90	87	0	12	99
+30 mins.	0	37	57	94	0	0	1	1	16	66	1	83	82	0	19	101
+45 mins.	1	35	49	85	0	0	2	2	10	72	0	82	90	2	22	114
Total Volume	2	166	186	354	1	1	3	5	60	299	1	360	347	3	66	416
% App. Total	0.6	46.9	52.5		20	20	60		16.7	83.1	0.3		83.4	0.7	15.9	
PHF	.500	.728	.816	.912	.250	.250	.375	.625	.882	.849	.250	.857	.964	.375	.750	.912

Accurate Counts

978-664-2565

Cars	2	157	181	340	1	1	3	5	59	291	1	351	343	3	65	411
% Cars	100	94.6	97.3	96	100	100	100	100	98.3	97.3	100	97.5	98.8	100	98.5	98.8
Trucks	0	9	5	14	0	0	0	0	1	8	0	9	4	0	1	5
% Trucks	0	5.4	2.7	4	0	0	0	0	1.7	2.7	0	2.5	1.2	0	1.5	1.2



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 13

Groups Printed- Cars

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:00 AM	0	19	32	0	0	0	8	15	0	17	0	2	93
06:15 AM	0	22	35	0	0	0	6	10	0	13	0	13	99
06:30 AM	2	27	48	0	0	0	13	15	1	23	0	7	136
06:45 AM	0	23	51	0	1	1	10	19	0	16	2	8	131
Total	2	91	166	0	1	1	37	59	1	69	2	30	459
07:00 AM	0	30	56	0	0	0	15	21	0	28	0	14	164
07:15 AM	0	69	65	0	0	0	14	41	0	32	1	13	235
07:30 AM	0	65	65	0	0	1	22	42	0	31	0	9	235
07:45 AM	0	44	60	0	0	0	18	38	0	31	0	12	203
Total	0	208	246	0	0	1	69	142	0	122	1	48	837
08:00 AM	2	30	54	0	0	2	16	25	1	24	0	12	166
08:15 AM	1	36	49	1	1	0	10	27	0	15	0	11	151
08:30 AM	0	12	40	0	0	0	10	27	0	25	1	8	123
08:45 AM	0	26	55	0	0	1	10	30	1	30	0	4	157
Total	3	104	198	1	1	3	46	109	2	94	1	35	597
09:00 AM	0	25	32	0	0	0	4	35	1	33	0	13	143
09:15 AM	0	33	47	0	0	1	9	21	1	29	0	15	156
09:30 AM	1	36	34	0	0	0	10	24	0	32	0	8	145
09:45 AM	0	30	45	0	0	0	5	35	0	32	0	10	157
Total	1	124	158	0	0	1	28	115	2	126	0	46	601
10:00 AM	0	30	36	0	0	2	2	33	1	42	0	10	156
10:15 AM	0	33	48	0	0	0	12	38	1	40	0	9	181
10:30 AM	1	36	62	0	0	0	7	28	0	41	0	9	184
10:45 AM	0	36	31	0	0	1	8	22	0	38	0	14	150
Total	1	135	177	0	0	3	29	121	2	161	0	42	671

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 14

Groups Printed- Cars

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	2	32	43	1	0	0	15	34	0	36	0	15	178
11:15 AM	1	26	46	0	0	1	12	28	0	42	1	6	163
11:30 AM	0	36	44	0	0	1	12	25	0	58	1	18	195
11:45 AM	0	39	46	1	1	1	7	43	0	45	1	10	194
Total	3	133	179	2	1	3	46	130	0	181	3	49	730
12:00 PM	0	26	44	0	0	0	8	40	0	68	0	12	198
12:15 PM	0	16	40	0	0	0	5	35	0	49	1	8	154
12:30 PM	1	36	42	0	0	0	7	42	0	37	1	10	176
12:45 PM	2	32	45	0	0	2	7	38	1	30	1	10	168
Total	3	110	171	0	0	2	27	155	1	184	3	40	696
01:00 PM	1	23	52	0	0	0	10	43	0	57	1	11	198
01:15 PM	1	31	33	1	3	1	5	33	2	41	0	11	162
01:30 PM	1	38	42	0	0	0	15	39	0	45	0	13	193
01:45 PM	0	41	32	0	0	1	8	36	0	52	0	16	186
Total	3	133	159	1	3	2	38	151	2	195	1	51	739
02:00 PM	0	34	34	0	0	0	9	41	0	46	1	11	176
02:15 PM	1	36	52	1	0	1	9	53	0	48	1	7	209
02:30 PM	0	32	37	0	0	0	6	42	0	64	1	17	199
02:45 PM	0	37	30	0	0	0	5	47	2	80	1	13	215
Total	1	139	153	1	0	1	29	183	2	238	4	48	799
03:00 PM	0	54	39	1	1	0	16	84	0	61	0	10	266
03:15 PM	1	34	40	0	0	1	17	72	0	78	1	20	264
03:30 PM	0	35	55	0	0	2	16	65	1	65	1	14	254
03:45 PM	1	34	47	0	0	0	10	70	0	86	1	13	262
Total	2	157	181	1	1	3	59	291	1	290	3	57	1046

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 15

Groups Printed- Cars

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	1	31	49	0	0	2	10	71	0	87	0	11	262
04:15 PM	1	36	51	0	0	0	9	47	0	82	0	19	245
04:30 PM	0	26	52	0	1	2	8	69	1	88	2	22	271
04:45 PM	0	27	45	0	0	0	8	70	1	73	1	12	237
Total	2	120	197	0	1	4	35	257	2	330	3	64	1015
05:00 PM	0	35	40	0	0	1	11	52	0	83	0	18	240
05:15 PM	1	27	44	0	0	1	13	65	0	63	1	20	235
05:30 PM	0	12	52	1	0	0	6	54	0	72	0	16	213
05:45 PM	0	29	31	0	0	0	9	65	1	57	0	10	202
Total	1	103	167	1	0	2	39	236	1	275	1	64	890
Grand Total	22	1557	2152	7	8	26	482	1949	16	2265	22	574	9080
Apprch %	0.6	41.7	57.7	17.1	19.5	63.4	19.7	79.6	0.7	79.2	0.8	20.1	
Total %	0.2	17.1	23.7	0.1	0.1	0.3	5.3	21.5	0.2	24.9	0.2	6.3	

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 16

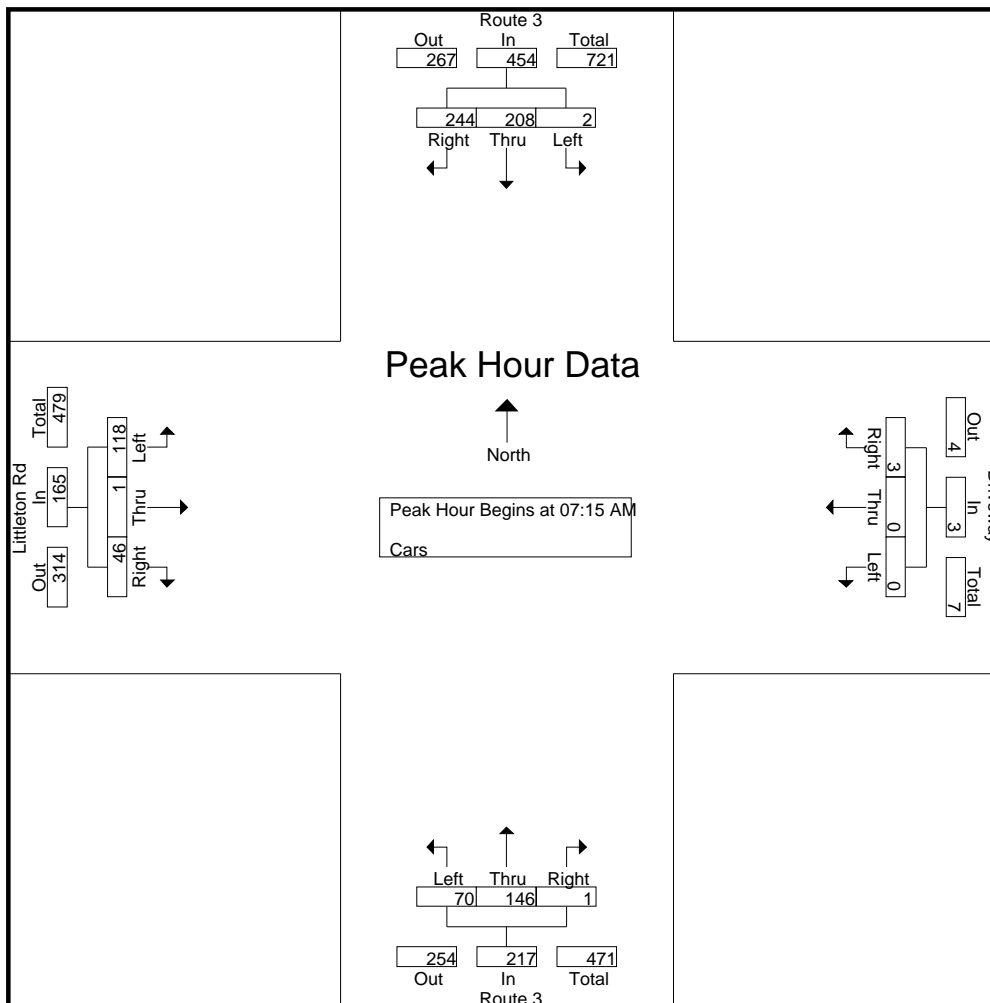
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	69	65	134	0	0	0	0	14	41	0	55	32	1	13	46	235
07:30 AM	0	65	65	130	0	0	1	1	22	42	0	64	31	0	9	40	235
07:45 AM	0	44	60	104	0	0	0	0	18	38	0	56	31	0	12	43	203
08:00 AM	2	30	54	86	0	0	2	2	16	25	1	42	24	0	12	36	166
Total Volume	2	208	244	454	0	0	3	3	70	146	1	217	118	1	46	165	839
% App. Total	0.4	45.8	53.7		0	0	100		32.3	67.3	0.5		71.5	0.6	27.9		
PHF	.250	.754	.938	.847	.000	.000	.375	.375	.795	.869	.250	.848	.922	.250	.885	.897	.893

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 17



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

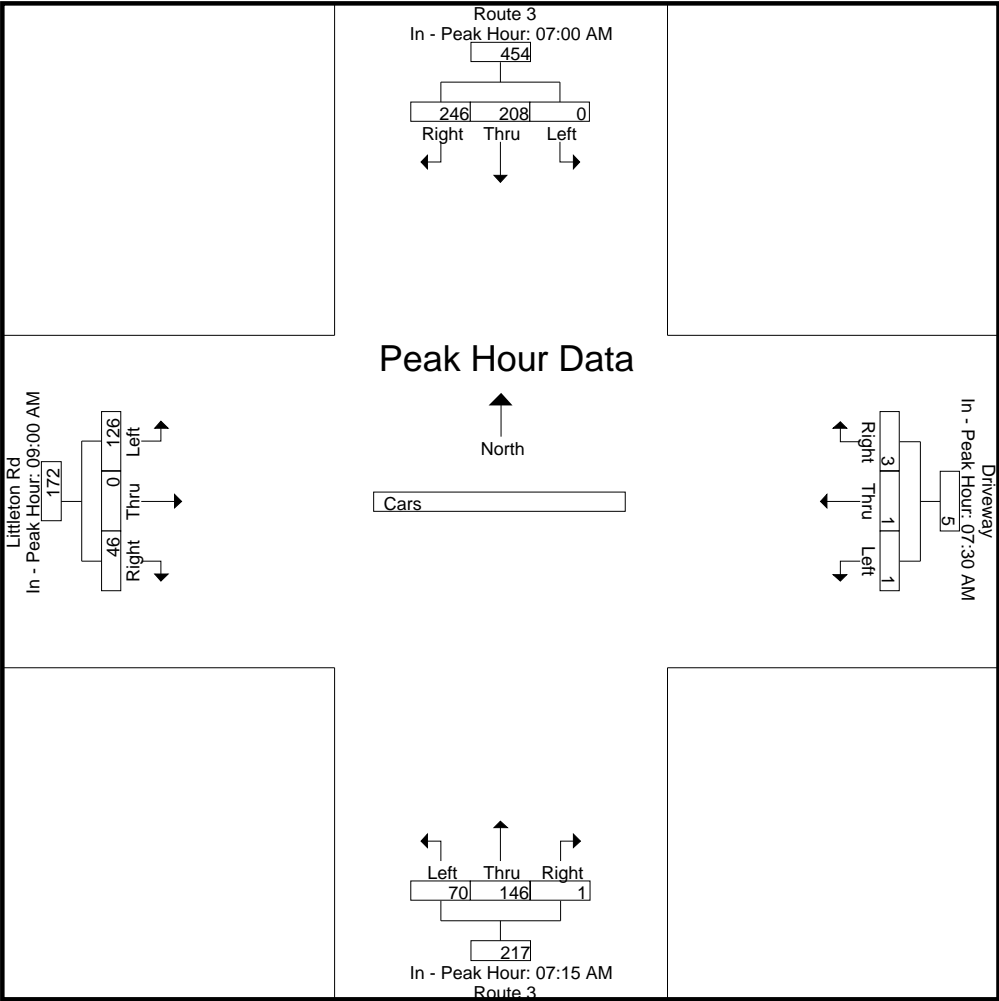
	07:00 AM				07:30 AM				07:15 AM				09:00 AM			
+0 mins.	0	30	56	86	0	0	1	1	14	41	0	55	33	0	13	46
+15 mins.	0	69	65	134	0	0	0	0	22	42	0	64	29	0	15	44
+30 mins.	0	65	65	130	0	0	2	2	18	38	0	56	32	0	8	40
+45 mins.	0	44	60	104	1	1	0	2	16	25	1	42	32	0	10	42
Total Volume	0	208	246	454	1	1	3	5	70	146	1	217	126	0	46	172
% App. Total	0	45.8	54.2		20	20	60		32.3	67.3	0.5		73.3	0	26.7	
PHF	.000	.754	.946	.847	.250	.250	.375	.625	.795	.869	.250	.848	.955	.000	.767	.935

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 18



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 19

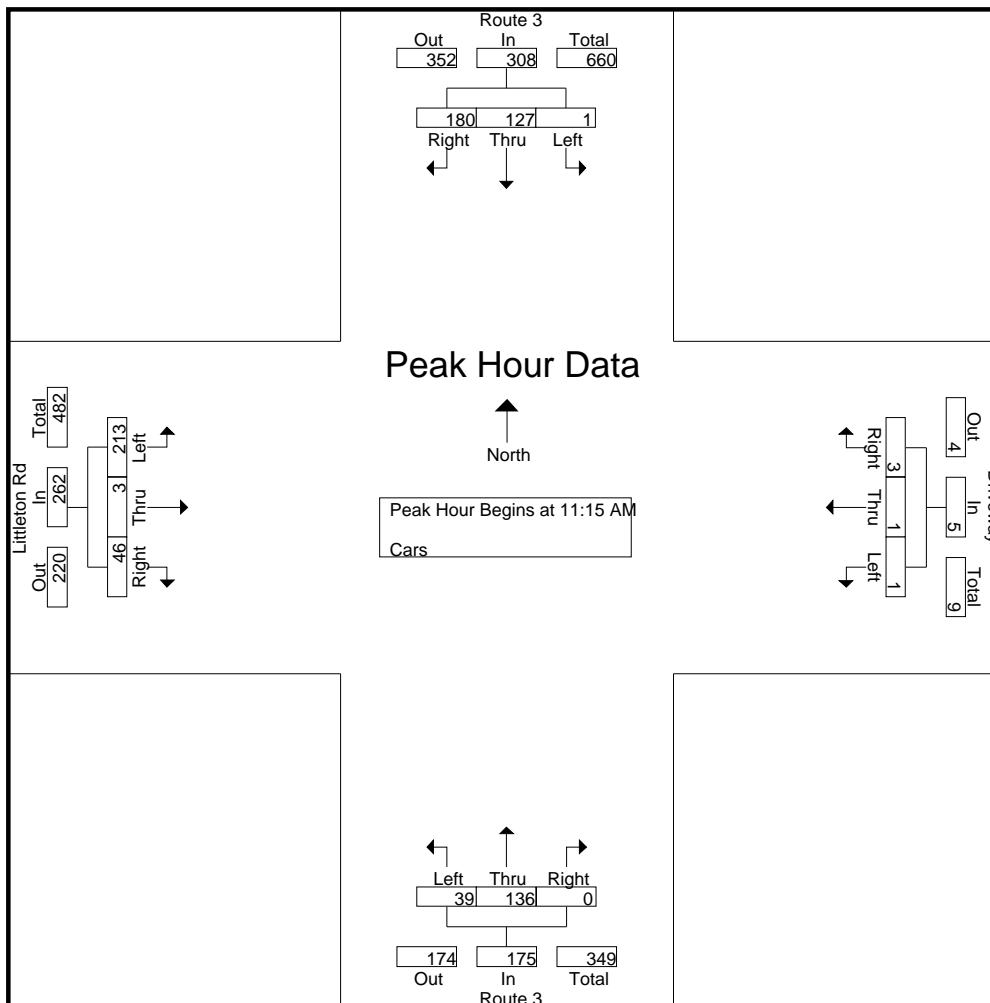
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:15 AM																	
11:15 AM	1	26	46	73	0	0	1	1	12	28	0	40	42	1	6	49	163
11:30 AM	0	36	44	80	0	0	1	1	12	25	0	37	58	1	18	77	195
11:45 AM	0	39	46	85	1	1	1	3	7	43	0	50	45	1	10	56	194
12:00 PM	0	26	44	70	0	0	0	0	8	40	0	48	68	0	12	80	198
Total Volume	1	127	180	308	1	1	3	5	39	136	0	175	213	3	46	262	750
% App. Total	0.3	41.2	58.4		20	20	60		22.3	77.7	0		81.3	1.1	17.6		
PHF	.250	.814	.978	.906	.250	.250	.750	.417	.813	.791	.000	.875	.783	.750	.639	.819	.947

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 20



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

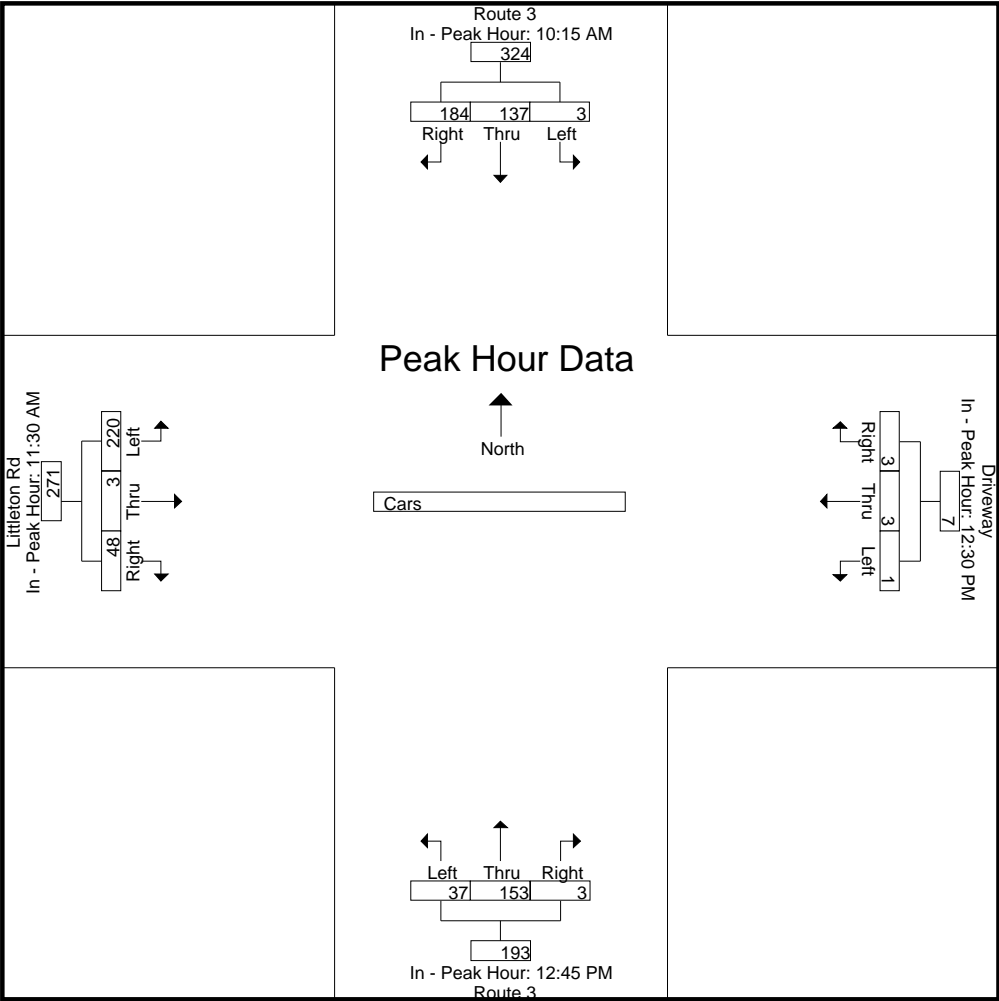
	10:15 AM				12:30 PM				12:45 PM				11:30 AM			
+0 mins.	0	33	48	81	0	0	0	0	7	38	1	46	58	1	18	77
+15 mins.	1	36	62	99	0	0	2	2	10	43	0	53	45	1	10	56
+30 mins.	0	36	31	67	0	0	0	0	5	33	2	40	68	0	12	80
+45 mins.	2	32	43	77	1	3	1	5	15	39	0	54	49	1	8	58
Total Volume	3	137	184	324	1	3	3	7	37	153	3	193	220	3	48	271
% App. Total	0.9	42.3	56.8		14.3	42.9	42.9		19.2	79.3	1.6		81.2	1.1	17.7	
PHF	.375	.951	.742	.818	.250	.250	.375	.350	.617	.890	.375	.894	.809	.750	.667	.847

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 21



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 22

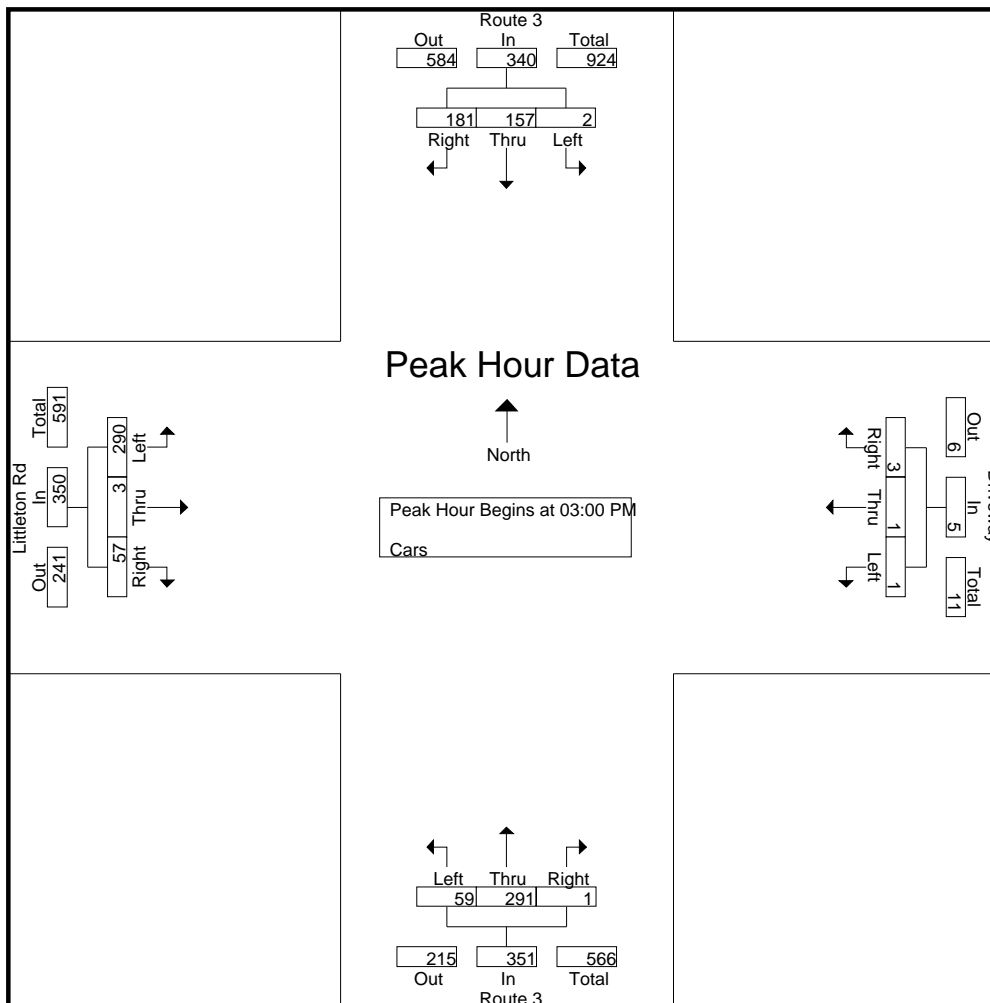
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	54	39	93	1	1	0	2	16	84	0	100	61	0	10	71	266
03:15 PM	1	34	40	75	0	0	1	1	17	72	0	89	78	1	20	99	264
03:30 PM	0	35	55	90	0	0	2	2	16	65	1	82	65	1	14	80	254
03:45 PM	1	34	47	82	0	0	0	0	10	70	0	80	86	1	13	100	262
Total Volume	2	157	181	340	1	1	3	5	59	291	1	351	290	3	57	350	1046
% App. Total	0.6	46.2	53.2		20	20	60		16.8	82.9	0.3		82.9	0.9	16.3		
PHF	.500	.727	.823	.914	.250	.250	.375	.625	.868	.866	.250	.878	.843	.750	.713	.875	.983

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 23



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

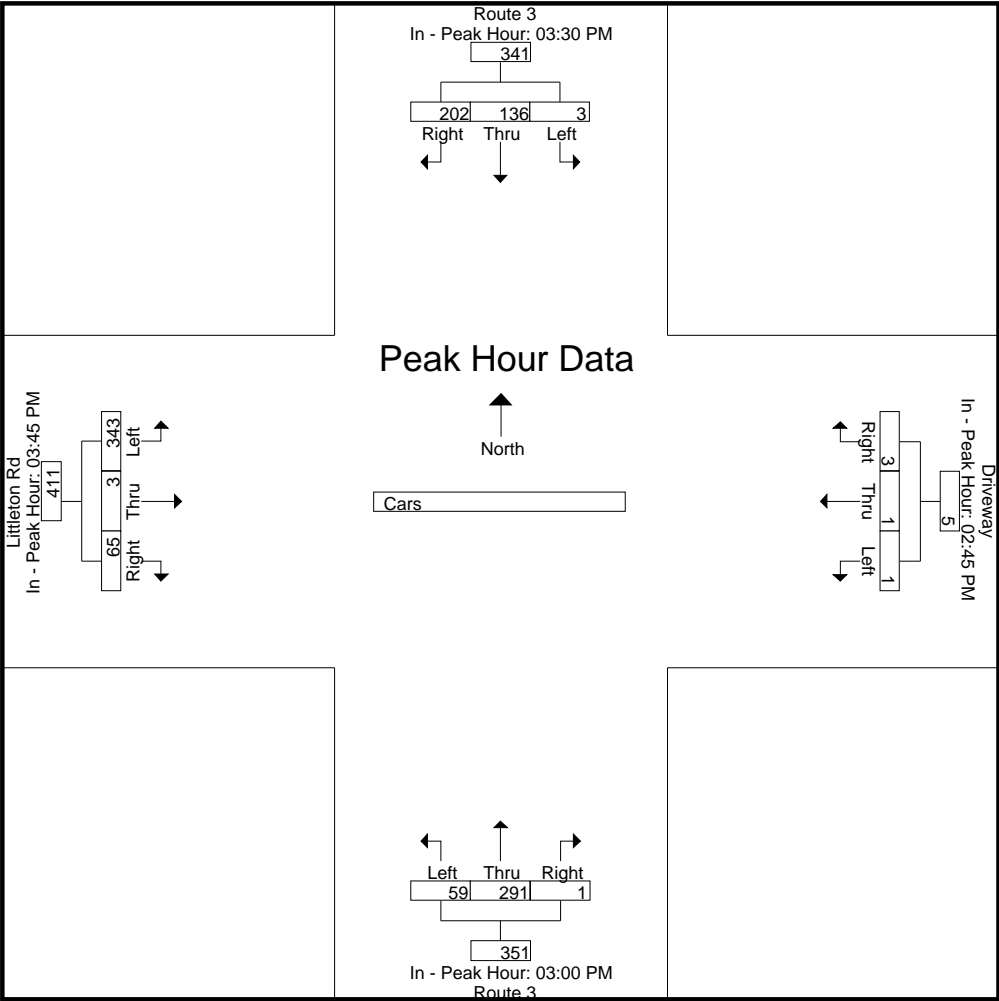
	03:30 PM				02:45 PM				03:00 PM				03:45 PM			
+0 mins.	0	35	55	90	0	0	0	0	16	84	0	100	86	1	13	100
+15 mins.	1	34	47	82	1	1	0	2	17	72	0	89	87	0	11	98
+30 mins.	1	31	49	81	0	0	1	1	16	65	1	82	82	0	19	101
+45 mins.	1	36	51	88	0	0	2	2	10	70	0	80	88	2	22	112
Total Volume	3	136	202	341	1	1	3	5	59	291	1	351	343	3	65	411
% App. Total	0.9	39.9	59.2		20	20	60		16.8	82.9	0.3		83.5	0.7	15.8	
PHF	.750	.944	.918	.947	.250	.250	.375	.625	.868	.866	.250	.878	.974	.375	.739	.917

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320913
Site Code : 18320001
Start Date : 9/13/2019
Page No : 24



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 25

Groups Printed- Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:00 AM	0	0	1	0	0	0	1	0	0	2	0	0	4
06:15 AM	0	1	1	0	0	0	0	1	0	3	0	0	6
06:30 AM	0	3	1	0	0	0	1	1	0	0	0	0	6
06:45 AM	0	1	2	0	0	0	0	2	0	2	0	0	7
Total	0	5	5	0	0	0	2	4	0	7	0	0	23
07:00 AM	0	2	1	0	0	0	0	1	0	1	0	3	8
07:15 AM	0	2	1	0	0	0	1	8	0	1	0	0	13
07:30 AM	0	1	0	0	0	0	0	5	0	3	0	0	9
07:45 AM	0	1	2	0	0	0	0	0	0	0	0	3	6
Total	0	6	4	0	0	0	1	14	0	5	0	6	36
08:00 AM	0	0	1	0	0	0	0	1	0	3	0	0	5
08:15 AM	0	2	3	0	0	0	1	1	0	3	0	1	11
08:30 AM	0	2	2	0	0	0	0	3	0	2	0	0	9
08:45 AM	0	2	7	0	0	0	0	1	0	2	0	0	12
Total	0	6	13	0	0	0	1	6	0	10	0	1	37
09:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	2
09:15 AM	0	0	2	0	0	0	1	0	0	1	0	1	5
09:30 AM	0	0	1	0	0	0	0	1	0	3	0	0	5
09:45 AM	0	3	1	0	0	0	0	1	0	3	0	1	9
Total	0	3	4	0	0	0	1	2	0	8	0	3	21
10:00 AM	0	1	1	0	0	0	0	1	0	1	0	1	5
10:15 AM	0	0	3	0	0	0	3	0	0	1	0	0	7
10:30 AM	0	0	2	0	0	0	2	1	0	0	0	1	6
10:45 AM	0	4	0	0	0	0	0	1	0	0	0	0	5
Total	0	5	6	0	0	0	5	3	0	2	0	2	23

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 26

Groups Printed- Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	2	0	0	0	0	0	0	0	4	0	1	7
11:15 AM	0	2	1	0	0	0	1	2	0	3	0	0	9
11:30 AM	0	3	0	0	0	0	0	5	0	3	0	0	11
11:45 AM	0	2	2	0	0	0	0	4	0	5	0	1	14
Total	0	9	3	0	0	0	1	11	0	15	0	2	41
12:00 PM	0	3	0	0	0	0	0	2	0	1	0	1	7
12:15 PM	0	1	0	0	0	0	0	1	0	0	0	1	3
12:30 PM	0	0	2	0	0	0	1	2	0	1	0	1	7
12:45 PM	0	0	1	0	0	0	0	1	0	1	0	0	3
Total	0	4	3	0	0	0	1	6	0	3	0	3	20
01:00 PM	0	1	2	0	0	0	0	1	0	0	0	2	6
01:15 PM	0	1	2	0	0	0	0	3	0	0	0	3	9
01:30 PM	0	4	4	0	0	0	1	3	0	6	0	0	18
01:45 PM	0	2	3	0	0	0	0	3	0	1	0	1	10
Total	0	8	11	0	0	0	1	10	0	7	0	6	43
02:00 PM	0	1	3	0	0	0	0	2	0	1	0	0	7
02:15 PM	0	0	2	0	0	0	0	0	0	2	0	0	4
02:30 PM	0	5	1	0	0	0	0	3	0	1	0	1	11
02:45 PM	0	4	1	0	0	0	0	3	0	1	0	0	9
Total	0	10	7	0	0	0	0	8	0	5	0	1	31
03:00 PM	0	3	1	0	0	0	1	4	0	1	0	0	10
03:15 PM	0	3	0	0	0	0	0	1	0	0	0	1	5
03:30 PM	0	2	2	0	0	0	0	1	0	3	0	0	8
03:45 PM	0	1	2	0	0	0	0	2	0	2	0	0	7
Total	0	9	5	0	0	0	1	8	0	6	0	1	30

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 27

Groups Printed- Trucks

Start Time	Route 3 From North			Driveway From East			Route 3 From South			Littleton Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	1	0	1	0	0	0	1	1	0	0	0	1	5
04:15 PM	0	0	2	0	0	0	0	2	0	0	0	0	4
04:30 PM	0	0	1	0	0	0	0	1	0	2	0	0	4
04:45 PM	0	1	0	0	0	0	1	0	0	2	0	0	4
Total	1	1	4	0	0	0	2	4	0	4	0	1	17
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	2	2	0	0	0	0	4
Total	0	0	0	0	0	0	2	2	0	2	0	0	6
Grand Total	1	66	65	0	0	0	18	78	0	74	0	26	328
Apprch %	0.8	50	49.2	0	0	0	18.8	81.2	0	74	0	26	
Total %	0.3	20.1	19.8	0	0	0	5.5	23.8	0	22.6	0	7.9	

Accurate Counts

978-664-2565

File Name : 18320913

Site Code : 18320001

Start Date : 9/13/2019

Page No : 28

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

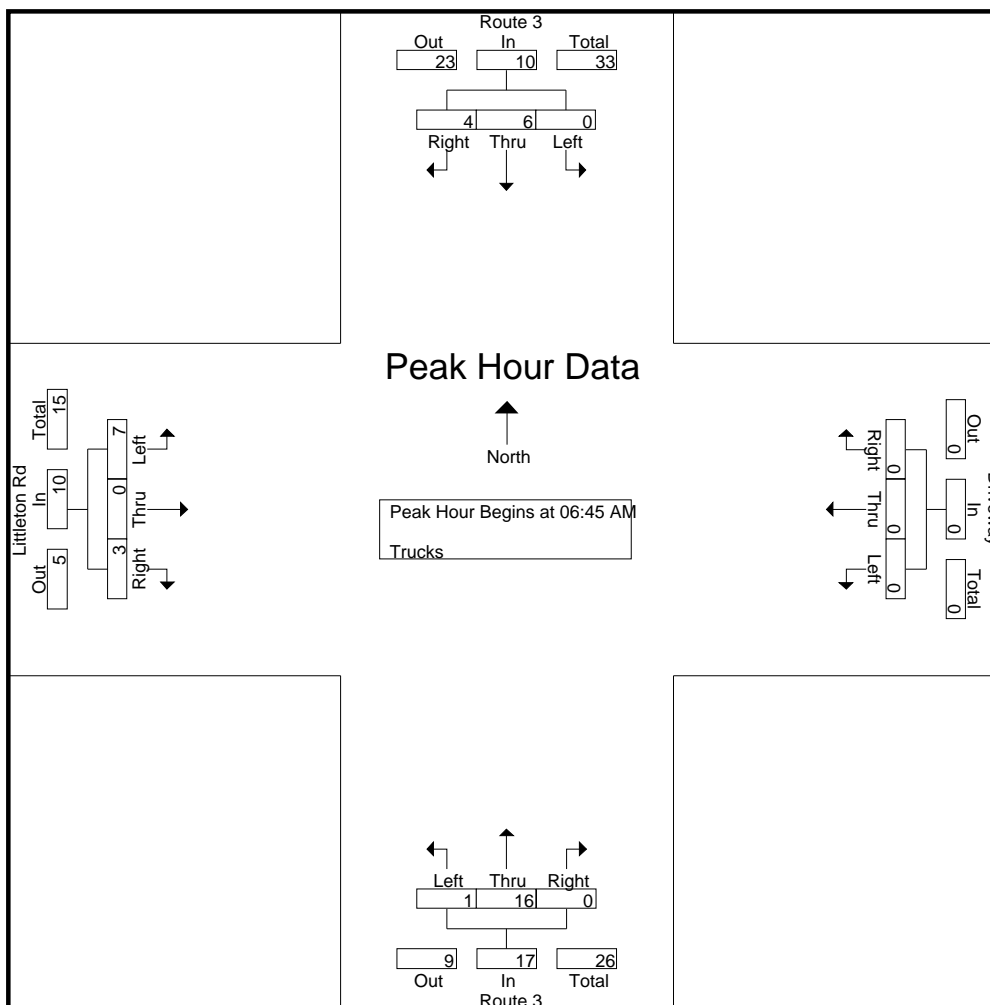
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	0	1	2	3	0	0	0	0	0	2	0	2	2	0	0	2	7
07:00 AM	0	2	1	3	0	0	0	0	0	1	0	1	1	0	3	4	8
07:15 AM	0	2	1	3	0	0	0	0	1	8	0	9	1	0	0	1	13
07:30 AM	0	1	0	1	0	0	0	0	0	5	0	5	3	0	0	3	9
Total Volume	0	6	4	10	0	0	0	0	1	16	0	17	7	0	3	10	37
% App. Total	0	60	40		0	0	0		5.9	94.1	0		70	0	30		
PHF	.000	.750	.500	.833	.000	.000	.000	.000	.250	.500	.000	.472	.583	.000	.250	.625	.712

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 29



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

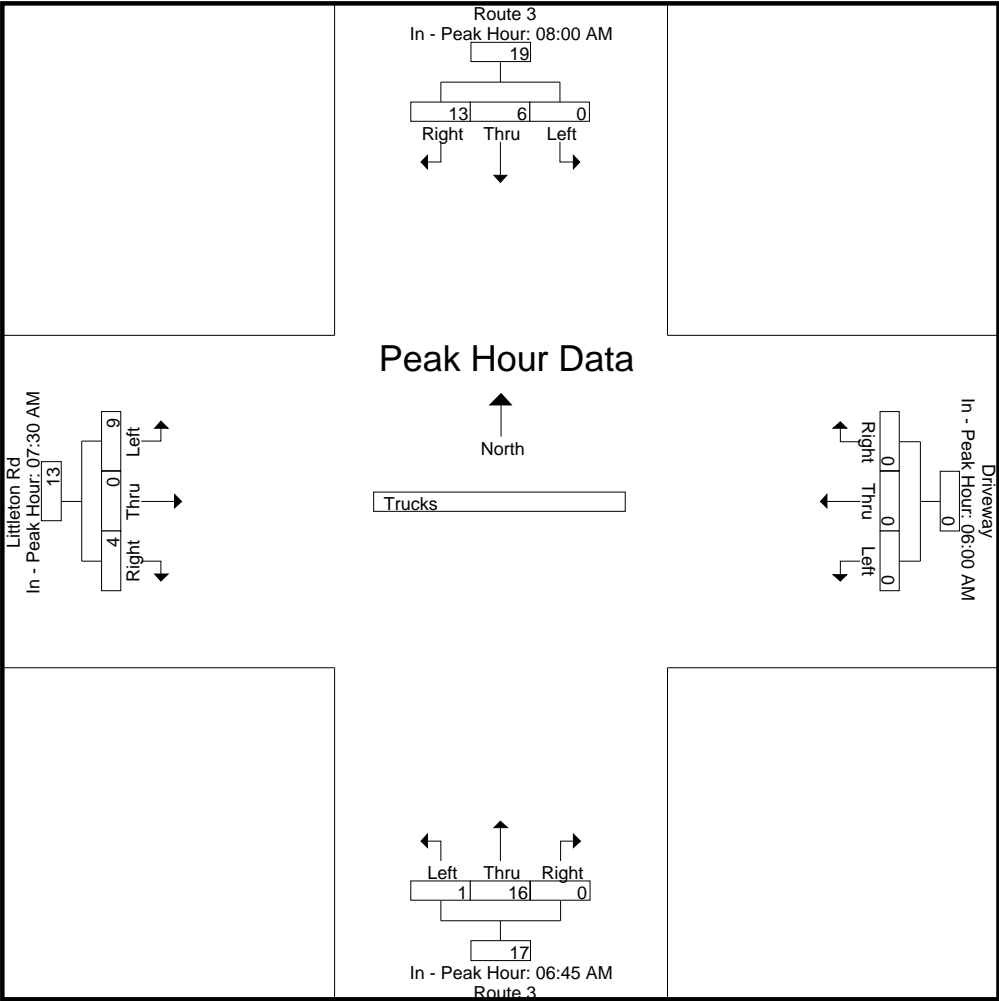
	08:00 AM				06:00 AM				06:45 AM				07:30 AM			
+0 mins.	0	0	1	1	0	0	0	0	0	2	0	2	3	0	0	3
+15 mins.	0	2	3	5	0	0	0	0	0	1	0	1	0	0	3	3
+30 mins.	0	2	2	4	0	0	0	0	1	8	0	9	3	0	0	3
+45 mins.	0	2	7	9	0	0	0	0	0	5	0	5	3	0	1	4
Total Volume	0	6	13	19	0	0	0	0	1	16	0	17	9	0	4	13
% App. Total	0	31.6	68.4		0	0	0		5.9	94.1	0		69.2	0	30.8	
PHF	.000	.750	.464	.528	.000	.000	.000	.000	.250	.500	.000	.472	.750	.000	.333	.813

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320913
Site Code : 18320001
Start Date : 9/13/2019
Page No : 30



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 31

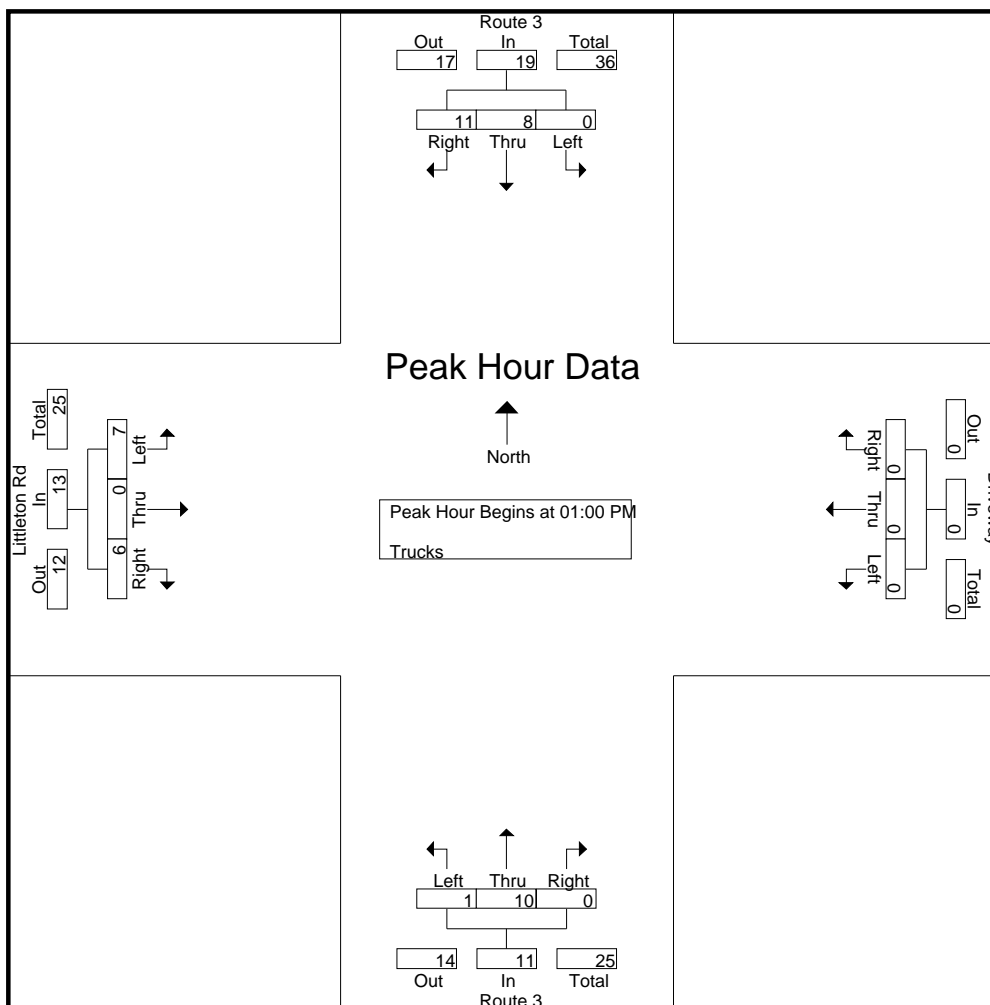
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 01:00 PM																	
01:00 PM	0	1	2	3	0	0	0	0	0	1	0	1	0	0	2	2	6
01:15 PM	0	1	2	3	0	0	0	0	0	3	0	3	0	0	3	3	9
01:30 PM	0	4	4	8	0	0	0	0	1	3	0	4	6	0	0	6	18
01:45 PM	0	2	3	5	0	0	0	0	0	3	0	3	1	0	1	2	10
Total Volume	0	8	11	19	0	0	0	0	1	10	0	11	7	0	6	13	43
% App. Total	0	42.1	57.9		0	0	0		9.1	90.9	0		53.8	0	46.2		
PHF	.000	.500	.688	.594	.000	.000	.000	.000	.250	.833	.000	.688	.292	.000	.500	.542	.597

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 32



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

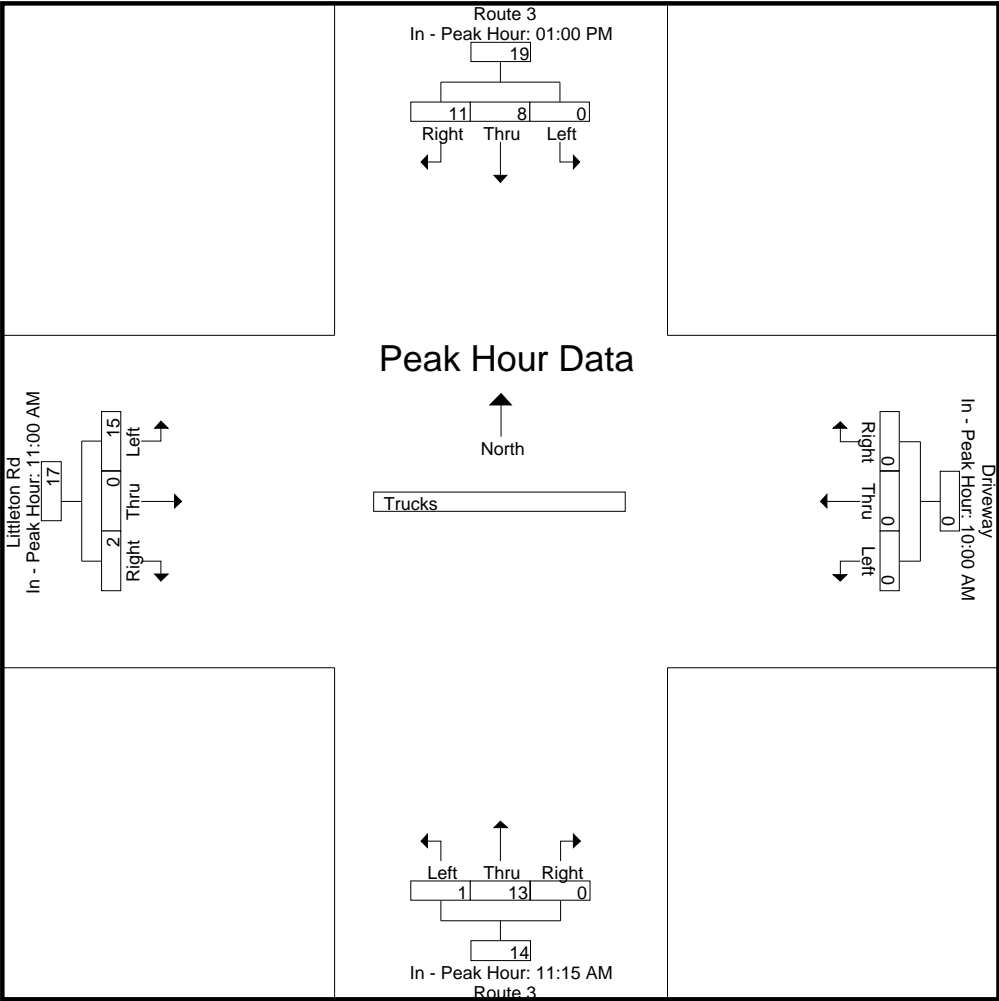
	01:00 PM				10:00 AM				11:15 AM				11:00 AM			
+0 mins.	0	1	2	3	0	0	0	0	1	2	0	3	4	0	1	5
+15 mins.	0	1	2	3	0	0	0	0	0	5	0	5	3	0	0	3
+30 mins.	0	4	4	8	0	0	0	0	0	4	0	4	3	0	0	3
+45 mins.	0	2	3	5	0	0	0	0	0	2	0	2	5	0	1	6
Total Volume	0	8	11	19	0	0	0	0	1	13	0	14	15	0	2	17
% App. Total	0	42.1	57.9		0	0	0		7.1	92.9	0		88.2	0	11.8	
PHF	.000	.500	.688	.594	.000	.000	.000	.000	.250	.650	.000	.700	.750	.000	.500	.708

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 33



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 34

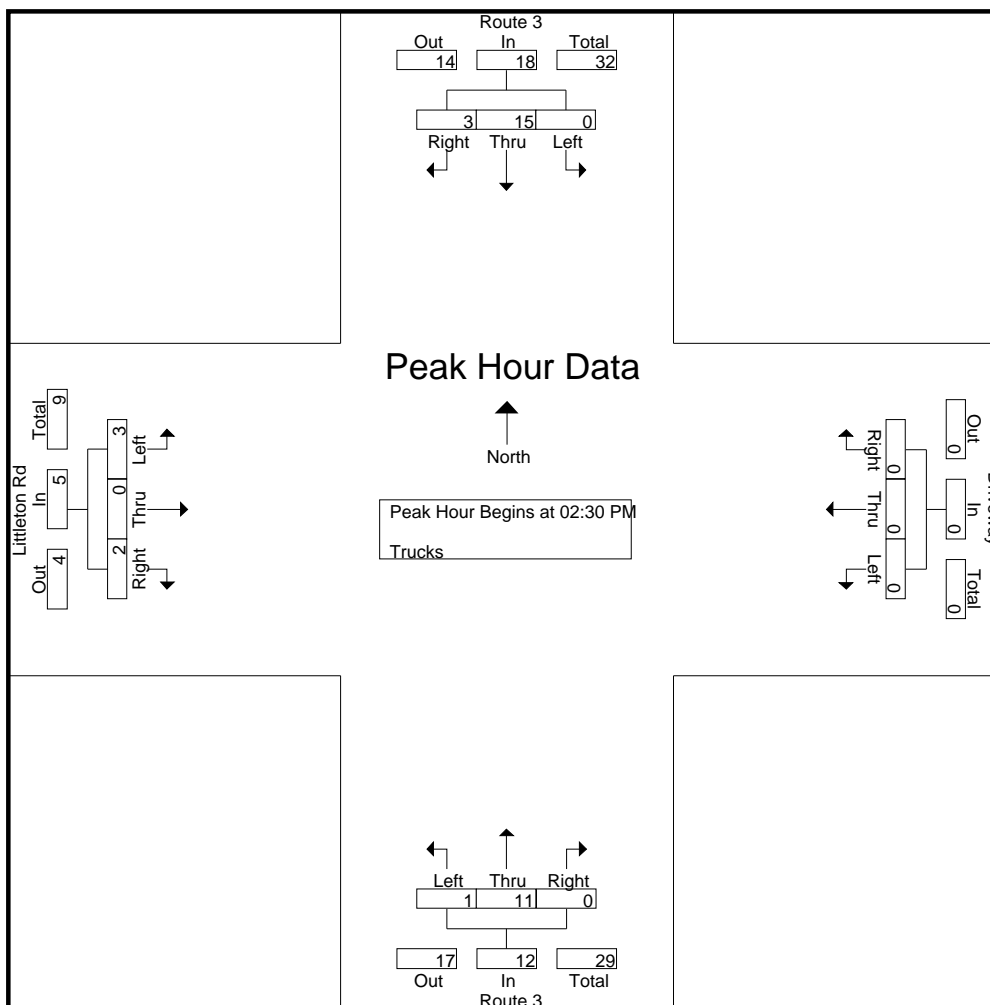
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	0	5	1	6	0	0	0	0	0	3	0	3	1	0	1	2	11
02:45 PM	0	4	1	5	0	0	0	0	0	3	0	3	1	0	0	1	9
03:00 PM	0	3	1	4	0	0	0	0	1	4	0	5	1	0	0	1	10
03:15 PM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	1	1	5
Total Volume	0	15	3	18	0	0	0	0	1	11	0	12	3	0	2	5	35
% App. Total	0	83.3	16.7		0	0	0		8.3	91.7	0		60	0	40		
PHF	.000	.750	.750	.750	.000	.000	.000	.000	.250	.688	.000	.600	.750	.000	.500	.625	.795

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 35



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

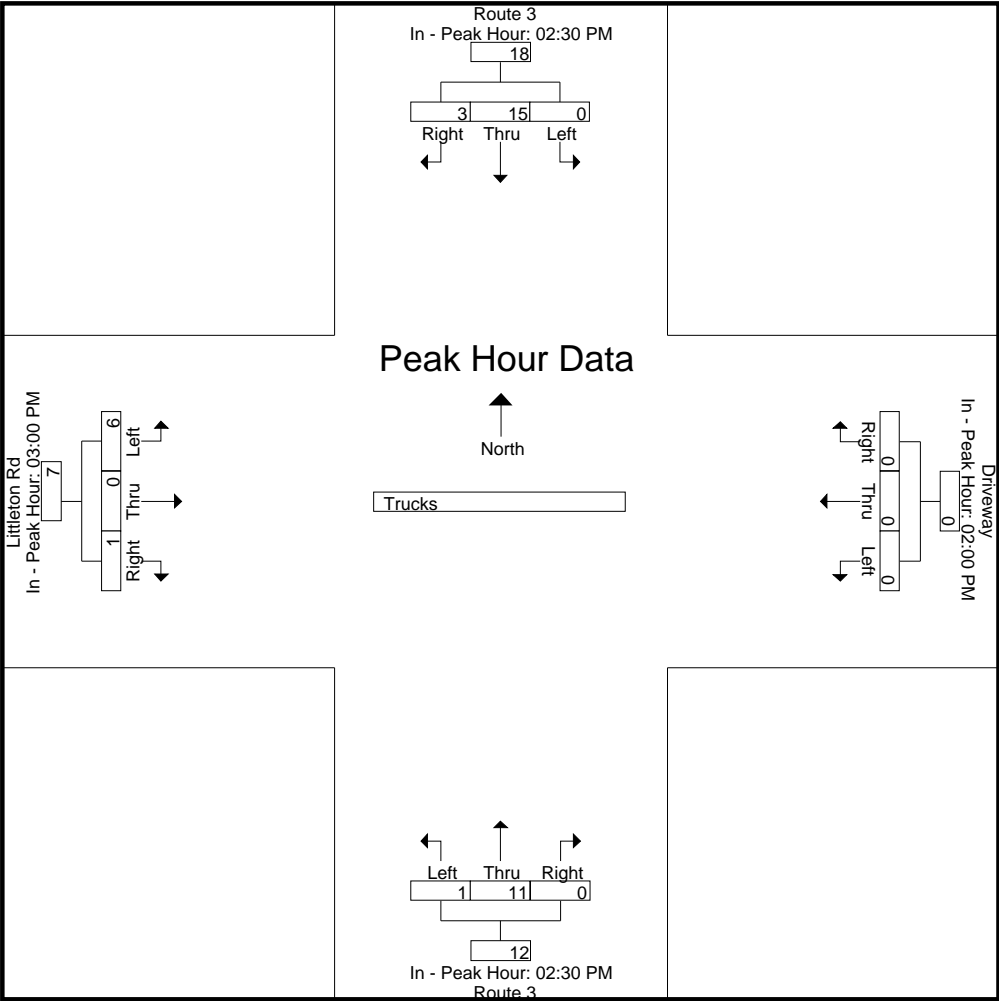
	02:30 PM				02:00 PM				02:30 PM				03:00 PM			
+0 mins.	0	5	1	6	0	0	0	0	0	3	0	3	1	0	0	1
+15 mins.	0	4	1	5	0	0	0	0	0	3	0	3	0	0	1	1
+30 mins.	0	3	1	4	0	0	0	0	1	4	0	5	3	0	0	3
+45 mins.	0	3	0	3	0	0	0	0	0	1	0	1	2	0	0	2
Total Volume	0	15	3	18	0	0	0	0	1	11	0	12	6	0	1	7
% App. Total	0	83.3	16.7		0	0	0		8.3	91.7	0		85.7	0	14.3	
PHF	.000	.750	.750	.750	.000	.000	.000	.000	.250	.688	.000	.600	.500	.000	.250	.583

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320913
Site Code : 18320001
Start Date : 9/13/2019
Page No : 36



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 37

Groups Printed- Bikes Peds

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
06:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	3
07:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	4
Total	0	0	0	0	0	0	0	2	0	0	0	4	0	0	0	0	6	0	6
08:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
08:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4	0	4
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	3
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	3
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
10:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	5

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 38

Groups Printed- Bikes Peds

Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	0	7
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	0	2
12:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	3	0	3
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
01:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
01:45 PM	0	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	3	1	4
Total	0	0	1	0	0	0	0	7	0	0	0	2	0	0	0	0	9	1	10
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2
02:45 PM	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	4	0	4
Total	0	0	0	1	0	0	0	5	0	0	0	2	0	0	0	0	8	0	8
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
04:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

File Name : 18320913

Site Code : 18320001

Start Date : 9/13/2019

Page No : 39

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

Groups Printed- Bikes Peds

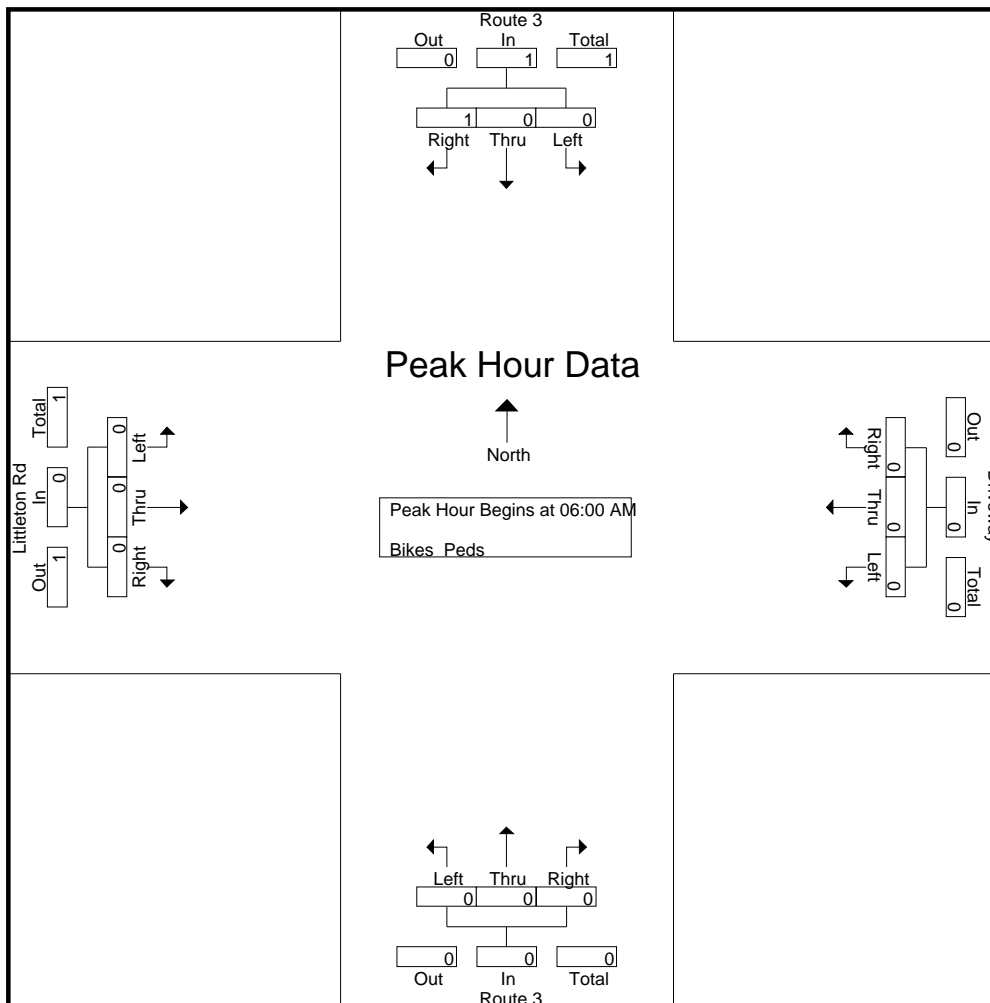
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
04:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	0	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
05:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
Total	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	4	0	4
Grand Total	0	0	2	3	0	0	0	30	0	0	0	19	0	0	0	4	56	2	58
Apprch %	0	0	100		0	0	0		0	0	0		0	0	0				
Total %	0	0	100		0	0	0		0	0	0		0	0	0		96.6	3.4	

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 41



Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

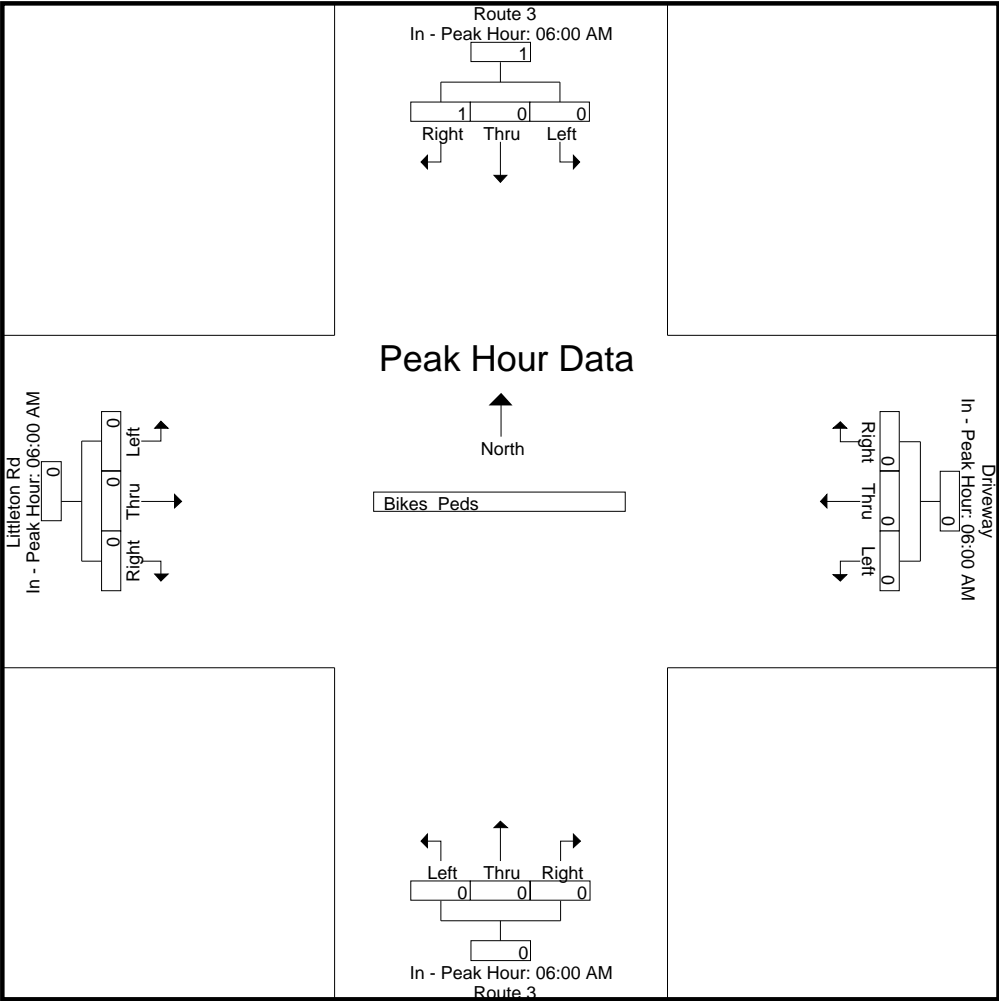
	06:00 AM				06:00 AM				06:00 AM				06:00 AM			
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320913
Site Code : 18320001
Start Date : 9/13/2019
Page No : 42

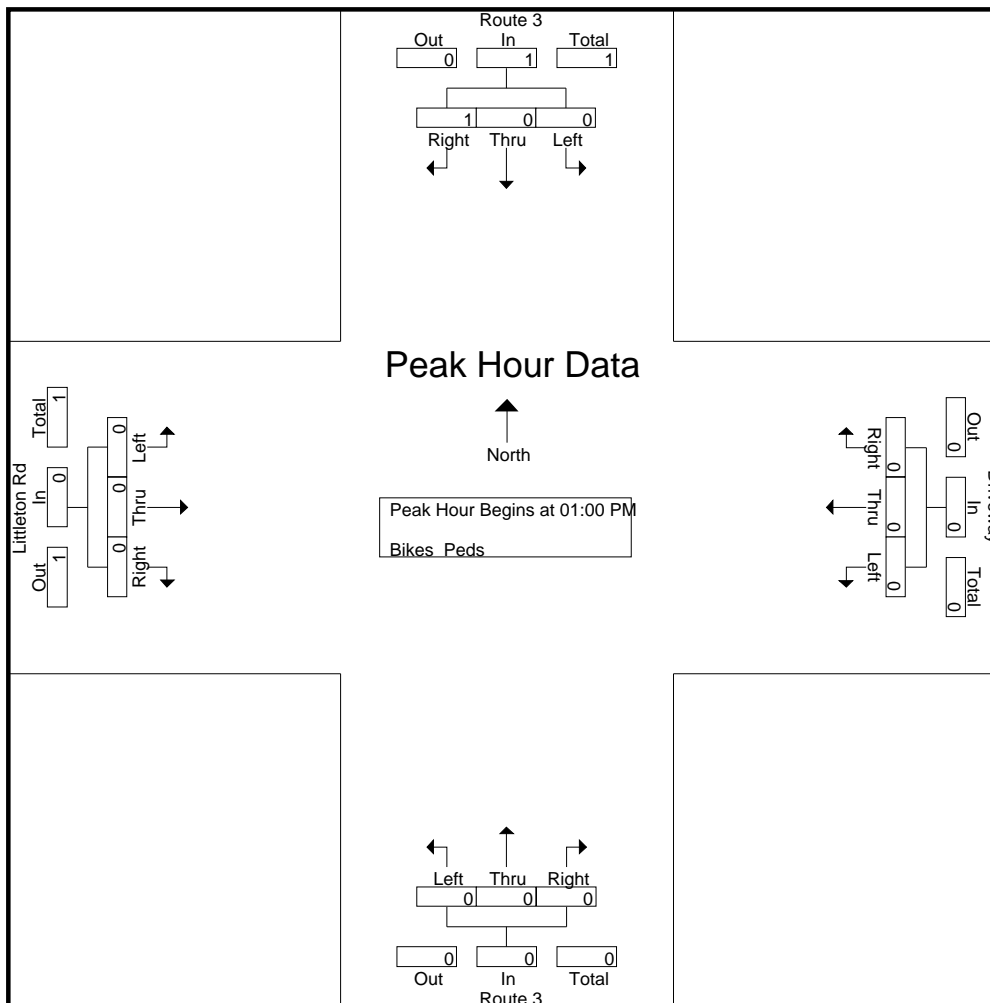


Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 44



Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

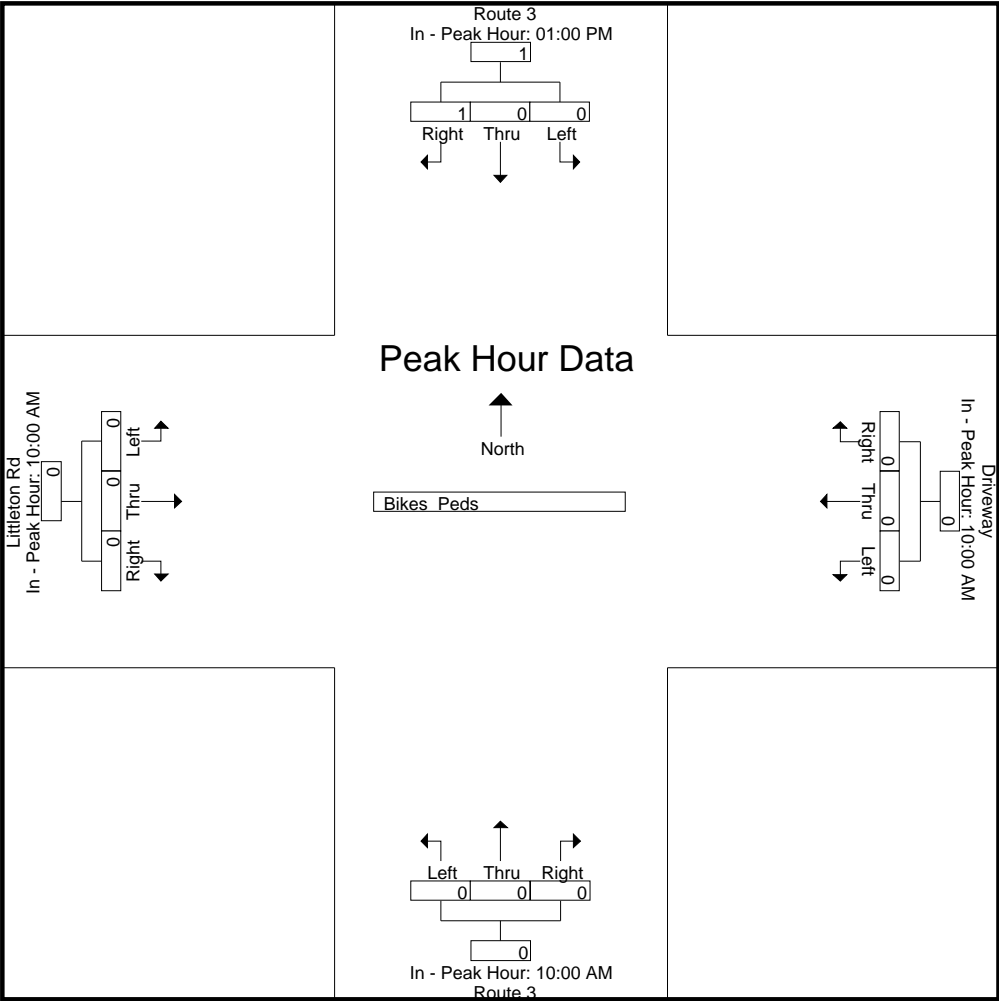
	01:00 PM				10:00 AM				10:00 AM				10:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320913
Site Code : 18320001
Start Date : 9/13/2019
Page No : 45



Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 46

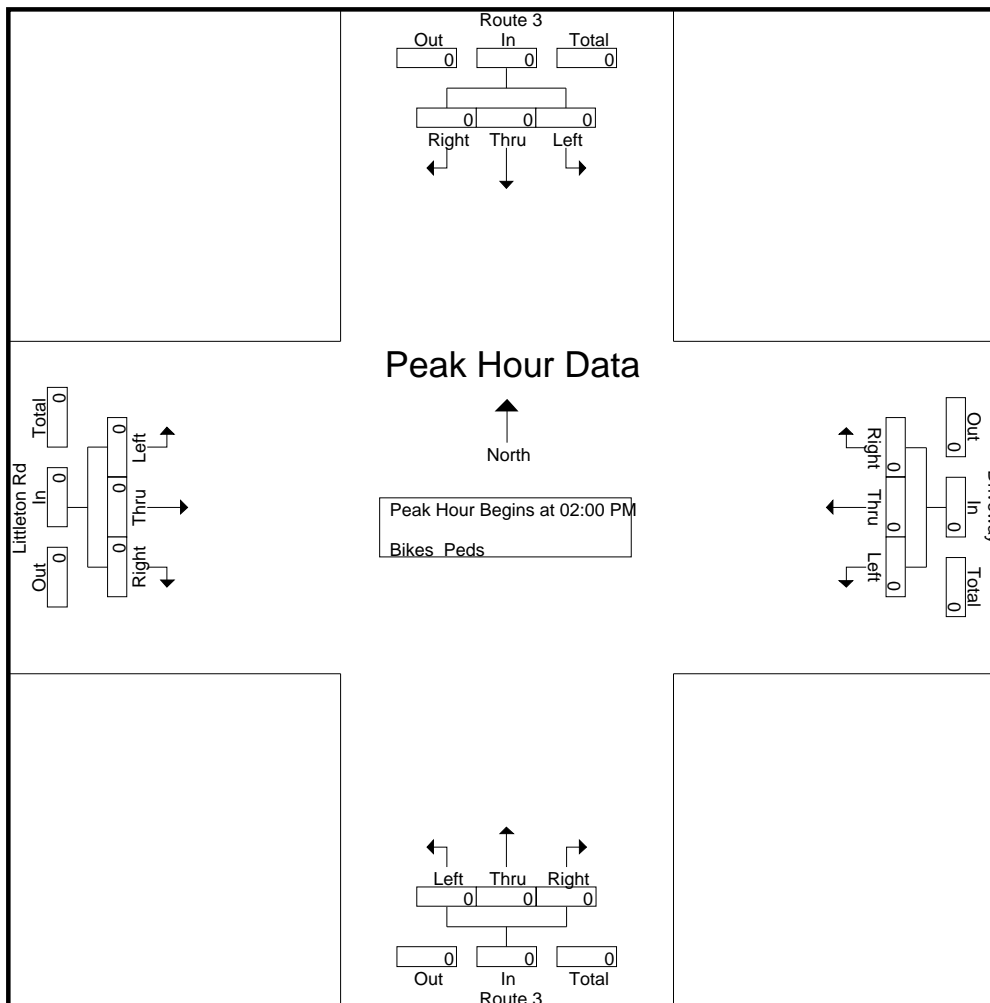
Start Time	Route 3 From North				Driveway From East				Route 3 From South				Littleton Rd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Route 3
 E/W Street : Littleton Road
 City/State : Whitefield, NH
 Weather : Clear

File Name : 18320913
 Site Code : 18320001
 Start Date : 9/13/2019
 Page No : 47



Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

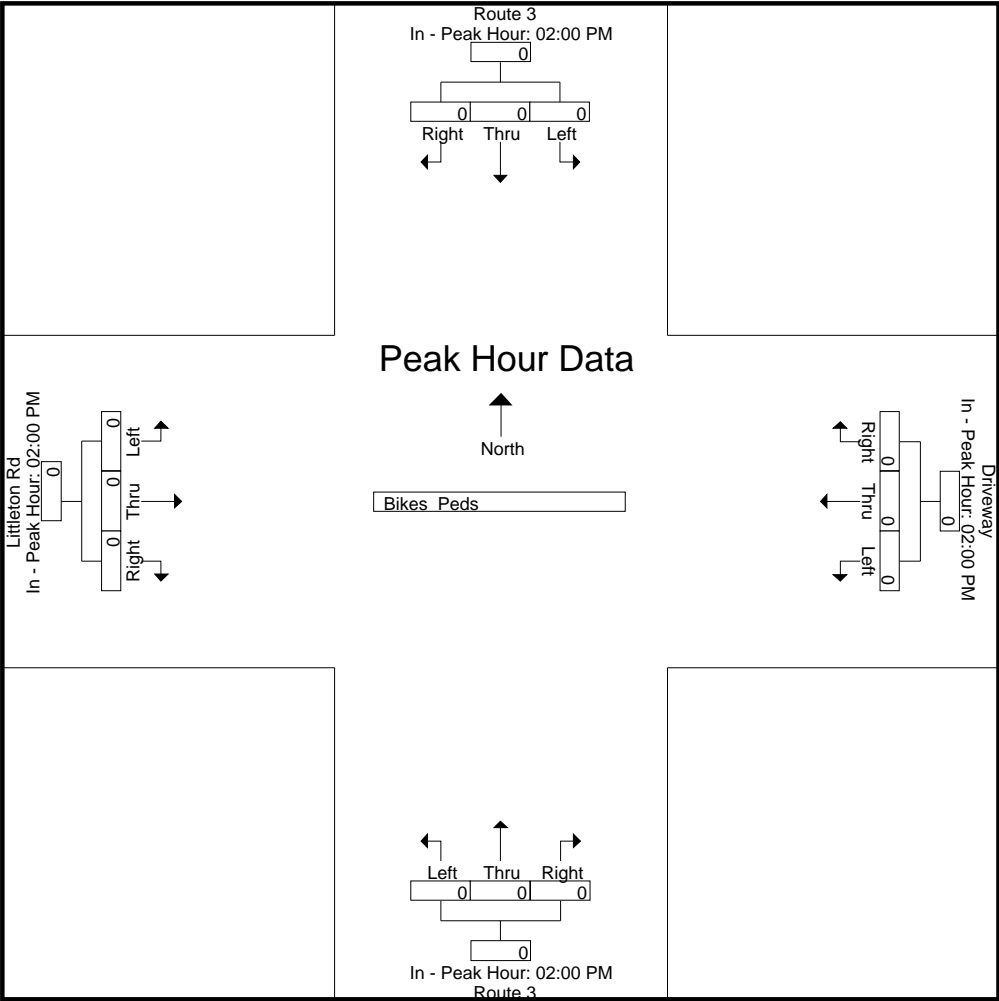
	02:00 PM				02:00 PM				02:00 PM				02:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

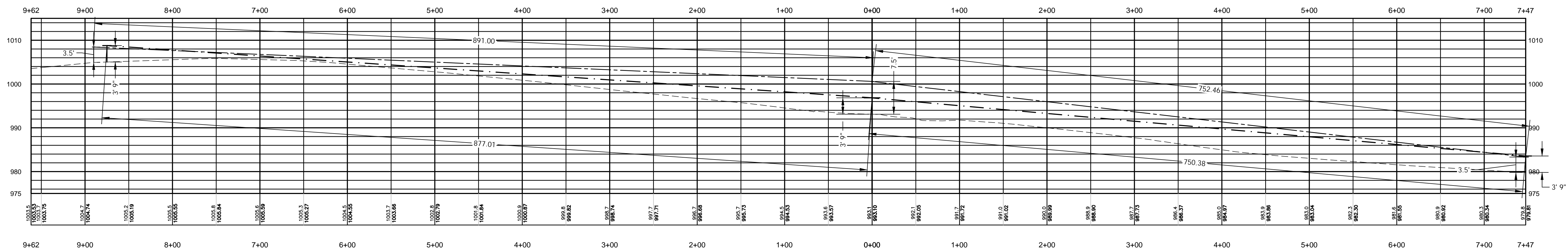
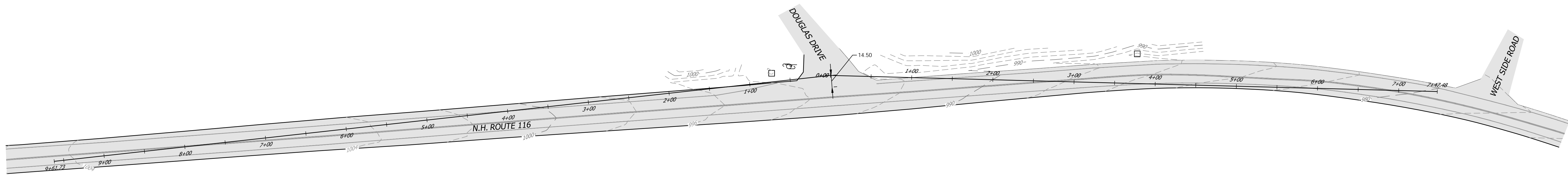
N/S Street : Route 3
E/W Street : Littleton Road
City/State : Whitefield, NH
Weather : Clear

File Name : 18320913
Site Code : 18320001
Start Date : 9/13/2019
Page No : 48



Right-Turn Lane Concept Design

Sight Distance Field Survey



WESTBOUND
STA: 0+00 to STA: 9+62

EASTBOUND
STA: 0+00 to STA: 7+47

SIGHT DISTANCES

WEST BOUND

NHDOT STANDARD DISTANCE: 877.01'
AASHTO STANDARD DISTANCE: 891.00'

EAST BOUND

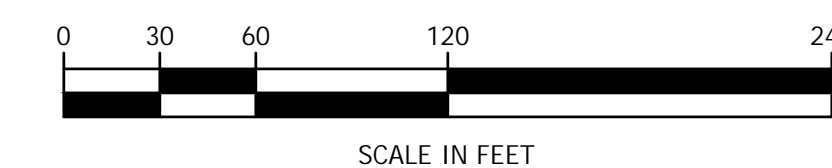
NHDOT STANDARD DISTANCE: 750.38'
AASHTO STANDARD DISTANCE: 752.46'

GENERAL NOTES

- THE PURPOSE OF THIS PLAN IS TO REPRESENT THE SIGHT DISTANCE FROM THE ENTRANCE OF DOUGLAS DRIVE AT A HEIGHT OF 7.5 FT TO A HEIGHT OF 3.5 FT AS PER AASHTO STANDARD OF MEASUREMENT AND AT A HEIGHT OF 3' 9" TO THE SAME HEIGHT AS PER NHDOT STANDARD OF MEASUREMENT.
- THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED IN FEBRUARY OF 2020 WITH TOPCON HIPER V DUAL FREQUENCY SURVEY GRADE GNSS RECEIVERS.
- THE HORIZONTAL DATUM IS ON THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83 (2011). THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE ORTHOMETRIC HEIGHT WAS COMPUTED USING GEOID 12B. THE CONTOUR INTERVAL IS 2FT. THE DATUMS WERE DERIVED FROM STATIC GPS OBSERVATIONS TAKEN AT THE TIME OF THE FIELD SURVEY AND PROCESSED USING THE ONLINE POSITIONING USER SYSTEM (OPUS).

LEGEND

- SIGN
- CATCH BASIN
- CONTOUR - MAJOR INTERVAL
- CONTOUR - MINOR INTERVAL
- NHDOT SIGHT DISTANCE
- AASHTO SIGHT DISTANCE
- EXISTING GROUND
- ROAD STRIPING
- PAVEMENT



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NORTH COUNTRY ENVIRONMENTAL SERVICES

DRIVEWAY PERMITTING

DALTON, NEW HAMPSHIRE

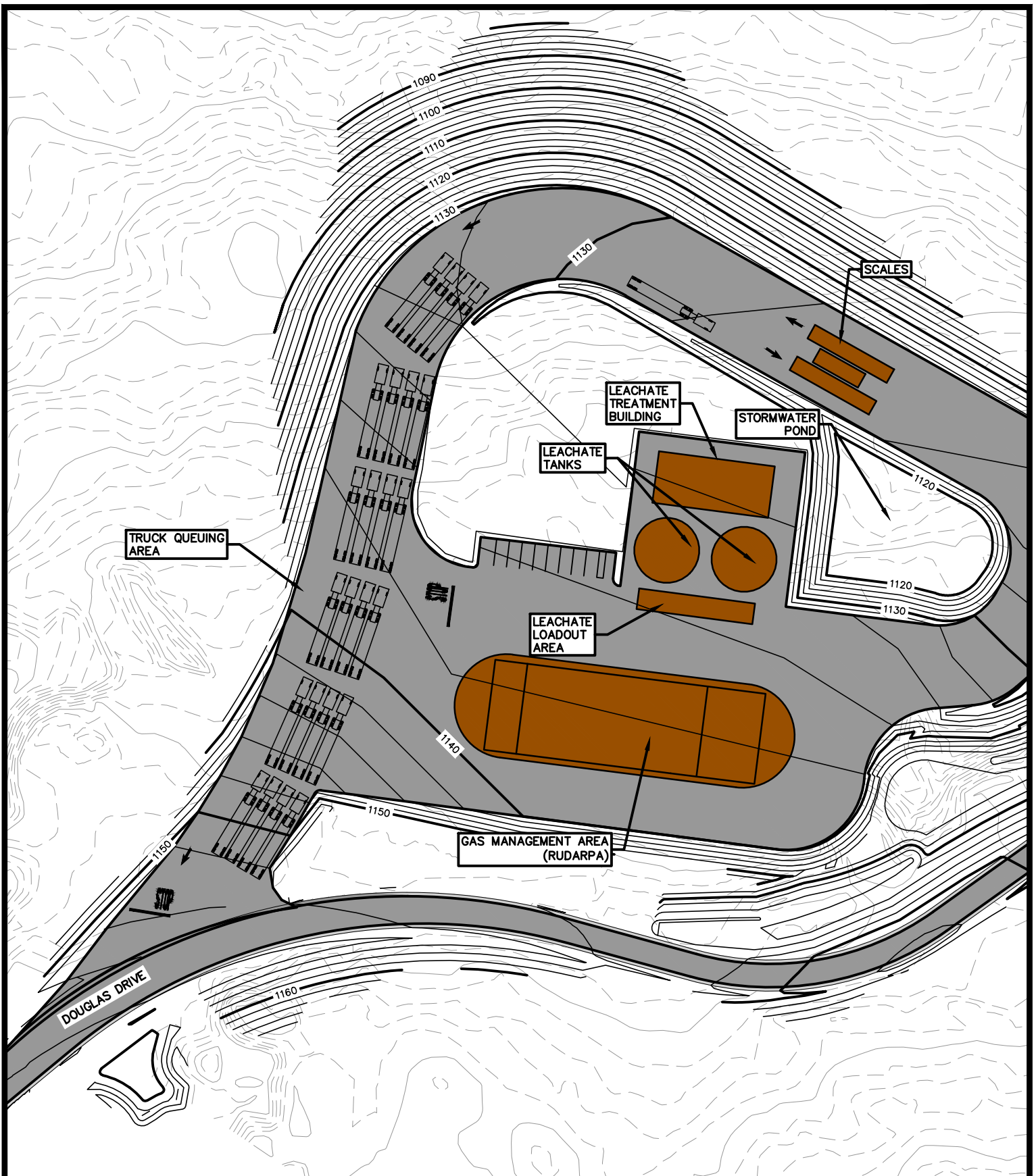
SIGHT DISTANCE EXHIBIT

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE:	PROJECT #:
FEB. 2020	19045
SURV'D BY:	DRAWN BY:
NWS	NWS
CHECK'D BY:	ARCHIVE #:
AJN	H-5604

SHEET 1 OF 1

On-Site Truck Storage Queue Plan



CMA
ENGINEERS

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603/431-6196 • 603/627-0708 • 207/541-4223
cmaengineers.com

Granite State Landfill
New England Waste Systems
Dalton, NH
Infrastructure Site Plan

Truck Queuing

Figure 1

Existing Site NHDOT Driveway Permit



GEORGE N. CAMPBELL, JR.
COMMISSIONER

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

District 1 Office, 641 Main Street, Lancaster, NH 03584 (603) 788-4641



JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

DRIVEWAY PERMIT

To: Douglas Ingerson
Dalton Valley Drag Strip
104 Douglas Drive
Bethlehem, NH 03574

City/Town: Bethlehem
Route/Road: NH 116 (S0000116)
Patrol Section: 111
Tax Map: 406
Lot: 1, 2,3
Development: Sand, Gravel, Asphalt & Dragstrip

Permit #: 01-047-4683P
District: 01
Permit Date 11/13/2009

Permission is hereby granted to construct (alter) a driveway, entrance, exit or approach adjoining NH 116 (S0000116), pursuant to the location and specifications as described below. Failure to adhere to the standards and engineering drawings previously approved shall render this instrument null and void. Failure to start or complete construction of said facility within one calendar year of the date of this permit shall require application for permit extension or renewal in accordance with the Driveway Access Rules. Facilities constructed in violation of the permit specifications or the rules, shall be corrected immediately upon notification by a Department representative. Any cost by the State to correct deficiencies shall be fully borne by the landowner. The landowner shall defend, indemnify and hold harmless the Department and its duly appointed agents and employees against any action for personal injury and/or property damage sustained by reason of the exercise of this permit.

Drive 1 St Prj: S-2062, 1951 Station: 173+50+Lt.
Location: Approximately 0.16 miles south of West Forest Lake Road on the west side of NH 116 (S0000116).
GPS: 44.327555 N 71.693859 W.

Specifications: This permit authorizes a paved access to be used as a Drag Strip drive. Any change in use, increase in use or reconstruction of the driveway requires reapplication.

The right-of-way line is located 50 feet from and parallel to the centerline of the highway. The driveway shall not exceed Per Plan in width. The entrance of the drive may be flared; typically the flare radius is one half the driveway width.

Other Conditions:

No structures, including buildings, permanent or portable signs, lights, displays, fences, walls, etc. shall be permitted on, over or under the Highway Right of Way.

No parking, catering or servicing shall be conducted within the Highway Right of Way.

The applicant shall comply with all applicable ordinances and regulations of the municipality or other State Agencies.

The Department has relied on the title and subdivision information provided by the landowner. The Department has not performed additional title research and makes no warranty or representation concerning landowner's legal right to access. In the event of a dispute about the landowner's legal right to the access provided herein, the landowner will defend and indemnify the Department.

It will be necessary for the property owner to extend STOP BAR to the center of the drive and pitch the entrance to the roadside ditch north of the site. All other drainage shall be directed to the southerly catch basin.

A construction bond in the amount of \$50,000.00 shall be required during construction and may be reduced to a \$5,000.00 two year maintenance bond after acceptance of the driveway by NHDOT.

Any future development will require re-application.

The existing drainage shall be maintained.

This permit requires the area adjacent to the highway be graded such that the drive surface will slope

from the edge of pavement according to the plan entitled "JW Chipping Corporation/DBA Chicks Sand & Gravel, Driveway Change of Use to Include Dalton Valley Dragstrip" by Associated Consulting Engineers dated 10/06/2009.

The applicant shall be responsible to mitigate any drainage problems attributed to the alteration of the existing drainage and to obtain easements thereto from downstream landowners.

The Project Engineer is to oversee construction.

This permit supercedes to permit #2940-P dated April 27, 1995.

Copies: District, Town, Patrolman

Richard A. Morneau, P.E.
2541 North Littleton Road
Littleton, NH 03561

Approved



Assistant District Engineer
For Director of Administration

ASSOCIATED CONSULTING CIVIL ENGINEERS, PLLC
Littleton New Hampshire 03561
Tel & Fax (603) 444-1435

September 8, 2010

Leon H. Geil, PE
Assistant District Engineer
District One
941 Main Street
Lancaster NH 03584

RE Drive Permit # 01-047-4683P
Douglas Ingerson – Dalton Valley Drag Strip
Construction report regarding construction of widening

The drive modification is complete in accordance with the plans submitted with the drive application. Mr. Ingerson and I met Scott Stevenson of the NHDOT Construction Bureau. We reviewed the work we had completed. Mr. Stevenson said the work we had done was satisfactory in regard to matching the work planned on the resurfacing project.

The paving for the widening was done by Blaktop Paving. They took the initiative to insure the work was done in a very professional manner. The traveled way and shoulders were kept very clean and free of all loose hot top. This not only made it better for the traveling public but produced a very flush and tight joint that was well compacted. The crew members did a lot of hand work to make sure there was sufficient hot top mix at the joint for the roller to "pinch" the joint. Their attention to these types of details produced a quality job. Some crew members were: Tim Cramer Supervisor, Marty Cameron Foreman, Kevin Brown, Dave Rienhart, Barry Duval, Greg Dube and Todd Leeman. It was a pleasure to work with them. Chick's Sand & Gravel constructed the gravel shoulders to back up the pavement widening and associated slope work. It is my opinion the work is completed in regards to the conditions of driveway permit.

Please see the attached daily reports and photos.

Sincerely



Richard Morneau, PE

Cc Chick's Sand & Gravel
Blaktop Paving

ASSOCIATED CONSULTING ENGINEERS

2541 North Littleton Road

Littleton New Hampshire 03561

Tel & Fax (603) 444-1435

JOB -		SHEET	OF
CALCULATED BY	DATE	/	/
CHECKED BY	DATE	/	/
SCALE	=		

Daily Report For THUR: 9/14/10

Weather A.M. CLEAR P.M. CLEAR
 Temp. A.M. 60° P.M. 50° Normal Sub-Normal Reason for sub-normal productivity _____

Contract Completion Date _____
 Number Working Days _____
 Number Working Days Used _____
 Number Days Remaining _____
 Percent of Work Performed _____

Work Day	<input checked="" type="checkbox"/>	Non-Work Day	<input type="checkbox"/>	Accum. Non-Work Days	_____
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	SUPT	TRKPP	FORE	SKILLED	INTER	COMMON	TOTAL	SHOVELS	CRANES	BACKHOES	LOADERS	SCRAPERS	BUILDERS	GRADERS	ROLLERS	GRAPALLS	TRUCKS
<u>CHIK'S S&G</u>	<u>1</u>					<u>2</u>	<u>3</u>			<u>1</u>							<u>1</u>

(IN THIS SPACE BELOW THE ENGINEER SHOULD REPORT ANY ITEMS WHICH WILL BE OF INTEREST TO THE OFFICE OR OF VALUE AS RECORDS)

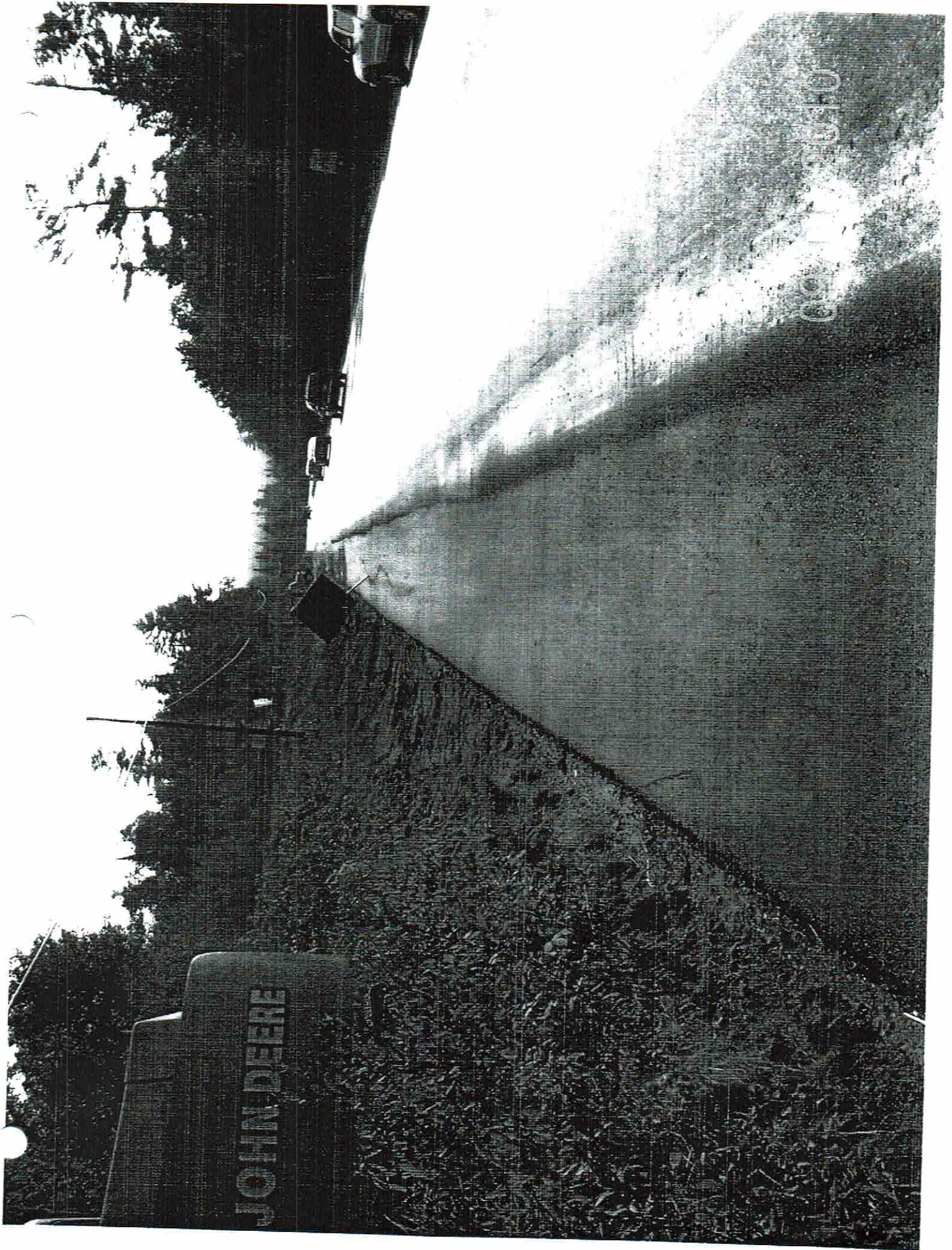
ITEM	LOCATION
<u>ONE FOOT GRAVEL SHOULDER & SLOPE</u>	
<u>- CONSTRUCTED GRAVEL SHOULDER TO BACK OF PAVEMENT WIDENING</u>	
<u>- CONSTRUCTED DITCH ON WEST SIDE OF ROAD</u>	
<u>" SLOPE " " "</u>	
<u>" " " EAST " " "</u>	

Samples Sent for Testing _____
 Materials Received on Project GRAVEL
 Visitors SCOTT STEVENSON 9/10

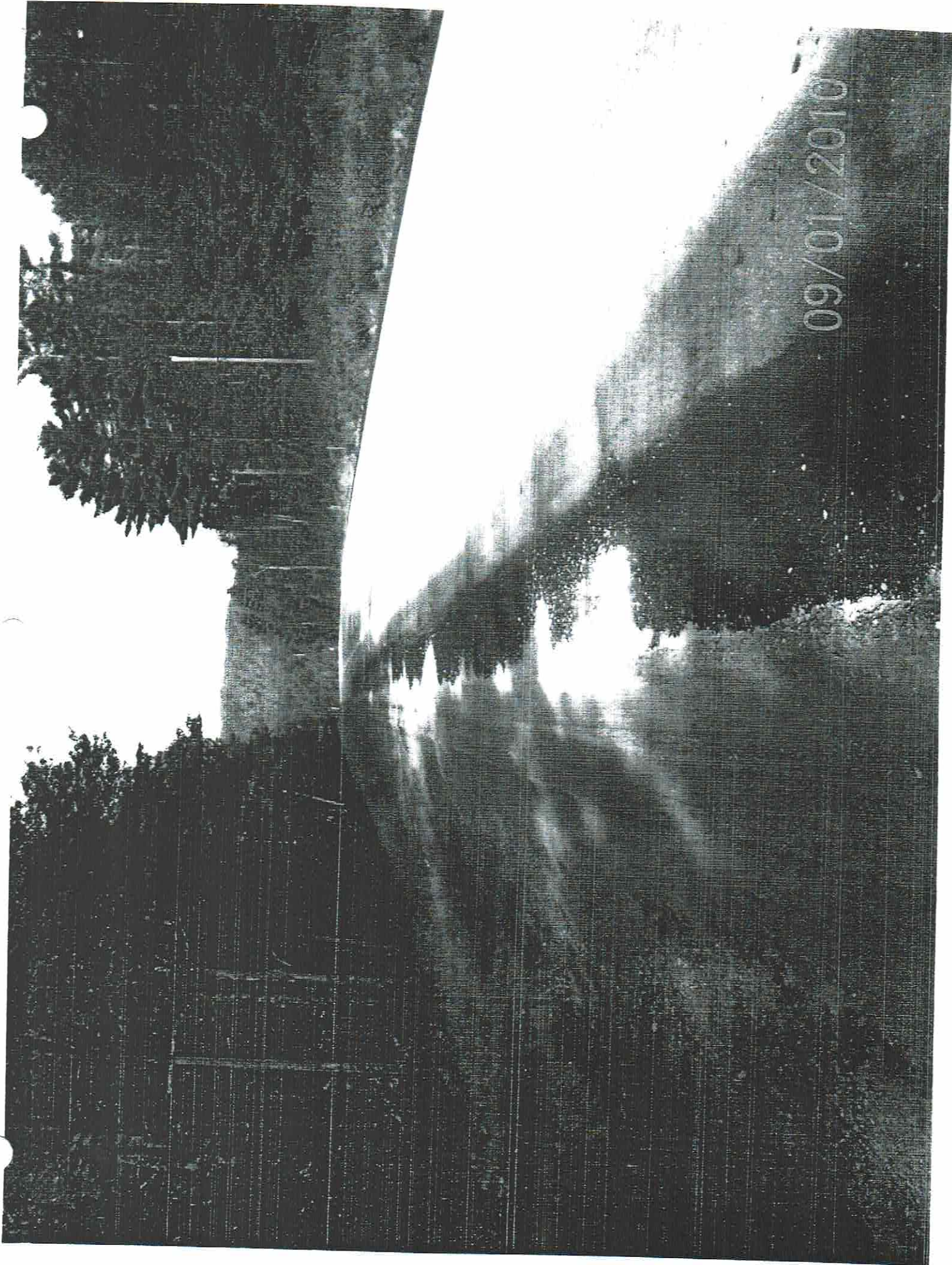
Signed [Signature]
 Address _____

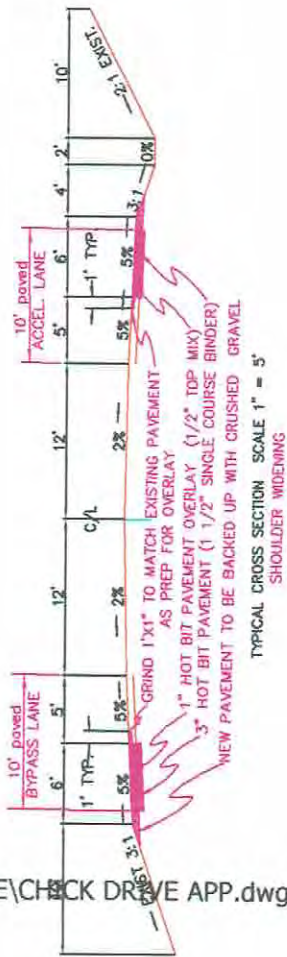
Project Tel. _____

Additional Remarks on the Back Side

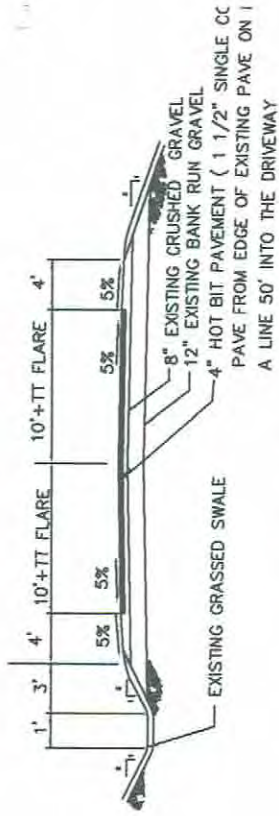


09/01/2010

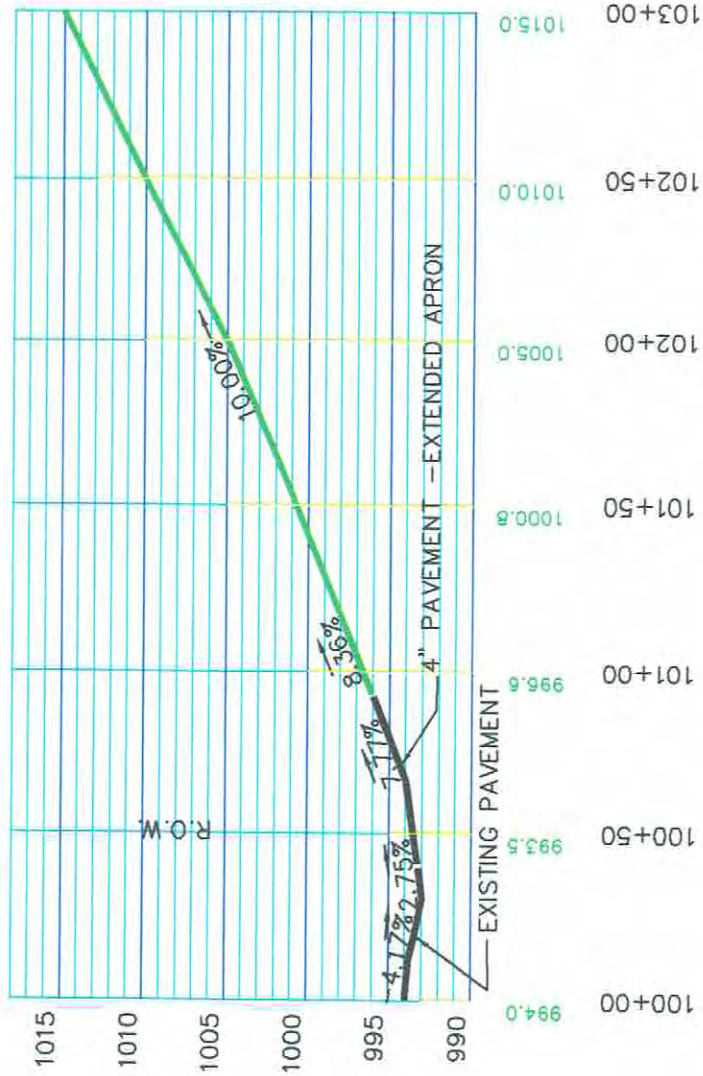




TYPICAL CROSS SECTION SCALE 1" = 5'
SHOULDER WIDENING



TYPICAL CROSS SECTION SCALE 1" = 5'
DRIVEWAY ENTRANCE



EXISTING DRIVEWAY ENTRANCE TO CHICKS SAND & GRAVEL
 PROPOSED CHANGE OF USE TO INCLUDE TRAFFIC TO RACE TRACK
 NO CHANGE PROPOSED TO THE EXISTING DRIVE ENTRANCE

DRIVEWAY APPLICATION PLAN
 CHANGE OF USE TO INCLUDE DRAC RACE STRIP



Associated Consulting Civil Engine
 2647 North Middleton Road
 Exton, New Hampshire 03841
 (603) 444-7438

J. W. CHIPPING CORP
 D. B. A. CHICKS SAND &
 DRIVEWAY CHANGE OF USE
 TO INCLUDE TRAFFIC TO RACE TRACK
 DATE 05/17/2012 Sheets of 2 Scale 1/8"

NH 116 and US 3 Truck Turning Analysis



*ROUTE 3NB WB-67 TURNING LEFT ONTO ROUTE 116WB
BEGIN TURN FROM MIDDLE OF THRU LANE*



WB-67
ASSTD 2011 (US)

WB-67
ASSTD 2011 (US)

ROUTE 3NB WB-67 TURNING LEFT ONTO ROUTE 116WB
BEGIN TURN FROM MIDDLE OF THRU LANE



*ROUTE 116EB WB-67 TURNING RT ONTO ROUTE 3SB
BEGIN TURN FROM MIDDLE OF RIGHT LANE*



WB-67
ASPHO 2011 (US)

WB-67
ASPHO 2011 (US)

ROUTE 116EB WB-67 TURNING RT ONTO ROUTE 3SB
BEGIN TURN FROM MIDDLE OF RIGHT LANE



WB-67
AASHTO 2011 (US)

WB-67
AASHTO 2011 (US)

ROUTE 116EB WB-67 TURNING RT ONTO ROUTE 3SB
BEGIN TURN FROM MIDDLE OF RIGHT AND LEFT LANES



ROUTE 116EB WB-67 TURNING RT ONTO ROUTE 3SB
BEGIN TURN FROM MIDDLE OF RIGHT AND LEFT LANES