



## Traffic Impact Study

Gasland Cortlandt

U.S. Route 6 (East Main Street, Town of Cortlandt  
Westchester County, New York)

April 2, 2019

Revised June 14, 2019

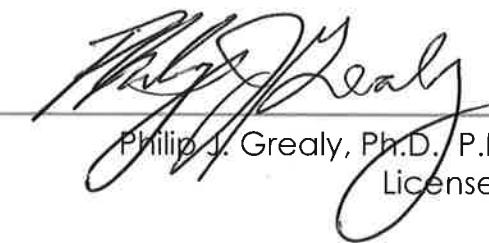
Revised October 23, 2019

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MC Project No. 19003182A



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<b>TABLE OF CONTENTS</b>	<b>PAGE NO.</b>
<b>I. INTRODUCTION.....</b>	<b>2</b>
A. PROJECT DESCRIPTION AND LOCATION .....	2
B. SCOPE OF STUDY .....	2
<b>II. EXISTING ROADWAY AND TRAFFIC DESCRIPTIONS.....</b>	<b>4</b>
A. DESCRIPTION OF EXISTING ROADWAYS .....	4
B. YEAR 2019 EXISTING TRAFFIC VOLUMES.....	5
C. ACCIDENT DATA.....	6
<b>III. EVALUATION OF FUTURE TRAFFIC CONDITIONS.....</b>	<b>7</b>
A. YEAR 2021 NO-BUILD TRAFFIC VOLUMES.....	7
B. SITE GENERATED TRAFFIC VOLUMES .....	7
C. ARRIVAL/DEPARTURE DISTRIBUTION.....	8
D. 2021 BUILD CONDITIONS TRAFFIC VOLUMES .....	8
E. DESCRIPTION OF ANALYSIS PROCEDURES.....	8
F. RESULTS OF ANALYSIS .....	9
G. SUMMARY OF RECOMMENDED/PROPOSED IMPROVEMENTS .....	12
<b>IV. SUMMARY AND CONCLUSION .....</b>	<b>15</b>

## **APPENDICES**

APPENDIX A.....	FIGURES
APPENDIX B.....	TABLES
APPENDIX C.....	LEVEL OF SERVICE STANDARDS
APPENDIX D .....	CAPACITY ANALYSIS
APPENDIX E.....	ACCIDENT DATA
APPENDIX F .....	ITE PASS BY TRIP DATA
APPENDIX G.....	NYSDOT CORRESPONDENCE

## I. INTRODUCTION

This report has been updated based on input received from the public hearing held on October 10, 2019, from the Town of Cortlandt Planning Board and their consultants, as well as input from the New York State Department of Transportation (NYSDOT). The proposed access configuration and level of access related and other traffic improvements have been updated and includes the elimination of the previously proposed access connection to Parkway Drive. The various improvements, which will be implemented by the Applicant as part of the site redevelopment, have been expanded and are incorporated into this report (see Section III-G). The report also includes updates in response to the technical review comments received from the Town's consultant AKRF, as well as from NYSDOT.

### A. **PROJECT DESCRIPTION AND LOCATION**

(*Figure No. 1*)

This report has been prepared to evaluate the potential traffic impacts associated with the proposed Gasland – Convenience/Gas Facility, which is a planned redevelopment of the property (2051 and 2053 East Main Street) located on the south side of U.S. Route 6, immediately east of Parkway Drive in the Town of Cortlandt, New York. The site is proposed to consist of an approximately 2,600 square foot convenience store and contain 6 pump islands with 12 fueling positions. As shown on Figure No. 1, access to the development is proposed via a reconstructed driveway connection opposite the Bear Mountain Parkway eastbound on/off ramp intersection, which is expected to include replacement of the existing signal system and other improvements. An existing secondary right turn entry driveway located further to the west on U.S. Route 6 is also proposed to be maintained. Also, the existing access driveway connection to Parkway Drive will be eliminated.

A Design Year of 2021 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

### B. **SCOPE OF STUDY**

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the proposed Gasland Cortlandt facility.

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Maser Consulting, P.A. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT). Together these data were utilized to establish the Year 2019 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2019 Existing Traffic Volumes were then projected to the 2021 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the Town of Cortlandt and in surrounding communities were estimated and then added to the Projected Traffic Volumes to obtain the Year 2021 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed development would generate during each of the peak hours (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the Year 2021 No-Build Traffic Volumes resulting in the Year 2021 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.

## II. EXISTING ROADWAY AND TRAFFIC DESCRIPTIONS

### A. DESCRIPTION OF EXISTING ROADWAYS

As shown on Figure No. 1, the proposed Gasland Cortland facility will be accessed from U.S. Route 6 via a reconstructed driveway connection to be located opposite the Bear Mountain Parkway Eastbound on/off ramp intersection and another driveway along Parkway Drive. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "D" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

#### 1. U.S. Route 6 (East Main Street)

U.S. Route 6 is major regional arterial, which travels in a generally east/west direction throughout Westchester County. In the immediate vicinity of the site, the roadway consists of five lanes, including a separate left turn lane. It narrows to a four-lane roadway passing under the Bear Mountain Parkway and widens back to a 5-lane section further to the east. It has several signalized intersections, including the following:

- Intersection with Bear Mountain Parkway EB On/Off Ramps (Signal W-492)
- Intersection with Jacobs Hill Road and Parkway Drive (Signal W-585)
- Intersection with Locust Avenue further to the east (Signal W-140)

In the immediate vicinity of the site, the roadway has a posted speed limit of 40 MPH. In association with the recently constructed Cortlandt Crossing development as part of NYSDOT Work Permit requirements, an Adaptive Traffic Signal System has been installed for the several intersections east of the site. Also, as part of this work, an emergency vehicle preemption system was installed, which allows emergency vehicles priority to preempt traffic movements to allow emergency vehicles to travel more efficiently along Route 6 when responding to emergencies.

2. **Parkway Drive/Jacobs Hill Road**

Parkway Drive is an existing Town roadway, which originates at a signalized intersection with U.S Route 6. It generally traverses in a southerly direction providing access to several residential homes. There is also an existing secondary access driveway to the southern portion of the proposed site. Also, aligning with U.S. Route 6 opposite Parkway Drive/Jacobs Hill Road, which serves commercial and residential development. Limited sidewalks and crosswalks are provided at the intersection of these roadways with U.S. Route 6.

3. **Bear Mountain Parkway**

The Bear Mountain Parkway Extension in the vicinity of the site generally operates as a two-lane divided roadway east of the site and operates as a three-lane section west of the site. There is a lane drop in the vicinity of the interchange with U.S. Route 6 in the eastbound direction and there is a separate right turn lane for the westbound off ramp connection to U.S. Route 6. The roadway is separated by a box beam guiderail throughout this section of roadway. The posted speed limit is 45 MPH on the Bear Mountain Parkway Extension. Note that under existing conditions, traffic exiting the eastbound off ramp currently experiences long delays during peak hours with vehicles occasionally queued beyond the ramp storage.

**B. YEAR 2019 EXISTING TRAFFIC VOLUMES**

(*Figures No. 2, 3, and 4*)

Manual traffic counts were collected by representatives of Maser Consulting, P.A. on Thursday, March 7, 2019 for the AM and PM Peak Hours and on Saturday, March 9, 2019 to determine the existing traffic volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the U.S. Route 6 Corridor. Based on this information, the Year 2019 Existing Traffic Volumes were established for the Weekday Peak AM, Weekday Peak PM, and Saturday Peak Hours at the following study area intersections.

- U.S. Route 6 and Jacobs Hill Road/Parkway Drive
- U.S. Route 6 and Bear Mountain Parkway EB On/Off Ramps and Site Access
- U.S. Route 6 and Bear Mountain Parkway WB On/Off Ramps and Sinclair Gas Access

Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- |                        |                    |
|------------------------|--------------------|
| ▪ Weekday Peak AM Hour | 7:45 AM – 8:45 AM  |
| ▪ Weekday Peak PM Hour | 4:45 PM – 5:45 PM  |
| ▪ Saturday Peak Hour   | 12:00 PM – 1:00 PM |

The resulting Year 2019 Existing Traffic Volumes are shown on Figures No. 2, 3, and 4 for the Weekday Peak AM Hour, Weekday Peak PM Hour, and Saturday Peak Hours, respectively.

### **C. ACCIDENT DATA**

(*Appendix E*)

Accident Data for the area roadways were obtained from the NYSDOT for the latest three-year period (2016, 2017 and 2018). Copies of the information are contained and summarized in Appendix “E”. Based upon review of the information, the types of accidents primarily consist of rear end, left turn and right-angle accidents. Also, on October 19, 2018 there was a fatality at the intersection of U.S. Route 6 at Bear Mountain Parkway westbound on/off ramp intersection, which occurred at dusk and involved a motorcycle and passenger car. Table A provides a summary of the accident details including contributing factors. Table A-2 summarizes the accident rates and comparison to state-wide averages. Note that both of the Bear Mountain Parkway intersections exceed the state-wide accident rates. Improvements have been identified in Section III-G of this report to help alleviate these conditions. Note that research has indicated that the implementation of Adaptive Traffic Signal Control (ATSC), which is one of the improvements being implemented by the Applicant, has been found to produce a crash modification factor (CMF) for total intersection crashes and tend to improve the overall safety and efficiency of traffic flow.

### III. EVALUATION OF FUTURE TRAFFIC CONDITIONS

#### A. YEAR 2021 NO-BUILD TRAFFIC VOLUMES

(Figure No. 5 through 13)

The Year 2019 Existing Traffic Volumes were increased by a growth factor of 2% per year to account for general background growth resulting in the Year 2021 Projected Traffic Volumes which are shown on Figures No. 5, 6, and 7 for each of the Peak Hours. In addition, traffic from other specific significant approved or potential developments in the area were identified through discussion with the Town of Cortlandt, Town of Yorktown, and City of Peekskill. The other specific developments considered include reoccupancy of the former Shop Rite Store, Cortlandt Crossing (unoccupied space), Hanover Estates, The Sentinel Assisted Living, Pondview Commons, and the Medical Oriented District on Route 202 in the Town of Cortlandt, Lowe's, CVS, Mohegan Audi Expansion, Envirogreen Associates Commercial, Route 6 (Mohegan Avenue), and the Roma Redevelopment and Weyant developments in the Town of Yorktown, and Fort Hill Residences (balance), Trinity Associates (52 dwelling units), and One Park Place (150 dwelling units) in the City of Peekskill. The resulting traffic volumes associated with these other developments are shown on Figures No. 8, 9, and 10 for each of the peak hours. These volumes were added to the 2021 Projected Traffic Volumes resulting in the Year 2021 No-Build Traffic Volumes which are shown on Figures No. 11, 12, and 13 for the Weekday Peak AM, Weekday Peak PM Hours, and Saturday Peak Hours, respectively.

#### B. SITE GENERATED TRAFFIC VOLUMES

(Table No. 1)

Estimates of the amount of traffic to be generated by the proposed development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled "Trip Generation", 10<sup>th</sup> Edition, 2017, based on Land Use Category – 853 Convenience Store with Gasoline Pumps for the Peak AM and PM Hours and Land Use Category – 945 Gas/Service Station with Convenience for the Peak Saturday Hour. Based on the information associated with this facility and information provided by Gasland, as well as their surveys of other Gasland facilities, the trip generation based on Land Uses 853 and 945 per fueling position is appropriate for the current proposal. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM, Peak PM, and Saturday Peak Hours. It should be noted that based on the ITE data, a significant portion

(over 50%) of the peak hour trips at this type of facility are attracted as “pass-by” or diverted link trips from the adjoining roadway network.

#### **C. ARRIVAL/DEPARTURE DISTRIBUTION**

*(Figures No. 14 and 15)*

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network, the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 14 and 15, respectively.

#### **D. 2021 BUILD CONDITIONS TRAFFIC VOLUMES**

*(Figures No. 16 through 21)*

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes for each of the study area intersections are shown on Figures No. 16, 17, and 18 for each of the peak hours, respectively. The site generated traffic volumes were then added to the Year 2021 No-Build Traffic Volumes to obtain the Year 2021 Build Traffic Volumes. The resulting Year 2021 Build Traffic Volumes are shown on Figures No. 19, 20, and 21 for the Weekday Peak AM, Weekday Peak PM, and Saturday Peak Hours, respectively.

#### **E. DESCRIPTION OF ANALYSIS PROCEDURES**

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

- Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the *Highway Capacity Manual, 6<sup>th</sup> Edition*, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service “A” represents the best condition and a Level of Service “F” represents the worst condition. A Level of Service “C” is generally

used as a design standard while a Level of Service “D” is acceptable during peak periods. A Level of Service “E” represents an operation near capacity. In order to identify an intersection’s Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

- **Unsignalized Intersection Capacity Analysis**

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the *Highway Capacity Manual, 6<sup>th</sup> Edition*. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix “C” of this report.

## **F. RESULTS OF ANALYSIS**

(Tables No. 2 and 2R)

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors were performed at the study area intersections utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements.

Table No. 2S summarizes the results of the capacity analysis for the 2019 Existing, 2021 No-Build and 2021 Build Conditions using the Synchro Percentile Methodology Results, as requested by the Town’s Traffic Consultant. This table also shows a breakdown of the percentage change of delay from No-Build to Build conditions. Table 3 summarizes the queuing by lane group for each of the conditions. Appendix “D” contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. U.S. Route 6 and Jacobs Hill Road/Parkway Drive (Signal W-585)

U.S. Route 6 intersects with Jacobs Hill Road and Parkway Drive at a full movement signalized intersection. The U.S. Route 6 approaches consist of two through lanes per direction plus a separate center left turn lane. The Parkway Drive approach consists of two lanes, including a channelized right turn movement, which is not under the signal control. The Jacobs Hill Road approach consists of approximately 24 feet of pavement, which is currently not striped. This should be restriped to define the travel lanes. Crosswalks are provided across the Jacobs Hill Road approach, as well as along the western leg of the U.S. Route 6 approach.

A capacity analysis was conducted for this intersection utilizing the 2019 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service “D” or better during the Peak Hours.

The capacity analysis was recomputed using the 2021 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to experience similar Levels of Service during Peak Hours under future conditions. As summarized in the last columns of Table No. 2S, the projected average vehicle delay increases from the No-Build conditions at this intersection and are expected to be less than 2 seconds with the completion of signal timing adjustments as coordinated with those changes at the Bear Mountain Parkway intersection. Note that Adaptive Traffic Control improvements will also be completed at this location as per NYSDOT specifications. (See Section III-G for summary of improvements.)

2. U.S. Route 6 and Bear Mountain Parkway EB On/Off Ramps & Site Access (Signal W-492)

U.S. Route 6 intersects with the Bear Mountain Parkway eastbound on/off ramps at a signalized intersection opposite the site. The site currently has two driveway connections in this vicinity. The easterly most intersection is under the signal control. As part of the redevelopment of the site, this driveway will be reconstructed as discussed below. Under existing conditions, the Bear Mountain Parkway Extension off ramp operates at poor Levels of Service during Peak Hours and often queues onto the mainline of the Bear Mountain Parkway Extension. Widening and restriping improvements are proposed by the Applicant to improve these conditions.

As part of redevelopment of the site, the existing traffic signal system will be replaced to include updated actuation, additional pedestrian accommodations, and other new signal poles and equipment. In addition, a modem and equipment for the Adaptive Traffic Control improvements will also be incorporated into the improvement plans. A

back-queue-detector will be included on the off-ramp approach to help address the existing queuing conditions. Note that U.S. Route 6, which is currently four travel lanes will be widened to provide a westbound left turn lane to turn into the site at this intersection.

Capacity analyses were conducted for this intersection utilizing the 2019 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service “D” during the AM, PM, and Saturday Peak Hours. It should be noted that the southbound approach operates at a Level of Service “E” during the PM and Saturday Peak Hours. Also, it was observed that currently during the PM and Saturday Peak Hour, vehicles queue on the off-ramp and this queue sometimes extends to the mainline of the Bear Mountain Parkway during peak periods.

The capacity analysis was recomputed using the 2021 No-Build and Build Traffic volumes. These results indicate that improvements will be required. With the improvements outlined in Section III-G, the intersection is expected to experience overall Levels of Service “C” during the AM and PM Peak Hours, and an overall Level of Service “D” during the Saturday Peak Hours under future conditions. Based on the analysis, certain movements such as exiting the site driveway will still experience delays, however, with the completion of planned improvements by the Applicant, the overall intersection delays will be improved. (See Section III-G for summary of improvements.)

**3. U.S. Route 6 and Bear Mountain Parkway WB On/Off Ramps/Sinclair Gas Access**

The westbound Bear Mountain Parkway Extension off ramp approach consists of a two-lane approach for left and right turn movements. U.S. Route 6 consists of two through lanes per direction plus a separate left turn lane on the westbound approach. Traffic at this intersection currently controlled by a “Stop” sign. Note that the intersection benefits from gaps created by the signals at the eastbound off/off ramps, as well as the signal at the Locust Avenue intersection. Under existing conditions, left turns from the ramp experience peak hour delays and this intersection would have to be monitored in the future for potential signalization.

Capacity analysis was conducted for this intersection utilizing the 2019 Existing Traffic Volumes. The analysis results indicate that the off-ramp approach to this intersection is currently operating at a Level of Service “D” during the AM and “F” during the PM and Saturday Peak Hours, while the through movements along Route 6 generally operate at acceptable Levels of Service.

The capacity analysis was recomputed using the 2021 No-Build and Build Traffic volumes, which indicates that the ramp delays will continue to increase regardless of the proposed project. In order to alleviate this, the installation of a traffic signal would be required. With signalization the intersection would experience an overall Level of Service “B” during the AM, PM, and Saturday Peak Hours under future conditions. Therefore, the intersection should continue to be monitored for signalization. In the interim, the Applicant will be completing other improvements at this location, as outlined in the next section.

## **G. SUMMARY OF RECOMMENDED/PROPOSED IMPROVEMENTS**

Based upon the results of the field inspections, as well as the results of the analysis, input from the Town, NYSDOT and the public, the following is a summary of the improvements proposed for the access and other off-site intersections.

1. It should be noted that it is expected that a significant portion of the trips utilizing this site will be attracted from the existing road network as “pass-by” or “diverted link” trips and are not new trips to the network. Published ITE data indicates that over 50% of these trips will arrive from the current traffic stream and will not be new trips to the roadway system. Thus, the analysis presented herein is likely conservatively high.
2. At the intersection of U.S. Route 6 and the Bear Mountain Parkway EB On/Off Ramp/ Site Access, the following improvements will be completed (see Drawing CP-1R):
  - The existing site easterly driveway will be reconstructed to align directly with the Bear Mountain Parkway on/off ramp. The driveway should consist of one entering and two exiting lanes, including a separate right, and a through left lane. The westerly driveway will be adjusted for right turn entry only and appropriate signing installed to control this (see Drawing CIP-1R).
  - Associated with easterly the site driveway reconstruction opposite the Bear Mountain Parkway eastbound on/off ramp, the existing traffic signal will be replaced and upgraded to include replacement of the existing poles, installation of new and additional signal heads, and updated vehicle actuation for all lanes. Based on a review of the accident data, retro reflective signal backplates on all signal heads will be installed to improve visibility and lane designation signing will be included as part of the replacement signal system. Also, as part of the signal upgrades, additional pedestrian accommodations will be incorporated into the work. The existing pedestrian poles controlling the crossing of the ramp will be replaced and an additional crosswalk provided crossing U.S. Route 6 as per NYSDOT requirements.

- Appropriate modifications of the existing sidewalks to accommodate ADA ramps, as well as a sidewalk in the vicinity of the site connecting west to Parkway Drive will be installed.
  - The traffic signal upgrades for the U.S. Route 6 and Bear Mountain Parkway EB On/Off Ramp intersection will include a modem, as well as the infrastructure necessary to provide the Adaptive Traffic Signal Control (ATSC) at this intersection.
  - Under existing conditions, it was observed that during peak periods traffic exiting the Bear Mountain Parkway eastbound off ramp currently queues on the ramp and extends onto the right lane exit of the parkway. In addition to the adaptive and other signal improvements, a “back-of-queue-detector will be installed to allow the signal to be more responsive to the extensive queues, which currently occur at this location
  - U.S. Route 6 will be widened to provide a separate left turn lane for traffic entering the site arriving from the east.
  - The Bear Mountain Parkway EB Off Ramp approach to U.S. Route 6 will be widened and restriped to provide additional capacity to help reduce current vehicle queues.
  - U.S. Route 6 along the site frontage will be widened to provide additional width to allow the acceptance of a dual turning movement exiting from the Bear Mountain Parkway EB Off Ramp as well as for the provision of the westbound left turn lane noted above.
  - New pedestrian controls, including pushbuttons with countdown modules, will be provided to accommodate pedestrian movements.
3. The Adaptive Traffic Signal Control (ATSC) software and hardware, as per NYSDOT specifications, will be installed at the following intersections to improve the efficiency of traffic flow along the Route 6 corridor:
- U.S. Route 6 and Jacobs Hill Road/Parkway Drive
  - U.S. Route 6 and East Main Street/Bear Mountain Parkway EB On/Off Ramps/Site Access
  - U.S. Route 6 and Locust Street

4. The existing traffic signal at Parkway Drive will also be upgraded to include retroreflective traffic signal back plates to enhance the visibility of the signal heads and improve the safety for motorists at this location. Signal timings, including vehicle clearances, will be coordinated with NYSDOT as part of the final Highway Work Permit.
5. All new ADA compliant sidewalks and crosswalks will be installed along the western site frontage connecting to the existing sidewalk system at Parkway Drive.
6. At the intersection of Bear Mountain Parkway WB On/Off Ramp and U.S. Route 6, signalization is not currently warranted based on NYSDOT requirements. The Cortlandt Crossing project is continuing to monitor conditions at that intersection as part of their ongoing requirements. In the interim, the Applicant will make the following improvements to enhance the overall operation:
  - Installation of an “Intersection Ahead” warning sign on the eastbound approach in advance of the Bear Mountain Parkway Overpass.
  - Clearing of existing vegetation to improve sight lines and visibility for vehicles entering and exiting the ramps.
  - The existing street luminaire at the intersection will be reviewed with NYSDOT to determine if any additional upgrades will be required to better illuminate the intersection.
  - New high visibility epoxy pavement markings will be installed.
7. The improvements referenced above and shown conceptually on Drawing CIP-1R will be subject to a Highway Work Permit from NYSDOT.

## IV. SUMMARY AND CONCLUSION

Based on the above analysis, with the completion of the recommended improvements listed above, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. Thus, the Gasland Cortlandt facility traffic is not expected to cause any significant impact in overall traffic operations in the area.



Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

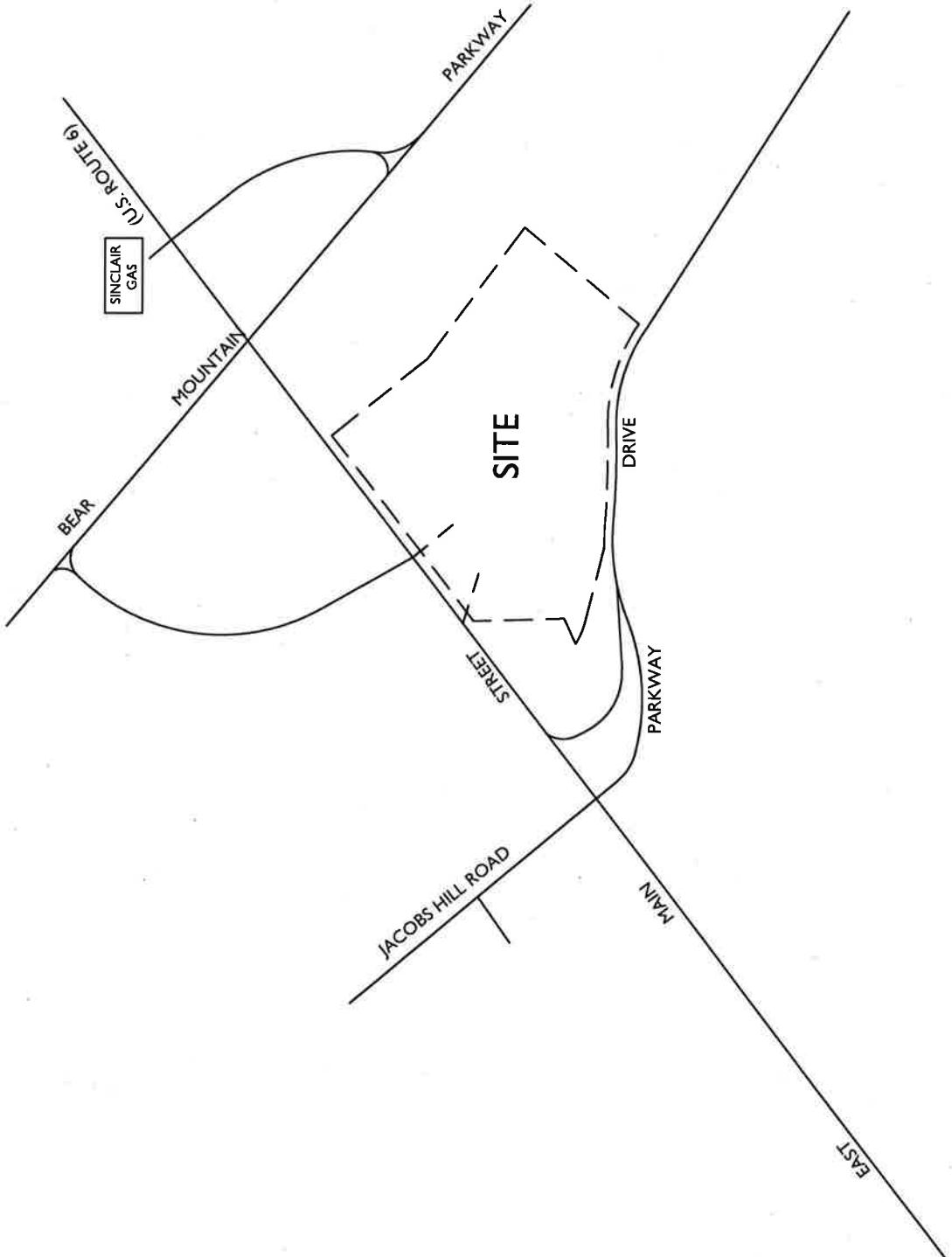
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***GASLAND CORTLANDT***

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**APPENDIX A**

**FIGURES**



NOTE: LINE DIAGRAM NOT TO SCALE



TRAFFIC IMPACT STUDY					
SCALE	DATE	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
AS SHOWN	3/21/19	B.H.			
PROJECT NUMBER: 1903182A DATE DRAWN: 3/21/19 FIGURE					
PROJECT TITLE: GASLAND CORTLANDT					
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<b>WESTCHESTER OFFICE</b> 403 Columbus Avenue Valhalla, NY 10595 State: 10595 Phone: 914-347-7300 Fax: 914-347-7266 					
<b>SITE LOCATION MAP</b> 					
<b>EAST MAIN STREET</b> <b>(U.S. ROUTE 6)</b> <b>CORTLANDT</b> <b>WESTCHESTER COUNTY</b> <b>NEW YORK</b>					



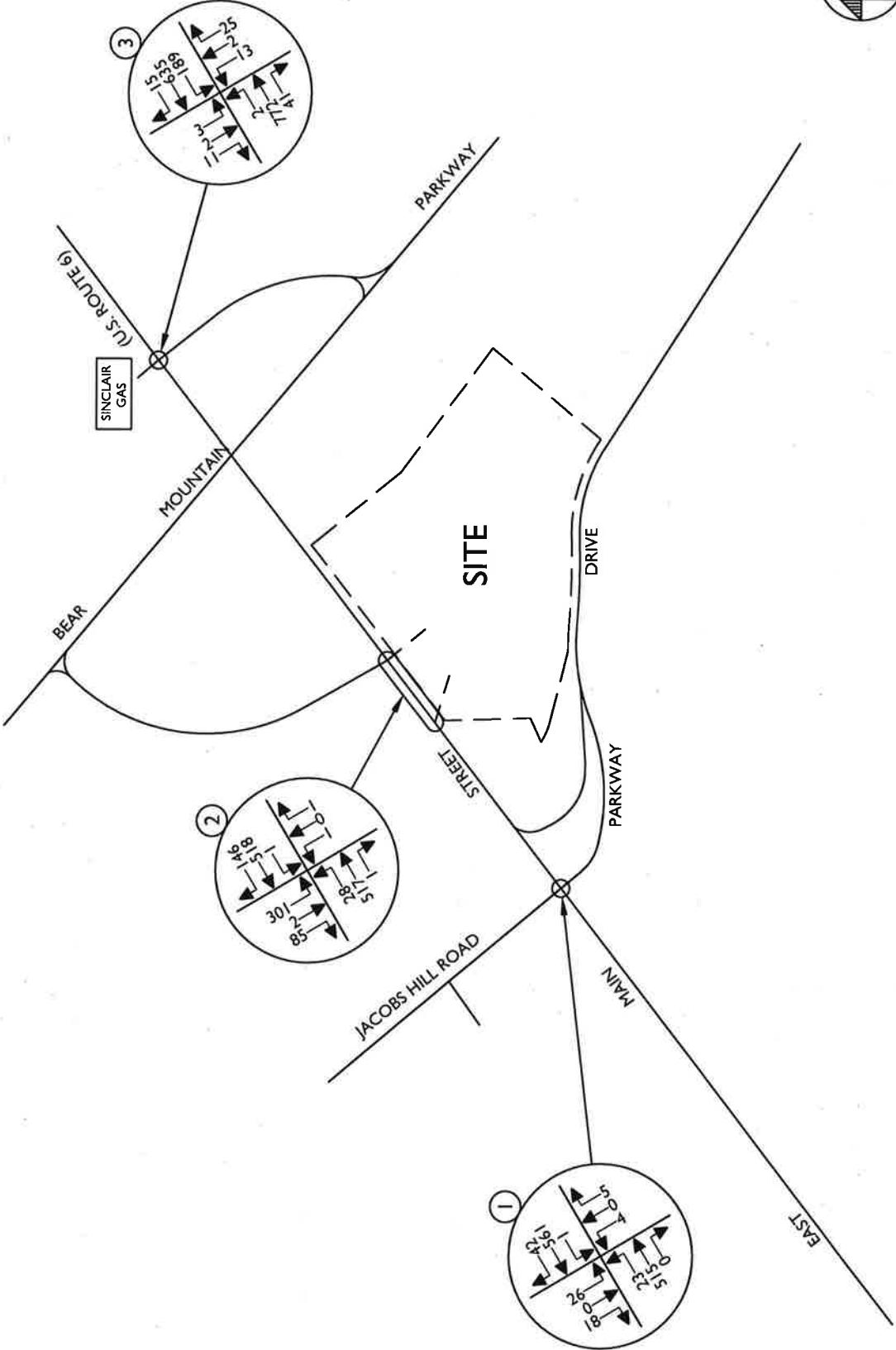
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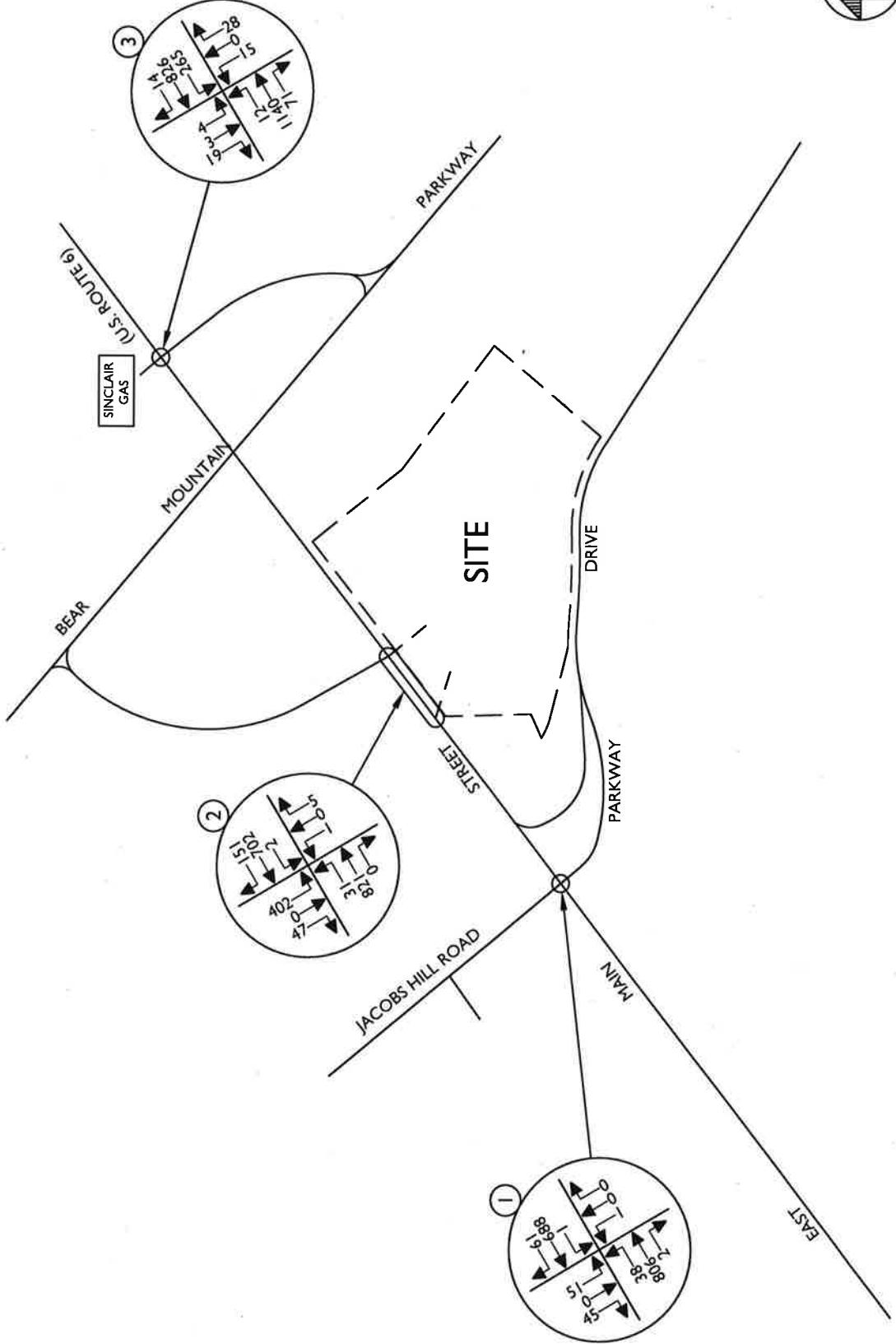
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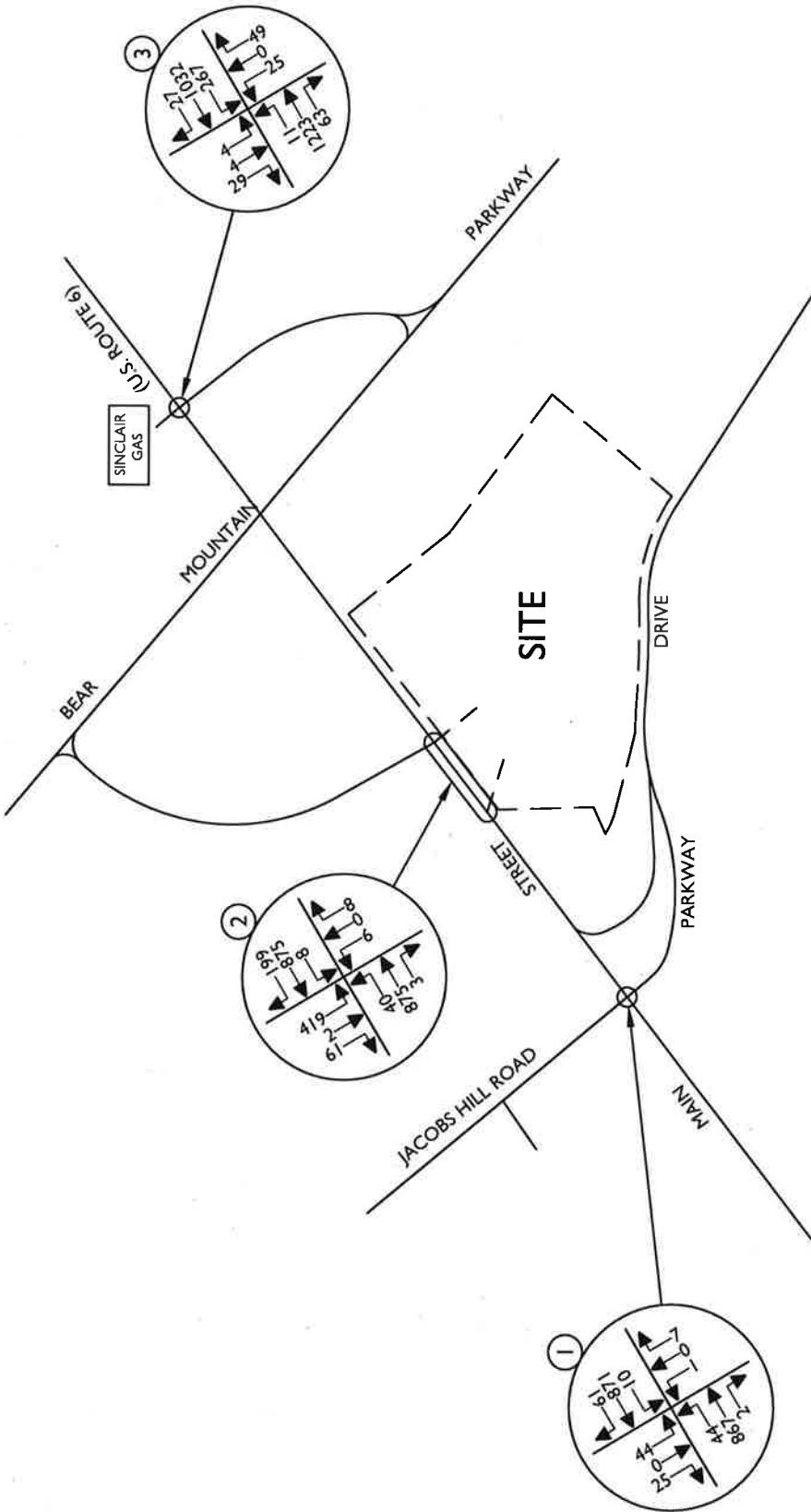
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NOTE: LINE DIAGRAM NOT TO SCALE

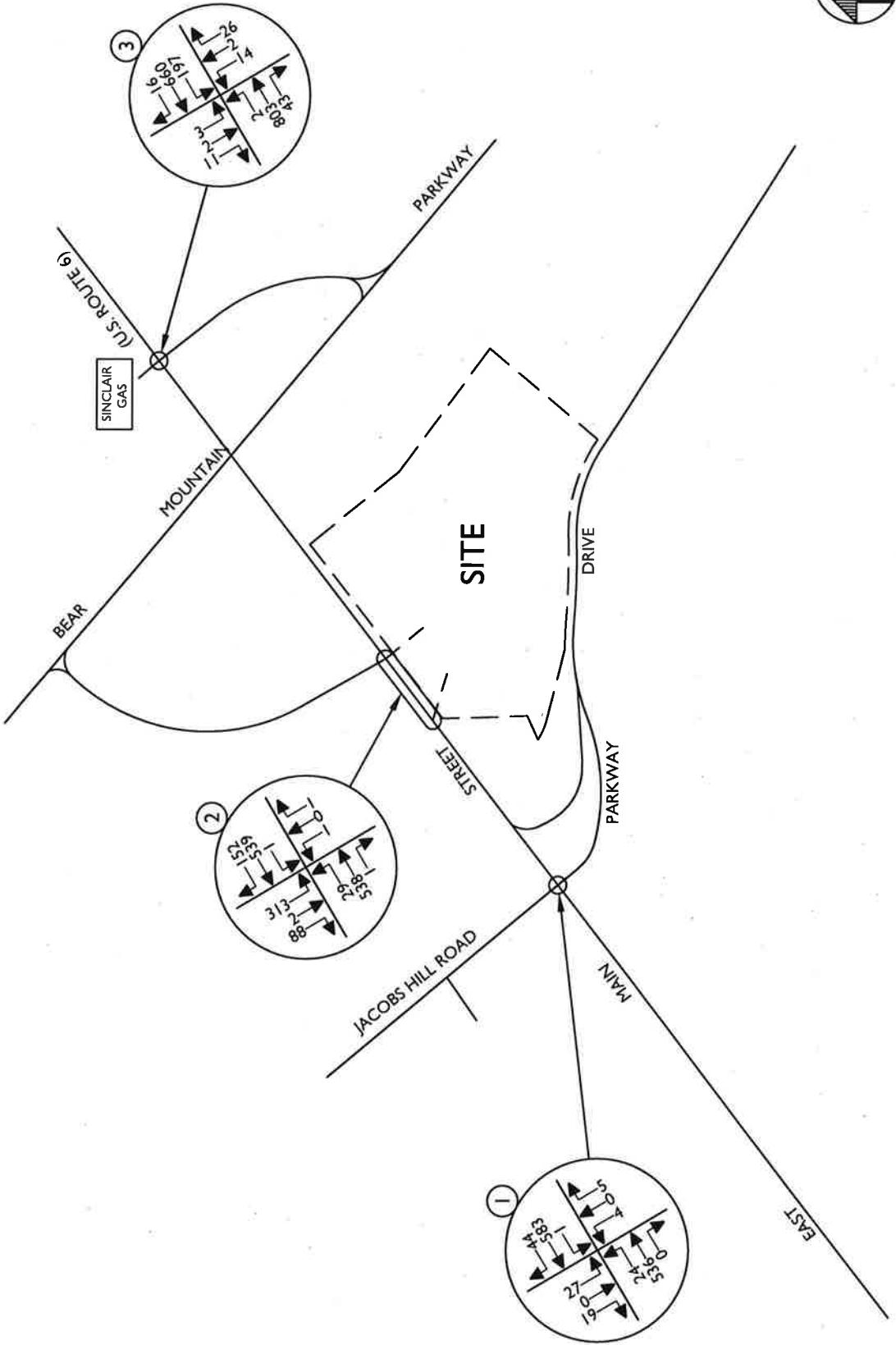
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				PROJECT NAME	DRIVER'S NAME
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SCALE	DATE	DRAWN BY	CHECKED BY	REVIEWED	PI.G.
AS SHOWN	3/1/19	R.H.			
PROJECT NUMBER: I-90031 BZA DRAWING NAME: 51023RH-FIGURE					
SHEET TITLE: 2019 EXISTING TRAFFIC VOLUMES WEEKEND PEAK SATURDAY HOUR					
SHEET NUMBER: 4					
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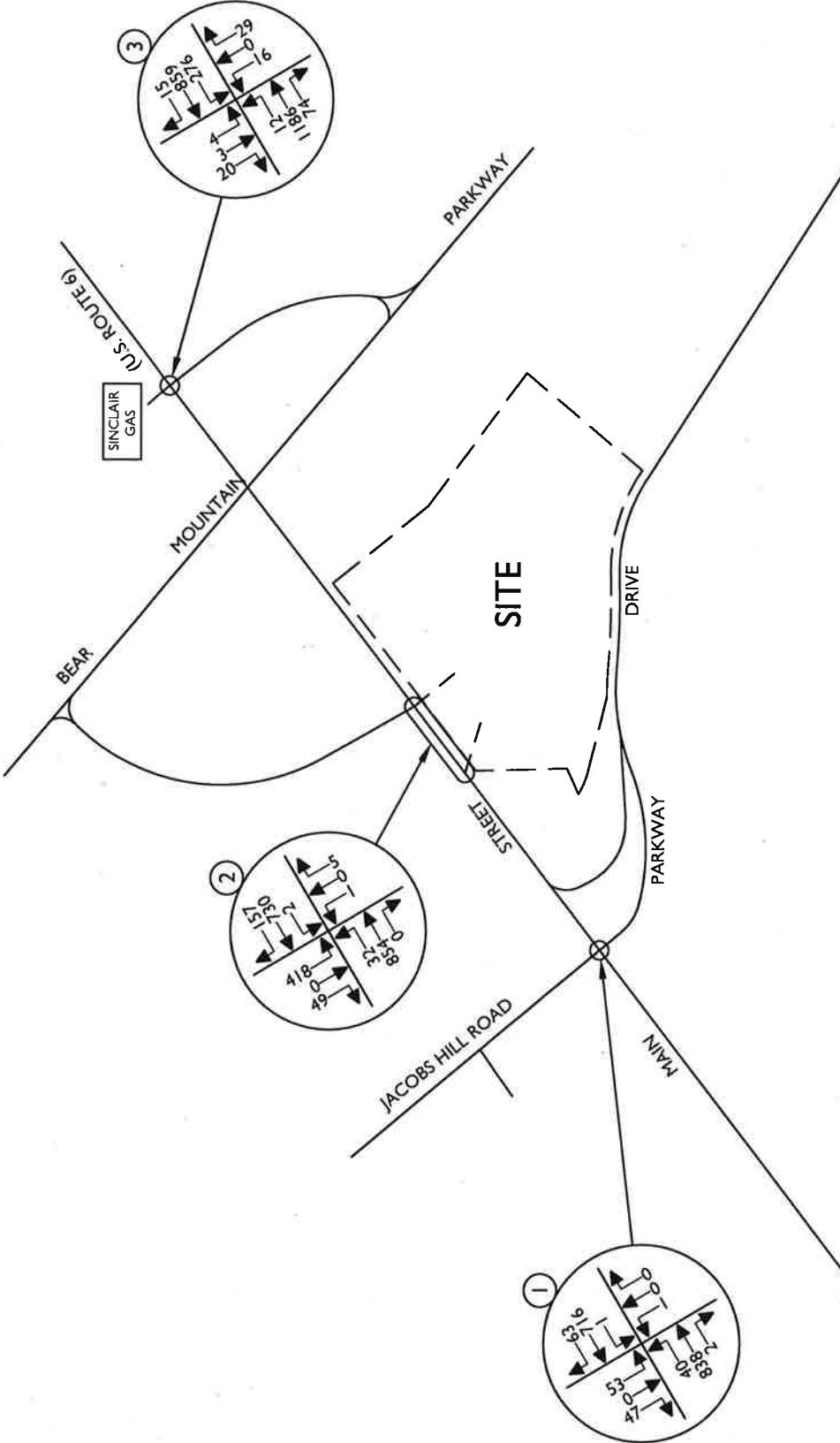
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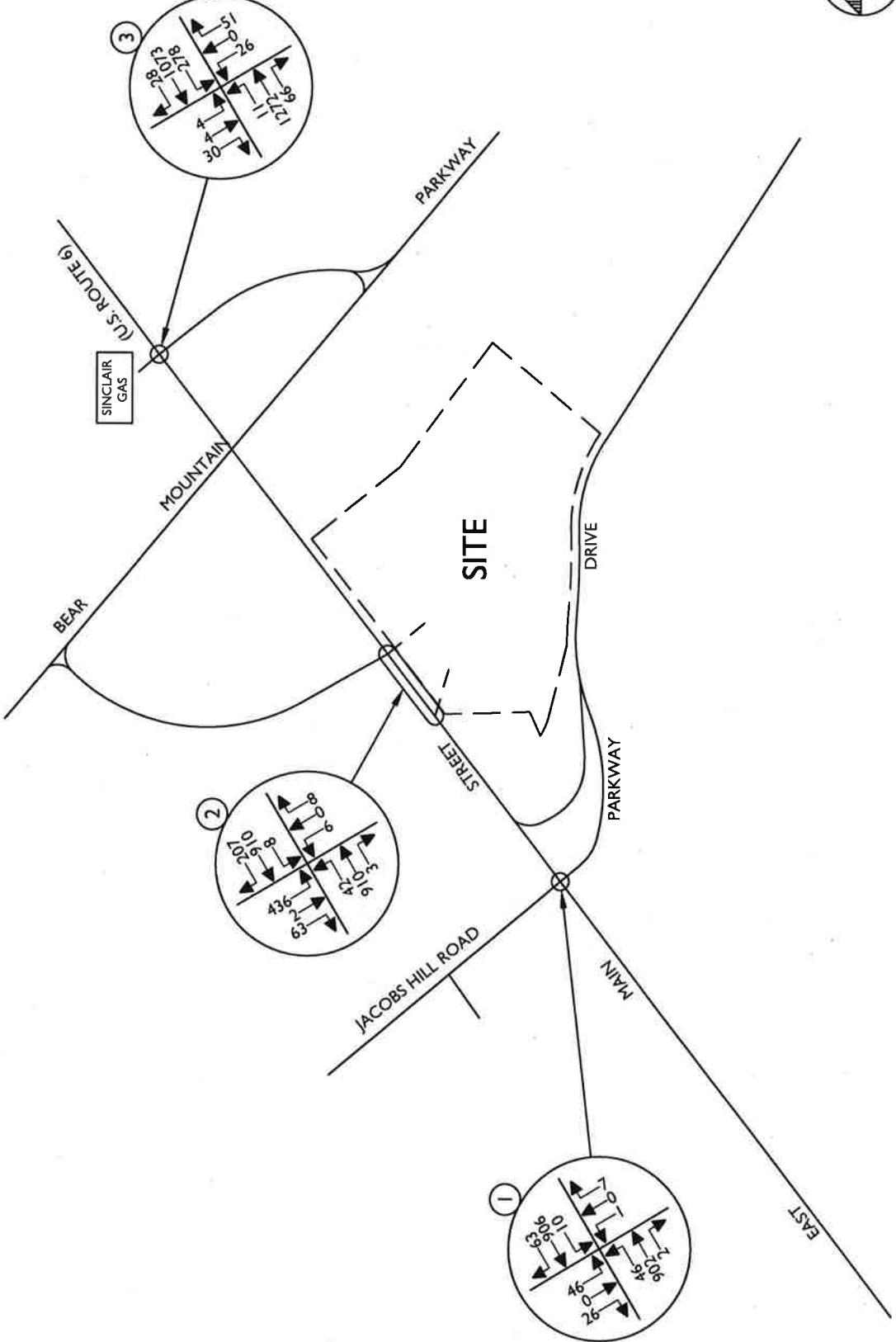


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REV	DATE	DRAWN BY	DESCRIPTION	CHECKED BY	DATE
-	-	-	-	R.H.	-
-	-	-	-	P.J.G.	-
PROJECT NUMBER:			19003182A	DRAWING NAME:	
SHEET NUMBER:			19102RH-FIGURE	SHEET TITLE:	
2021 PROJECTED TRAFFIC VOLUMES					
WEEKEND PEAK SATURDAY HOUR					
STREET NUMBER:					

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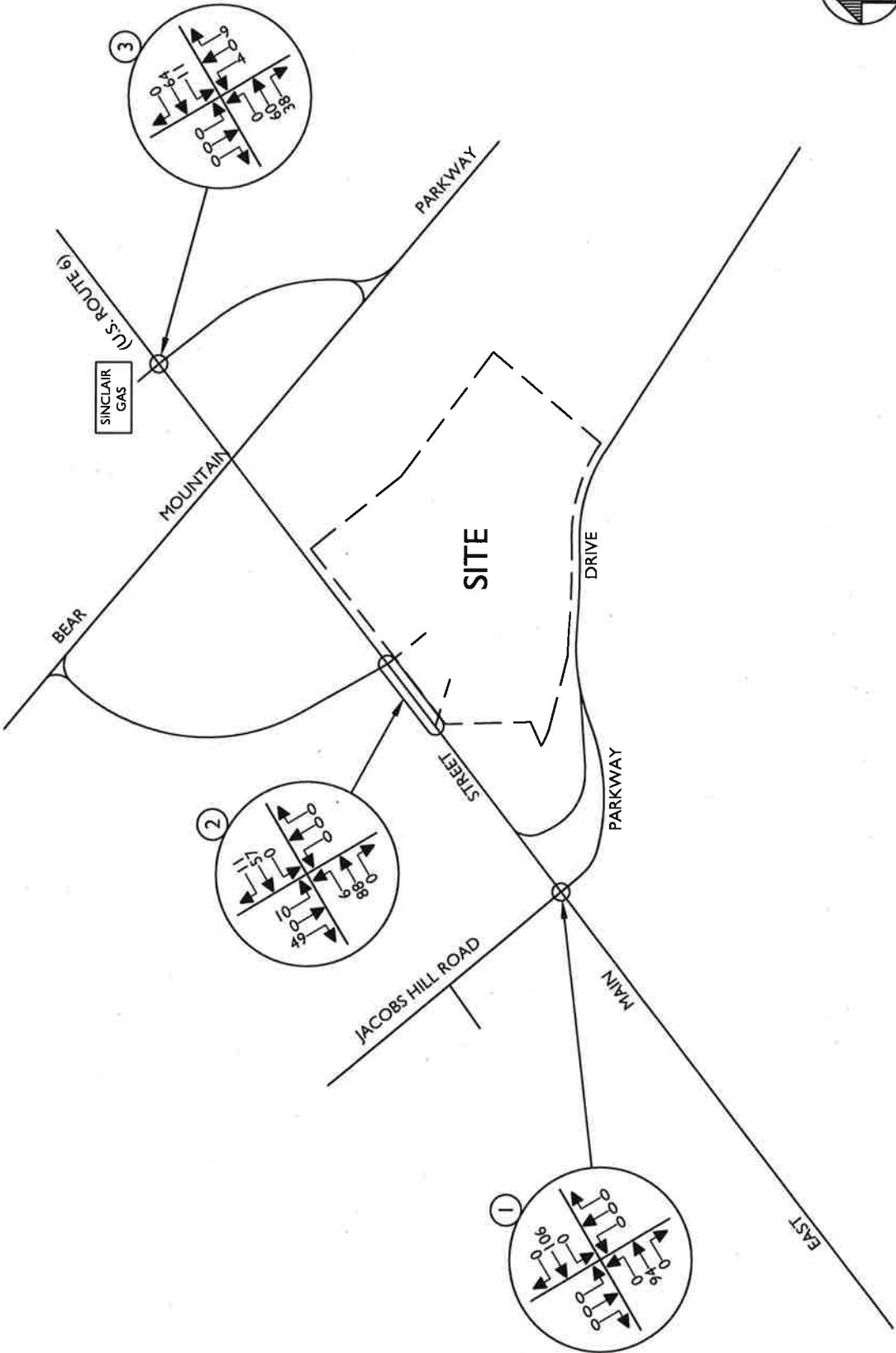
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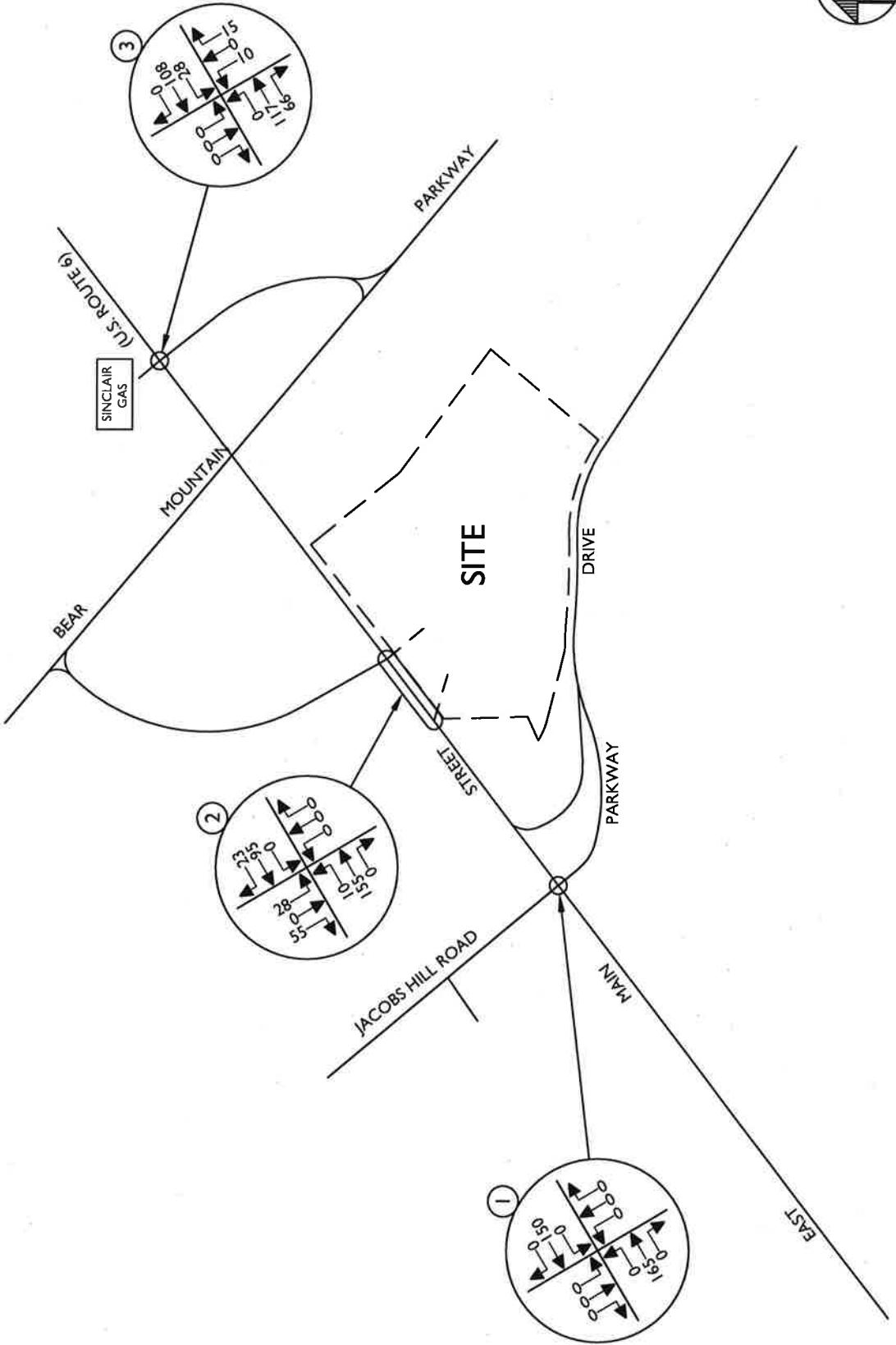
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<b>8</b>	OTHER DEVELOPMENT TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR

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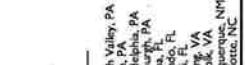
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SCALE AS SHOWN	DATE 3/21/19	DRAWN BY R.J.G.	CHECKED BY P.J.G.
PROJECT NUMBER 19003-82A	DRAWING NAME [19] 012345-FIGURE		
SHEET TITLE OTHER DEVELOPMENT TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR		SHEET NUMBER: 9	

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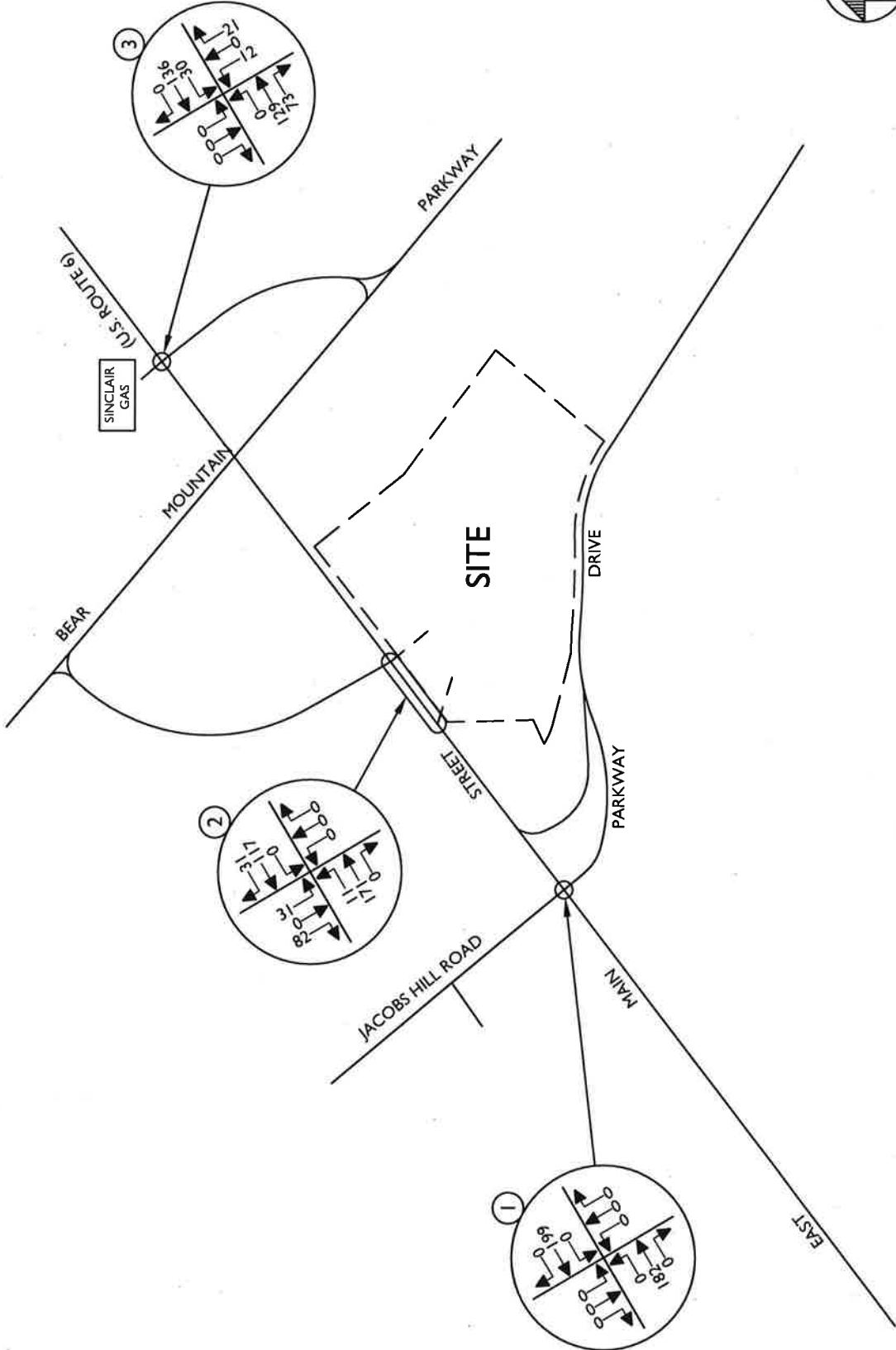
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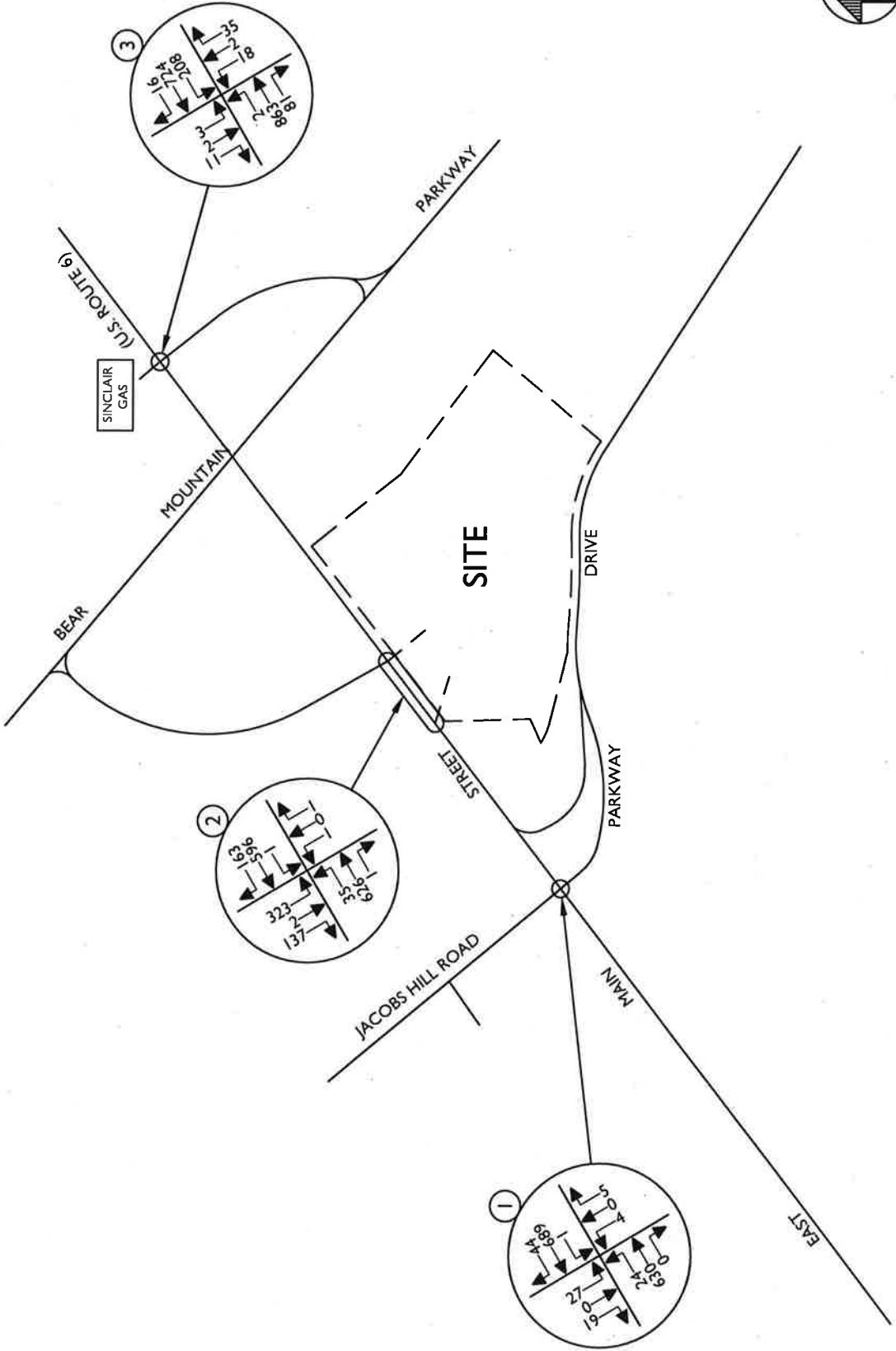
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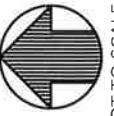
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TRAFFIC IMPACT STUDY	
SCALE	1:5000
DATE	3/21/09
DRAWN BY	G. HARRIS
DESIGNER	P.J.G.
FIGURE NUMBER	19023RH-FIGURE 1
FIGURE NAME	19023RH-FIGURE 1
FIGURE DATE	3/21/09
FIGURE TIME	10:00 AM
<b>2020 NO-BUILD TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR</b>	
SHEET 1 OF 10 SHEETS	

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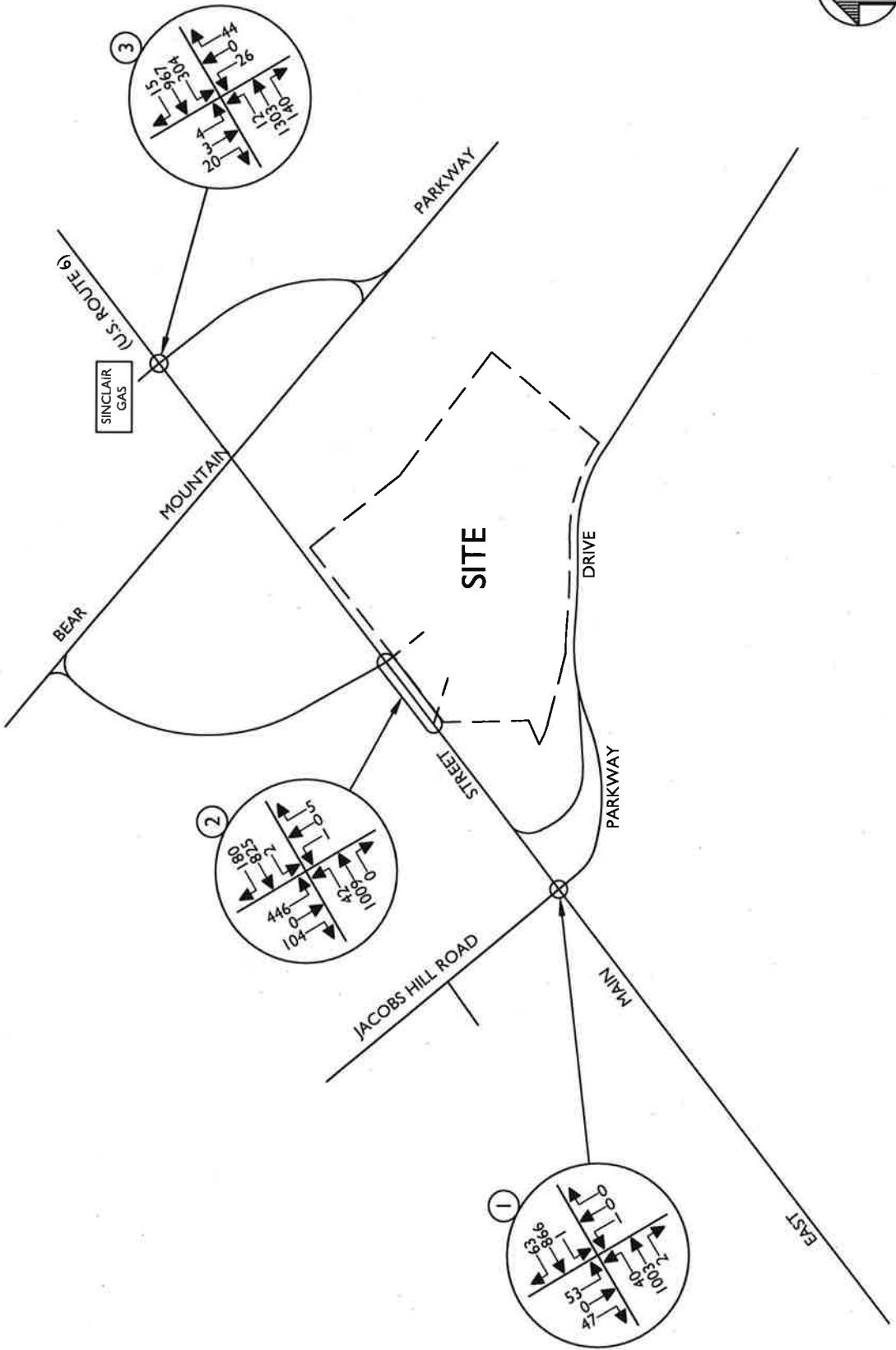
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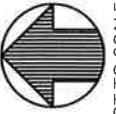
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SCALE	DATE	DRAWN BY	CHECKED BY
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PROJECT NUMBER	9103 BZA	DRAWN BY FIGURE	
SHEET #11			
2021 NO-BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR			
SHEET NAME: _____			

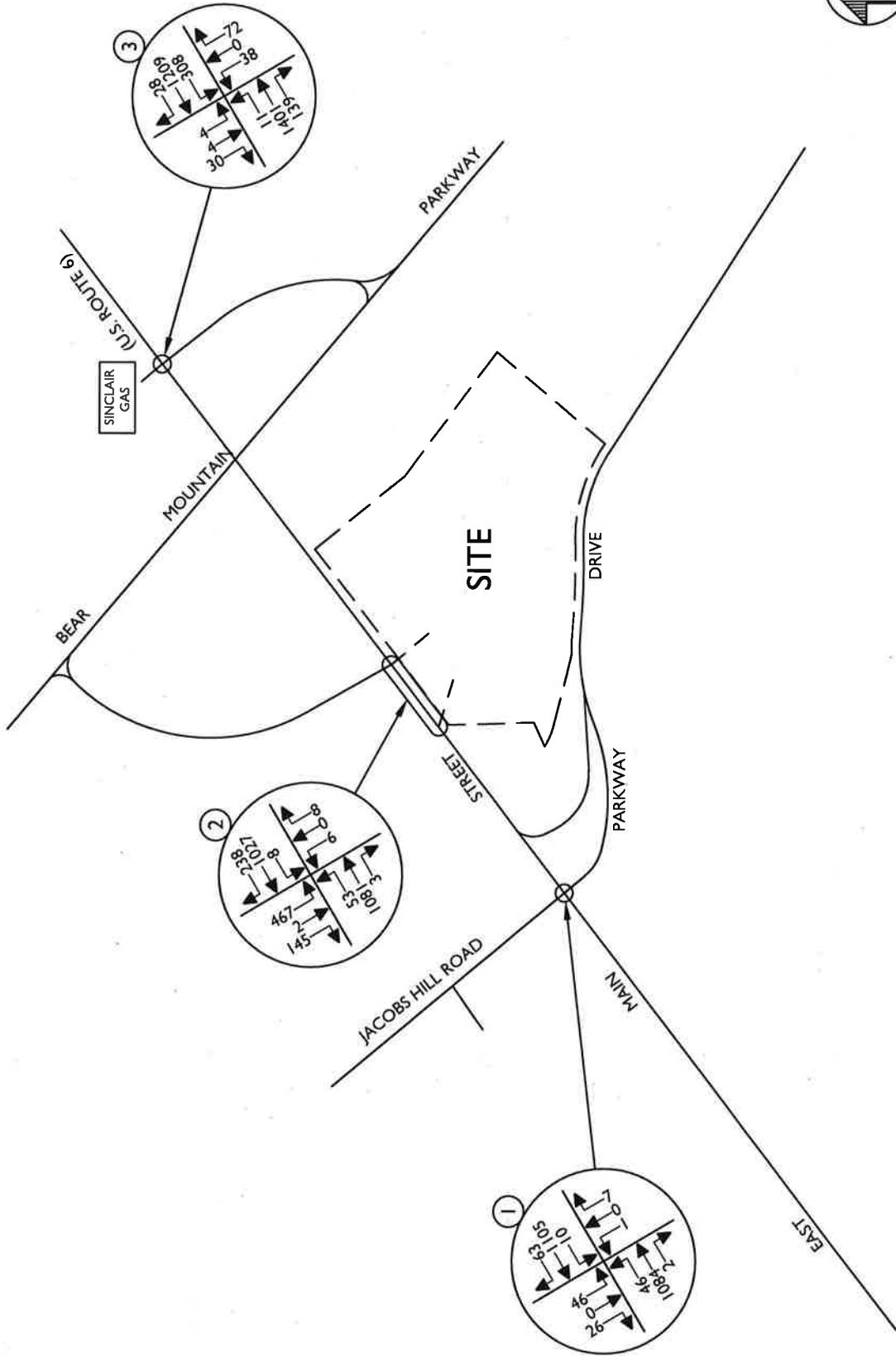


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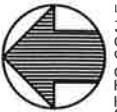
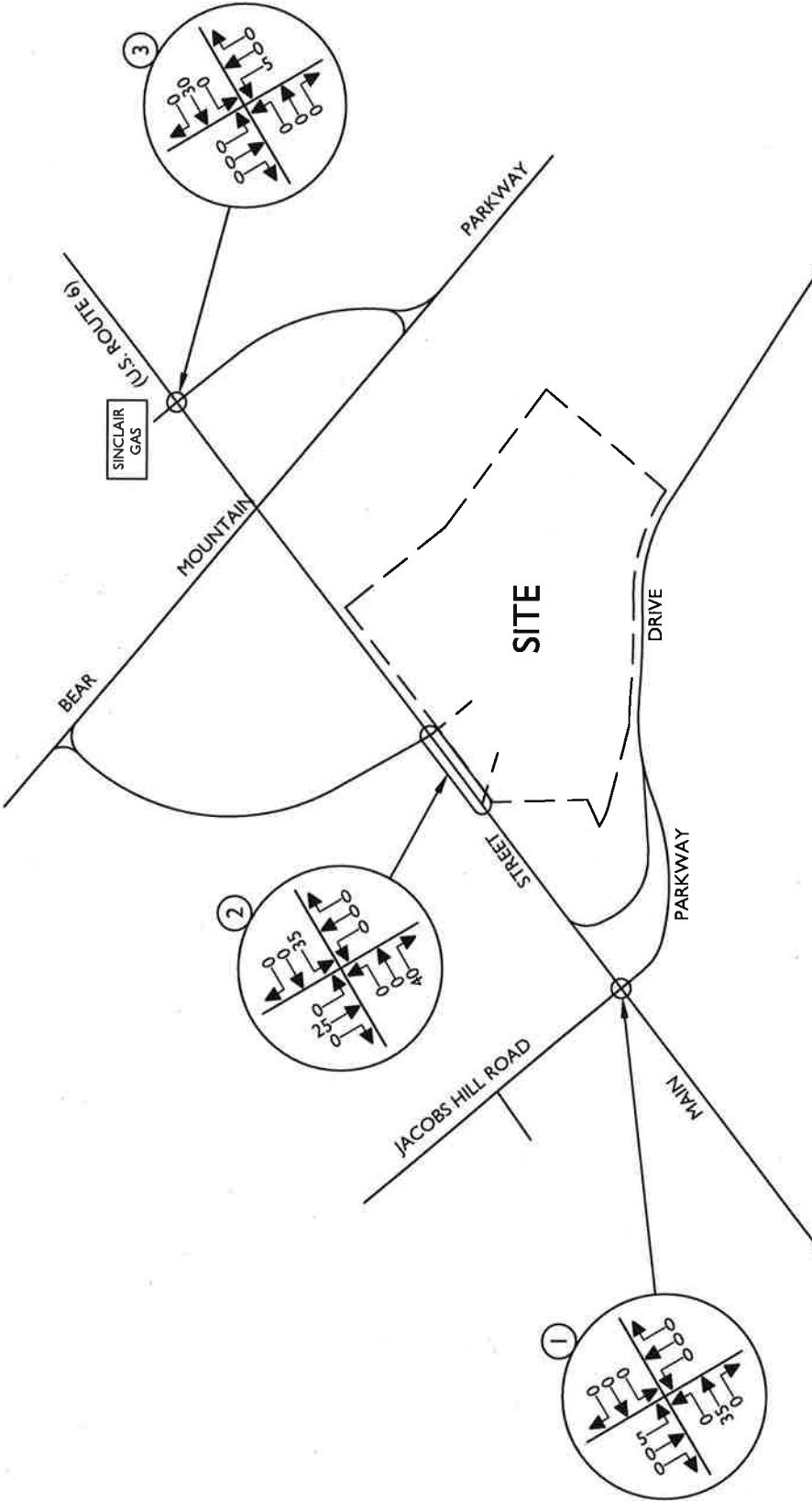
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-	-	-	-	3/21/19	R.H.
-	-	-	-	-	P.J.G.
SCALE:		PROJECT NAME:		DRAWING NAME:	
AS SHOWN		190303.R2A		190303RH FIGURE	
PROJECT TITLE:		PRINT TITLE:		STREET NUMBER:	
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PROJECT NUMBER:	9003102A	DRAWING NAME:	91023B-L FIGURE

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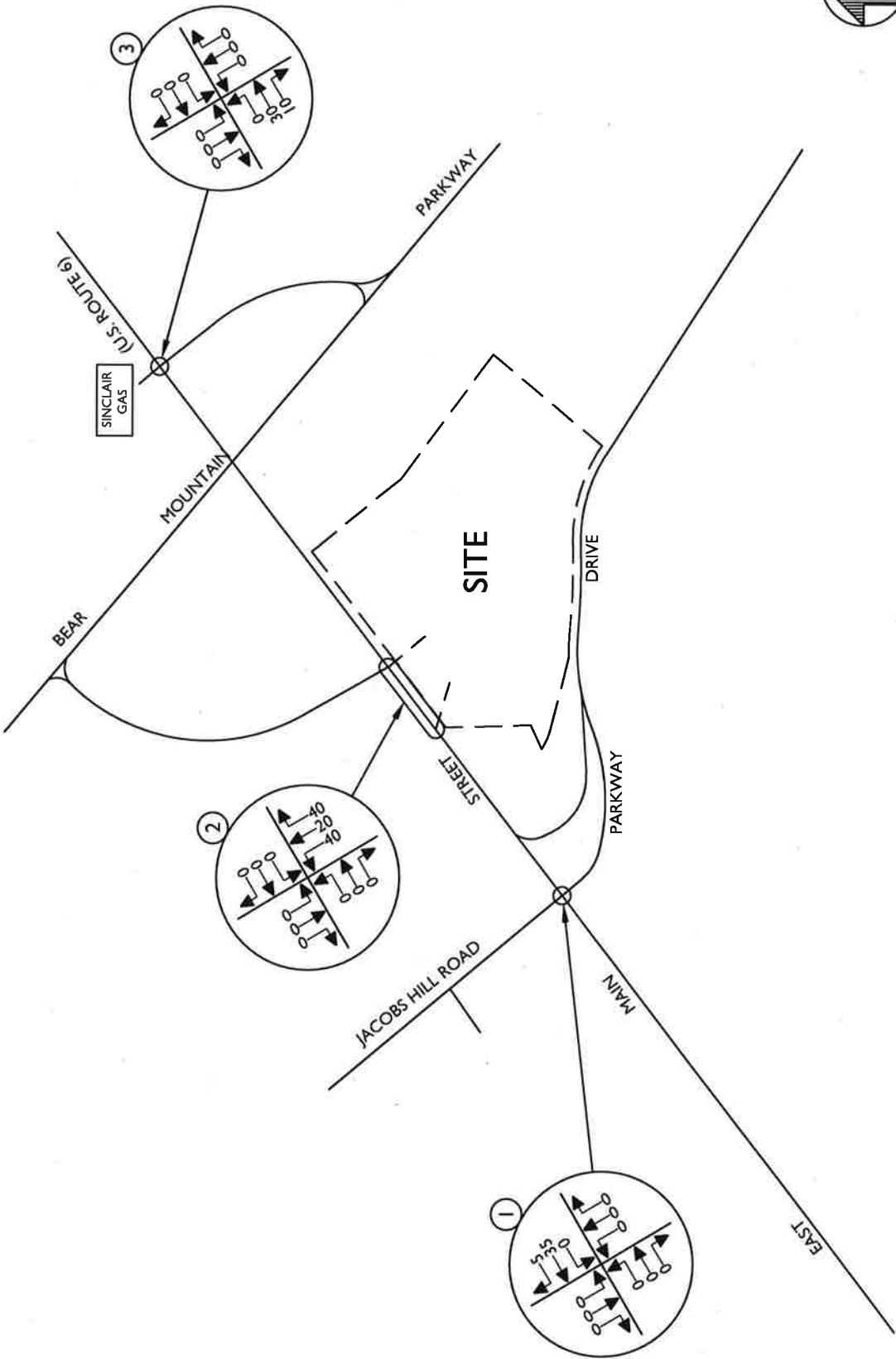
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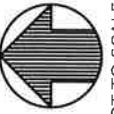


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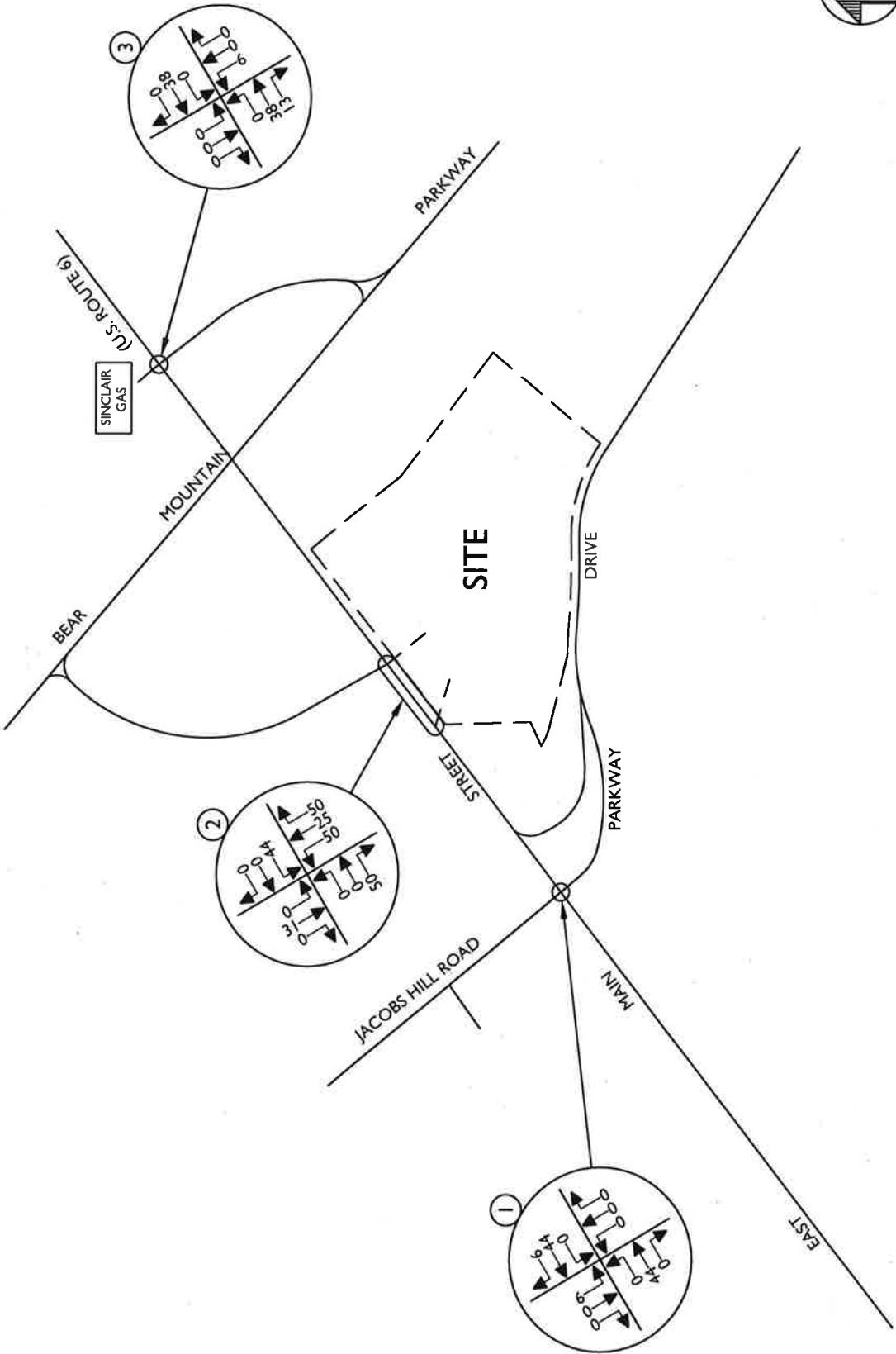
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SCALE AS SHOWN	DATE 3/21/19	CHECKED BY R.H. P.J.G.	
PROJECT NUMBER: 190301BZ	DRAWN BY DRAWING NAME: 9/0232RH [FIGURE]	DEPARTURE DISTRIBUTION (ALL VALUES ARE EXPRESSED AS %)	
SHEET NUMBER: 15			



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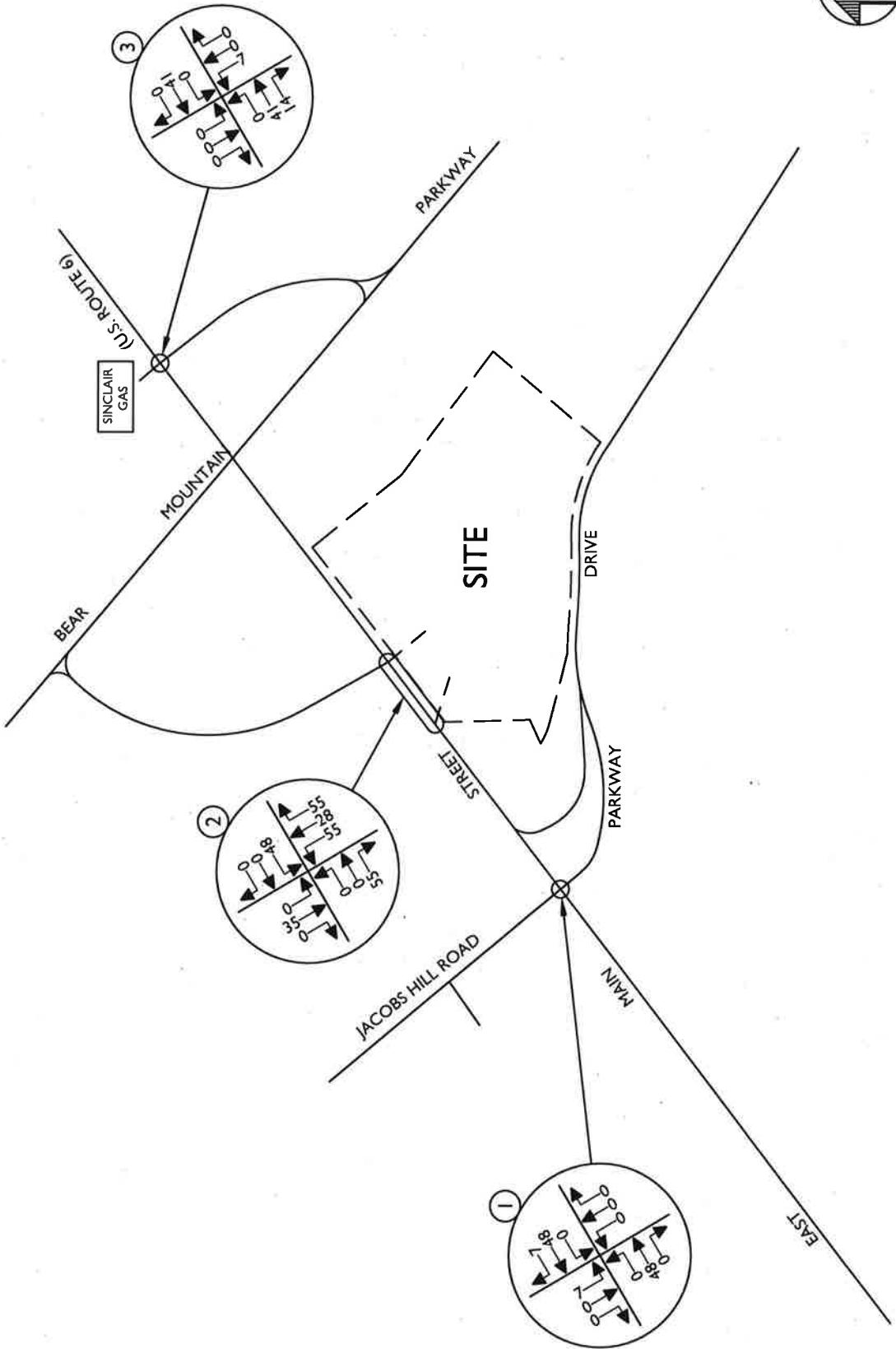
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SCALE:	DATE:
AS SHOWN	3/21/09
PROJECT NUMBER:	R.H. FIGURE 9103RHF-FIGURE
SHEET TITLE:	
SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR	
STREET NUMBER:	



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SCALE	DATE	PLANNED PROJECT NUMBER	CHECKED BY	REMARKS	
AS SHOWN	3/21/19	R.H.	P.J.G.		
			190301-BZA	190123R-1	
SHEET NUMBER:					
SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR					

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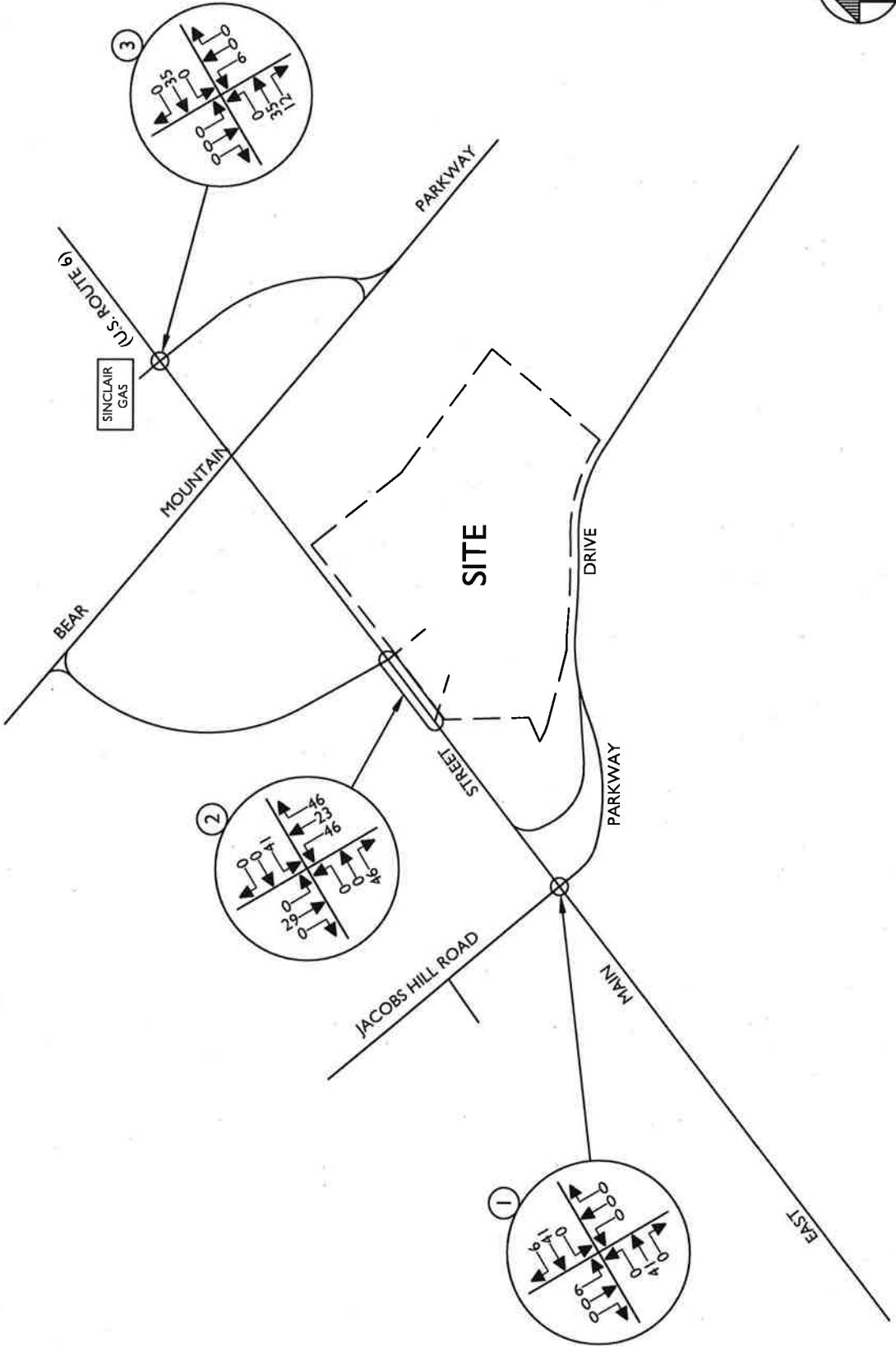
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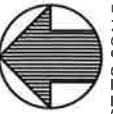
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DATE	3/1/21/9
APPROVING NAME	P.J.G.
FIGURE	19-023RH-FIGURE
DRAWING NUMBER	182A

18 VOLUMES  
SATURDAY HOUR

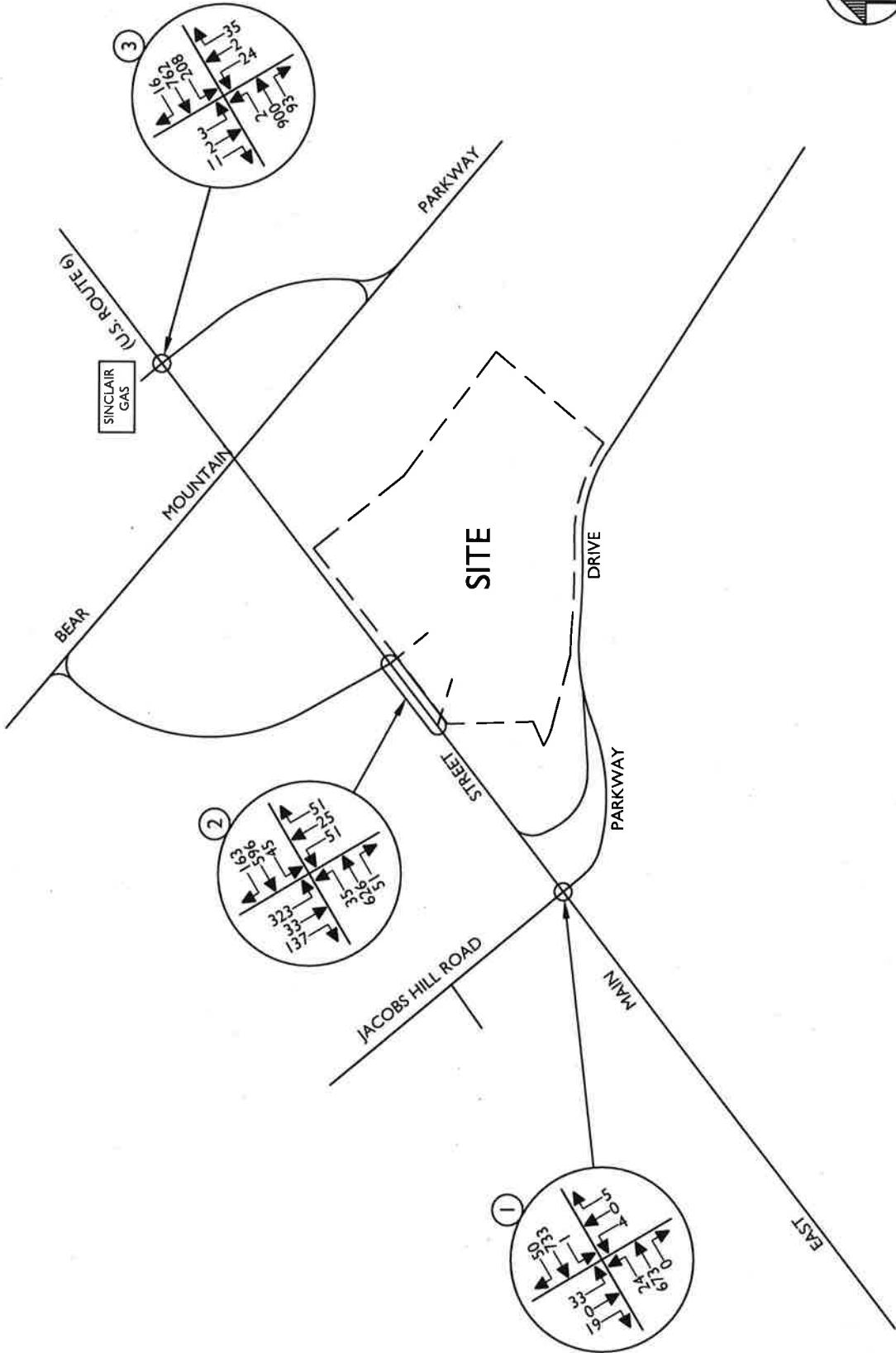


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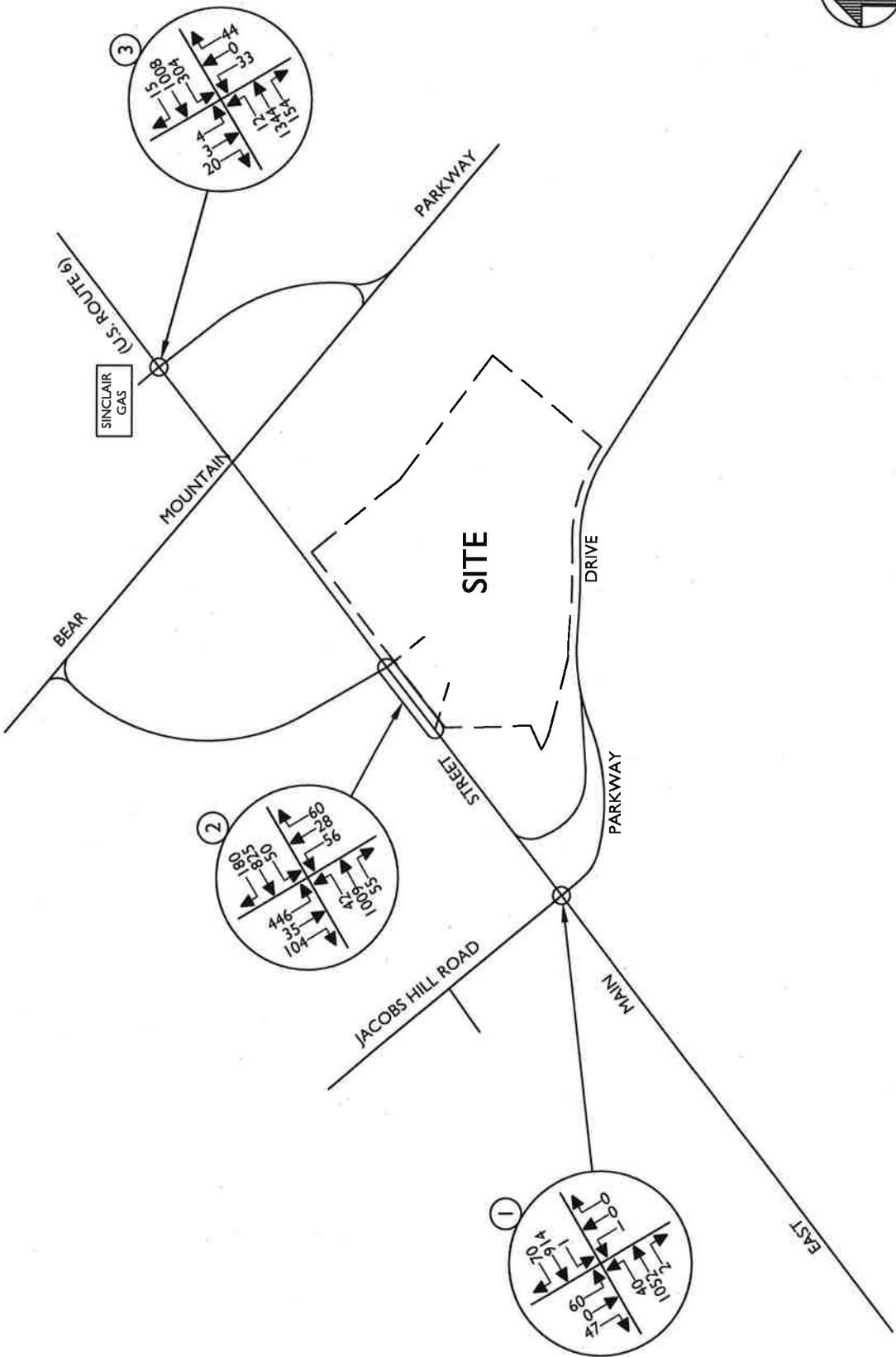
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<b>2021 BUILD TRAFFIC VOLUMES</b>	<b>WEEKDAY PEAK AM HOUR</b>
<b>Sheet 1 of 1</b>	<b>Page 1 of 1</b>
<b>19</b>	



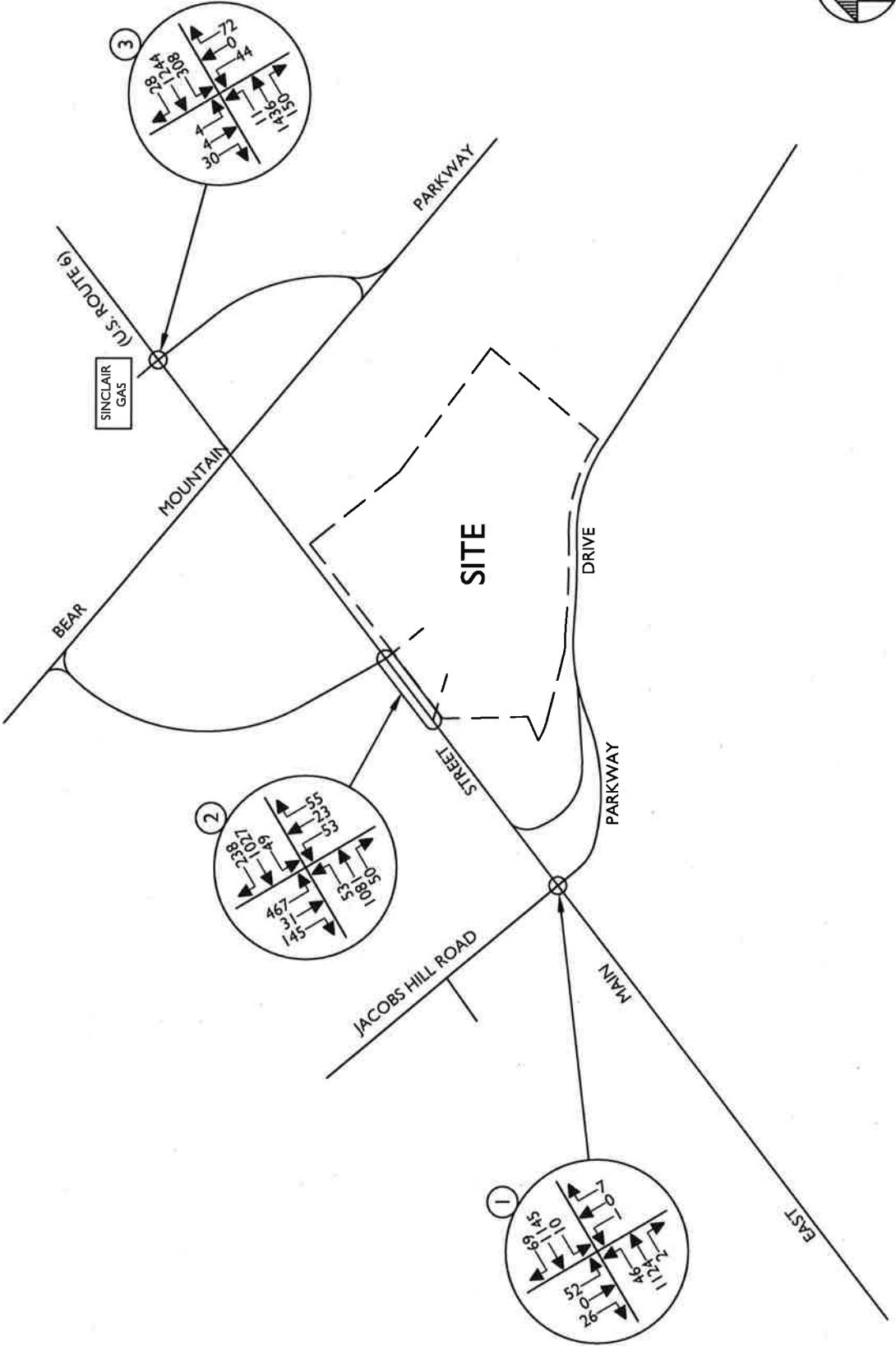
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REV	DATE	DRAWN BY	DESCRIPTION	DRAWN BY	CHECKED BY
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PROJECT NUMBER: 19003 BZA			DRAWING NAME: 191023RH-FIGURE		
2021 BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR					
SHEET NUMBER: 20					

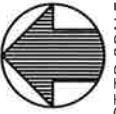
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AS SHOWN	3/12/19	R. H.	P. G.		
PROJECT NUMBER	(910)232-RC-FIGURE				
19003 182A					
SHEET TITLE:					
2021 BUILD TRAFFIC VOLUMES					
WEEKEND PEAK SATURDAY HOUR					
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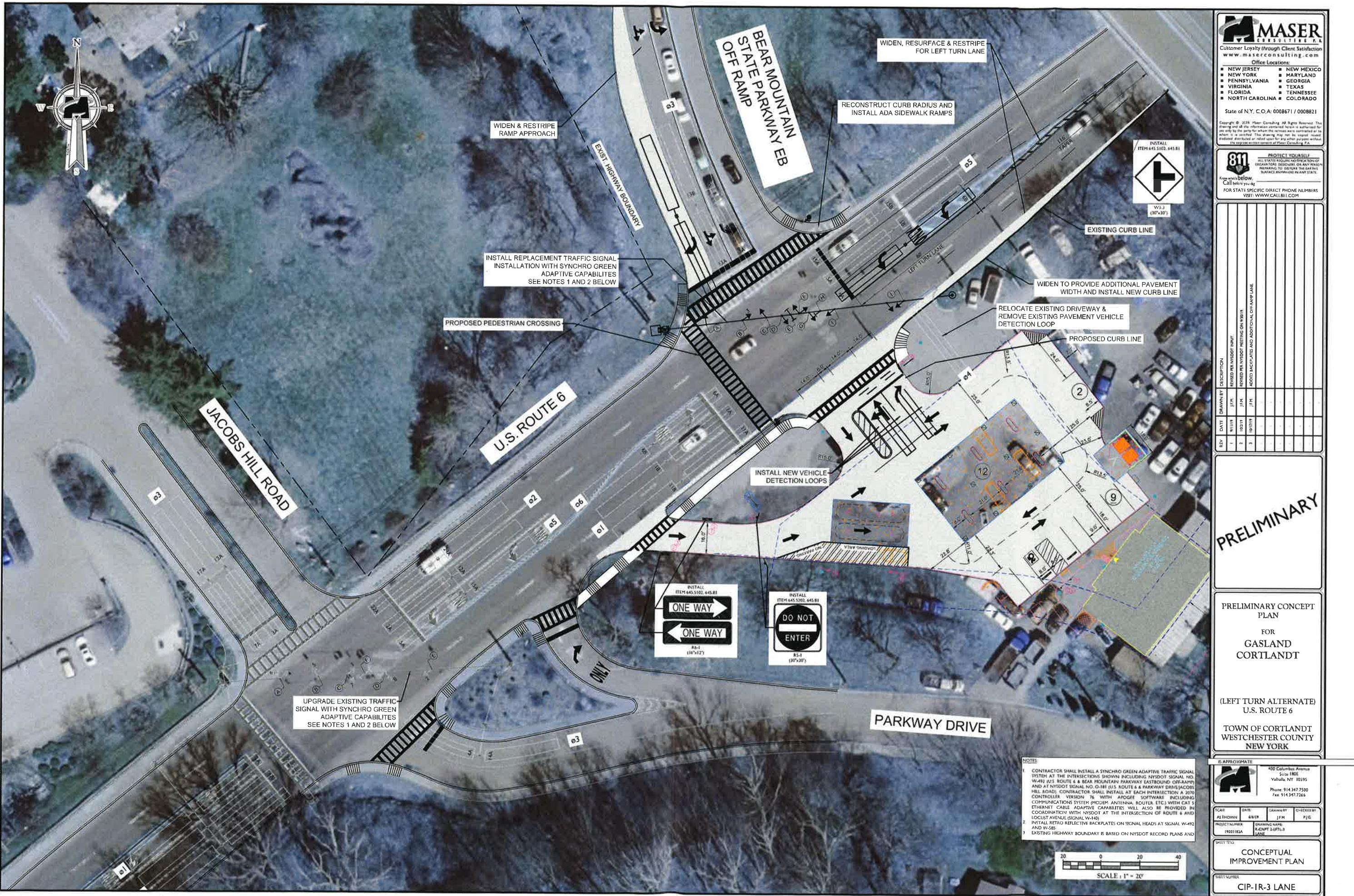
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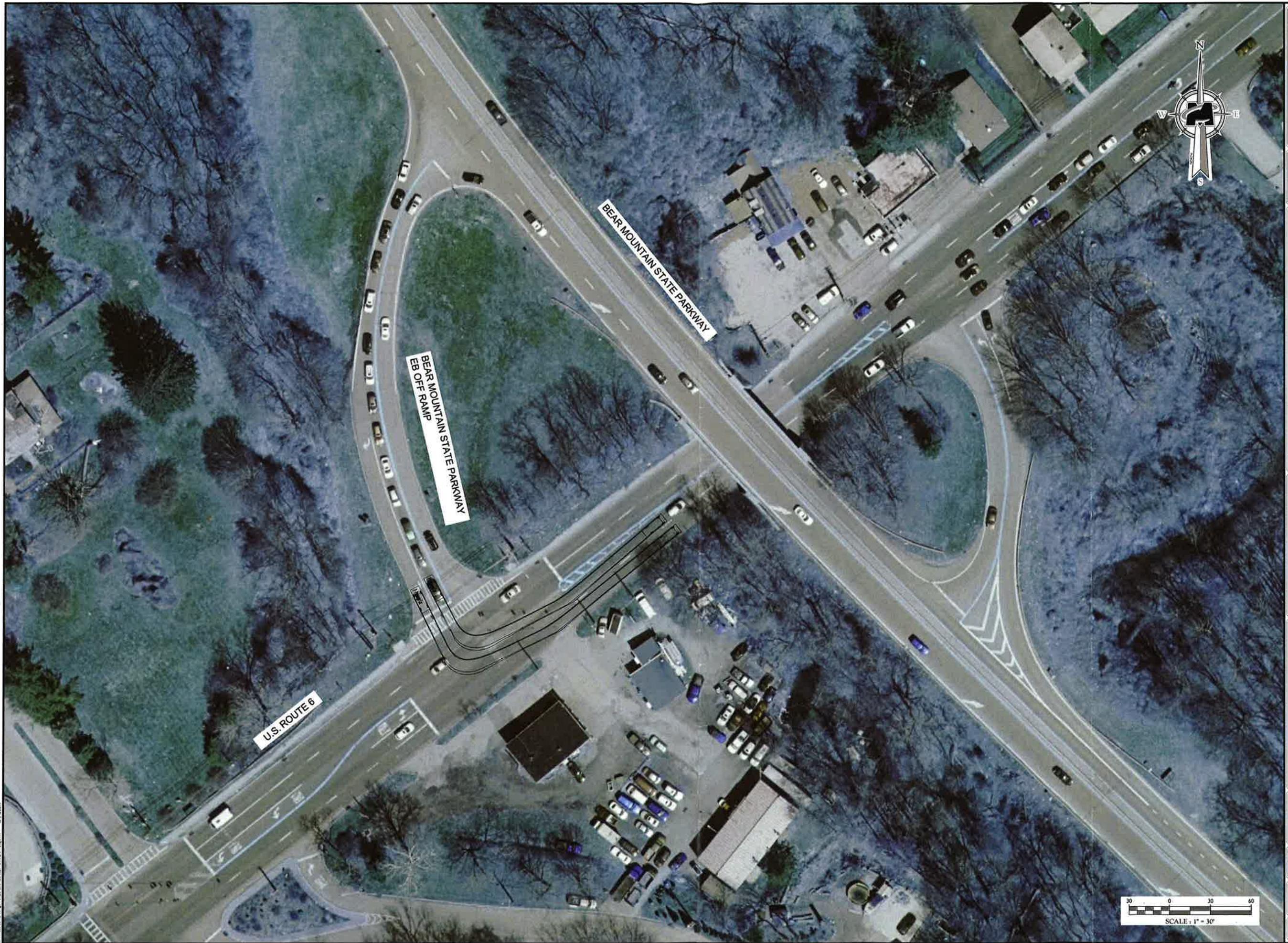
EAST MAIN STREET  
(U.S. ROUTE 6)  
CORTLANDT  
WESTCHESTER COUNTY  
NEW YORK

REV	DATE	DRAWN BY	DESCRIPTION
1			
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Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

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## ***GASLAND CORTLANDT***

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### **APPENDIX B**

### **TABLES**

**TABLE NO. 1**

**HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED  
SITE GENERATED TRAFFIC VOLUMES**

GASLAND CORTLANDT TOWN OF CORTLANDT, NEW YORK	ENTRY			EXIT		
	HTGR <sup>1</sup>	VOLUME	NEW TRIPS <sup>2</sup>	HTGR <sup>1</sup>	VOLUME	NEW TRIPS <sup>2</sup>
GAS STATION (12 FUELING POSITIONS)						
PEAK AM HOUR	10.38	125	94	10.38	125	94
PEAK PM HOUR	11.52	138	104	11.52	138	104
SATURDAY PEAK HOUR	9.64	116	87	9.64	116	87

NOTES:

- 1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10TH EDITION, 2017. ITE LAND USE CODE - 853 - CONVIENCE STORE W/ GASOLINE PUMPS FOR AM & PM PEAK HOURS AND LAND USE CODE - 945 - GAS/ SERVICE STATION W/ CONVENIENCE.
- 2) "NEW TRIPS" INCLUDE A 25% PASS-BY/DIVERTED LINK TRIP CREDIT APPLIED TO THE GAS STATION DEVELOPMENT TO ACCOUNT FOR TRIPS ATTRACTED FROM THE EXISTING TRAFFIC STREAMS ALONG U.S. ROUTE 6.



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# **SYNCHRO PERCENTILE METHODOLOGY DELAY RESULTS**

TABLE NO. 2S

LEVEL OF SERVICE SUMMARY TABLE  
(SYNCHRO PERCENTILE METHODOLOGY DELAY)

			NO ACCESS TO PARKWAY DRIVE													
			2019 EXISTING			2021 NO-BUILD			2021 BUILD			% CHANGE NO-BUILD TO BUILD				
			AM	PM	SATURDAY	AM	PM	SATURDAY	AM	PM	SATURDAY	AM	PM	SATURDAY		
1	U.S. ROUTE 6 & JACOBS HILL ROAD/PARKWAY DRIVE	SIGNALIZED	EB L	B [19.0]	B [17.3]	B [17.4]	B [16.8]	B [16.2]	B [19.9]	B [16.0]	B [16.2]	B [19.9]	-4.8%	0.0%	0.0%	
			T / TR	C [32.2]	C [34.7]	D [47.5]	C [30.1]	E [77.2]	E [75.5]	C [29.1]	E [76.8]	E [75.3]	-3.3%	-0.5%	-0.3%	
		EB APPROACH	WB L	C [31.6]	C [33.9]	D [46.0]	C [29.6]	E [74.9]	E [73.3]	C [28.6]	E [74.5]	E [73.2]	-3.4%	-0.5%	-0.1%	
			NB L	C [22.0]	B [19.0]	B [19.5]	B [19.0]	B [17.0]	B [18.5]	B [13.0]	B [13.0]	B [16.6]	-31.6%	-23.5%	-10.3%	
		WB APPROACH	T / TR	D [41.9]	D [38.9]	E [56.9]	D [40.9]	D [54.4]	F [80.8]	C [30.4]	E [69.0]	E [77.4]	-25.7%	26.8%	-4.3%	
			NB APPROACH	B [12.2]	B [17.0]	B [19.0]	B [14.8]	B [19.0]	C [21.4]	B [15.8]	B [20.0]	C [21.0]	6.8%	5.3%	0.0%	
		SB APPROACH	R	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	0.0%	0.0%	0.0%	
			NB APPROACH	A [5.4]	B [17.0]	A [2.4]	A [6.6]	B [19.0]	B [18.9]	A [2.6]	B [20.0]	A [2.6]	6.1%	5.3%	0.0%	
		SB APPROACH	SB LT	B [11.6]	B [15.9]	B [16.7]	B [14.1]	B [18.9]	C [21.3]	B [14.6]	B [19.9]	C [21.6]	5.0%	5.3%	1.4%	
			SB APPROACH	R	A [0.1]	A [1.5]	A [0.1]	A [0.1]	A [2.0]	A [0.1]	A [2.1]	A [0.1]	0.0%	5.0%	0.0%	
		OVERALL		A [6.8]	A [9.2]	B [11.9]	A [8.2]	B [10.9]	B [13.6]	A [9.4]	B [12.1]	B [14.4]	14.6%	11.0%	5.9%	
				D [35.7]	C [34.7]	D [49.7]	C [34.5]	E [62.6]	E [75.0]	C [28.7]	E [68.9]	E [73.2]	-16.8%	10.1%	-2.4%	
		W/ SIGNAL TIMING IMPROVEMENTS	EB L	-	-	-	-	-	-	B [16.8]	B [16.2]	A [5.7]	0.0%	0.0%	-71.4%	
			T / TR	-	-	-	-	-	-	C [29.1]	D [36.3]	A [7.0]	-3.3%	-53.0%	-90.7%	
		EB APPROACH	WB L	-	-	-	-	-	-	C [28.7]	D [35.5]	A [6.9]	-3.0%	-52.6%	-90.6%	
			T / TR	-	-	-	-	-	-	B [13.0]	A [3.0]	A [5.2]	-31.6%	-82.4%	-71.9%	
		WB APPROACH	NB LT	-	-	-	-	-	-	C [31.8]	C [20.8]	A [9.9]	-22.2%	-61.8%	-87.8%	
			R	-	-	-	-	-	-	C [31.8]	C [20.8]	A [9.9]	-22.2%	-61.8%	-87.7%	
		NB APPROACH	SB LT	-	-	-	-	-	-	B [15.2]	B [20.0]	E [56.0]	2.7%	5.3%	166.7%	
			R	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.4]	0.0%	0.0%	0.0%	
		NB APPROACH	SB APPROACH	-	-	-	-	-	-	A [6.8]	B [20.0]	A [7.4]	3.0%	5.3%	184.6%	
			OVERALL	-	-	-	-	-	-	B [14.5]	E [58.2]	A [1.2]	2.8%	4.8%	173.2%	
				-	-	-	-	-	-	A [0.1]	A [2.1]	D [38.9]	0.0%	5.0%	1100.0%	
				-	-	-	-	-	-	A [9.1]	B [12.0]	C [29.5]	11.0%	10.1%	186.0%	
				-	-	-	-	-	-	C [29.5]	C [27.7]	A [9.4]	-14.5%	-55.8%	-87.5%	
		W/ RECONSTRUCTED SITE DRIVEWAY & SIGNAL TIMING IMPROVEMENTS	EB L	C [21.1]	C [21.5]	C [22.7]	C [21.7]	C [22.0]	C [22.8]	-	-	-	-	-	-	
			T / TR	C [21.8]	C [36.8]	E [56.3]	C [26.6]	F [83.0]	F [85.6]	-	-	-	-	-	-	
		EB APPROACH	WB L	C [21.8]	D [36.2]	D [54.8]	C [26.4]	F [80.6]	F [82.6]	-	-	-	-	-	-	
			T / TR	B [17.4]	C [23.0]	E [77.6]	B [19.8]	E [78.8]	F [106.7]	-	-	-	-	-	-	
		WB APPROACH	NB LTR	A [0.0]	A [0.2]	A [0.4]	A [0.0]	A [0.2]	A [0.4]	-	-	-	-	-	-	
			NB APPROACH	A [0.0]	A [0.2]	A [0.4]	A [0.0]	A [0.2]	A [0.4]	-	-	-	-	-	-	
		SB APPROACH	SB L	D [46.8]	D [45.0]	D [43.3]	D [46.8]	D [39.6]	D [36.4]	-	-	-	-	-	-	
			TR	A [6.8]	A [0.2]	A [7.2]	A [6.5]	A [0.4]	A [5.2]	-	-	-	-	-	-	
		SB APPROACH	OVERALL	D [37.9]	D [40.3]	D [38.6]	C [34.7]	C [32.2]	C [28.9]	-	-	-	-	-	-	
				C [23.8]	C [31.7]	E [61.3]	C [25.7]	E [69.5]	F [81.5]	-	-	-	-	-	-	
		W/ RECONSTRUCTED SITE DRIVEWAY & SIGNAL TIMING IMPROVEMENTS	EB L	-	-	-	-	-	-	A [8.6]	B [13.5]	C [31.2]	-60.4%	-38.6%	36.8%	
			T / TR	-	-	-	-	-	-	B [14.1]	E [78.9]	C [26.3]	-47.0%	-4.9%	-69.3%	
		EB APPROACH	WB L	-	-	-	-	-	-	B [13.8]	E [76.3]	C [25.5]	-47.7%	-5.3%	-67.9%	
			T / TR	-	-	-	-	-	-	C [20.8]	C [20.8]	B [14.3]	-	-	-	
		WB APPROACH	NB LT	-	-	-	-	-	-	D [35.3]	D [37.2]	C [33.1]	78.3%	-52.8%	-69.0%	
			R	-	-	-	-	-	-	C [34.5]	D [36.4]	C [32.4]	74.2%	-53.8%	-69.6%	
		NB APPROACH	SB L	-	-	-	-	-	-	D [46.4]	D [54.4]	F [159.8]	-	-	-	
			TR	-	-	-	-	-	-	A [1.5]	A [1.6]	A [3.2]	-	-	-	
		SB APPROACH	OVERALL	-	-	-	-	-	-	C [28.4]	C [32.4]	F [94.0]	-	-	-	
				-	-	-	-	-	-	C [31.2]	E [63.8]	F [164.5]	-33.3%	61.1%	351.9%	
				-	-	-	-	-	-	A [4.5]	A [0.5]	B [15.9]	-30.8%	25.0%	205.8%	
				-	-	-	-	-	-	C [24.5]	D [53.7]	F [134.3]	-29.4%	66.8%	364.7%	
				-	-	-	-	-	-	C [25.2]	D [54.6]	D [53.2]	-1.9%	-21.4%	-34.7%	
		W/ RECONSTRUCTED SITE DRIVEWAY & SIGNAL TIMING IMPROVEMENTS & BEAR MTN. PKWY OFF-RAMP IMPROVEMENTS	EB L	-	-	-	-	-	-	A [4.0]	B [11.1]	B [18.7]	-81.6%	-49.5%	-18.0%	
			T / TR	-	-	-	-	-	-	A [6.1]	E [59.7]	C [20.7]	-77.1%	-28.1%	-75.8%	
		EB APPROACH	WB L	-	-	-	-	-	-	A [5.9]	E [57.8]	C [20.6]	-77.7%	-28.3%	-75.1%	
			T / TR	-	-	-	-	-	-	B [10.6]	B [16.3]	B [12.2]	-	-	-	
		WB APPROACH	NB LT	-	-	-	-	-	-	B [18.2]	C [24.0]	C [25.9]	-8.1%	-69.5%	-75.7%	
			R	-	-	-	-	-	-	D [46.4]	D [54.4]	E [69.9]	-	-	-	
		NB APPROACH	SB L	-	-	-	-	-	-	A [1.5]	A [1.6]	A [2.9]	-	-	-	
			LT	-	-	-	-	-	-	C [28.4]	C [32.4]	D [41.7]	-	-	-	
		NB APPROACH	SB APPROACH	-	-	-	-	-	-	D [47.2]	D [45.5]	E [64.2]	0.8%	14.9%	76.4%	
			OVERALL	-	-	-	-	-	-	D [46.8]	D [44.9]	E [64.3]	-	-	-	
				-	-	-	-	-	-	A [7.8]	A [1.6]	B [18.4]	-	-	-	
				-	-	-	-	-	-	D [36.1]	D [37.5]	D [53.9]	4.0%	16.5%	86.5%	
				-	-	-	-	-	-	B [19.0]	D [39.6]	C [30.1]	-26.1%	-43.0%	-63.1%	
		U.S. ROUTE 6 & BEAR MOUNTAIN PARKWAY WB ON/OFF RAMPS/ SINCLAIR GAS STATION	UNSIGNALIZED	EB LTR	A [9.0]	A [9.7]	B [10.9]	A [9.4]	B [10.4]	B [11.9]	A [9.5]	B [10.6]	B [12.2]	1.1%	1.9%	2.5%
			WB LTR	B [11.3]	C [17.3]	C [20.2]	B [12.7]	D [28.4]	D [40.6]	B [13.3]	E [31.9]	E [46.2]	4.7%	12.3%	13.8%	
			NB L	F [60.8]	F [386.7]	F [*]	F [110.1]	F [16.1]	F [*]	F [165.1]	F [*]	F [*]	40.8%	0.0%	0.0%	
			TR	C [15.0]	B [13.8]	B [14.6]	F [325.4]	E [44.0]	F [*]	C [17.6]	C [16.6]	C [18.3]	6.0%	3.1%	2.2%	
			SB LTR	D [30.0]	F [111.4]	-	-	-	-	F [50.4]	F [*]	F [*]	14.5%	0.0%	0.0%	
		W/ SIGNALIZATION	EB LT / TR	-	-	-	-	-	-	B [12.5]	E [69.0]	B [12.5]	-	-	-	
			EB APPROACH	WB L	-	-	-	-	-	B [12.5]	E [69.0]	B [12.5]	-	-	-	
			T / TR	-	-	-	-	-	-	A [8.2]	D [43.2]	D [48.2]	-	-	-	
		WB APPROACH	NB L	-	-	-	-	-	-	A [2.0]	A [6.0]	A [3.1]	-	-	-	
			R	-	-	-	-	-	-	A [3.3]	B [14.5]	B [11.9]	-	-	-	
		NB APPROACH	TR	-	-	-	-	-	-	D [42.3]	C [34.6]	E [58.2]	-	-	-	
			SB LTR	-	-	-	-	-	-	B [17.4]	A [0.3]	A [0.6]	-	-	-	
			SB APPROACH	-	-	-	-	-	-	C [27.3]	B [15.0]	C [22.5]	-	-	-	
			OVERALL	-	-	-	-	-	-	C [24.6]	B [18.4]	C [24.8]	-	-	-	
				-	-	-	-	-	-	A [8.6]	D [42.5]	B [12.7]	-	-	-	

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS.

2) SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

3) \* REPRESENTS ESTIMATED AVERAGE VEHICLE DELAYS GREATER THAN 500 SECONDS. NOTE THAT INTERSECTION DOES NOT YET SATISFY WARRANTS FOR SIGNALIZATION.

**TABLE 3**  
**QUEUE SUMMARY TABLE**

STORAGE LENGTH (FT.)	2019 EXISTING						2021 NO-BUILD						NO ACCESS TO PARKWAY DRIVE					
	AM		PM		SAT		AM		PM		SAT		AM		PM		SAT	
	50%	95%	50%	95%	50%	95%	50%	95%	50%	95%	50%	95%	50%	95%	50%	95%	50%	95%
<b>1 U.S. ROUTE 6 &amp; JACOBS HILL ROAD/PARKWAY DRIVE</b>	EB L	115	9	22	13	27	14	27	8	20	12	25	12	19	12	24	12	26
	TR L	615	145	190	199	270	189	284	173	220	237	338	222	374	183	229	246	362
	WB L	90	0	m1	1	m1	6	m8	1	m1	1	m1	5	m6	0	m1	1	m4
	WB TR	200	199	242	257	317	319	382	241	281	318	381	398	m361	251	m284	131	m276
	NB LT	500	1	7	0	4	0	4	1	8	0	0	4	0	4	0	4	0
	R LT	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SB LT	125	5	23	17	46	16	43	6	27	20	50	19	46	8	32	23	56
	R SB	125	0	0	0	8	0	0	0	0	0	11	0	0	0	0	11	0
	<i>W/ SIGNAL IMPROVEMENTS TIMING CHANGES</i>																	
	EB L	50	16	47	17	m34	20	m43	21	m50	22	m37	27	m47	*	*	*	*
<b>2 U.S. ROUTE 6 &amp; BEAR MOUNTAIN PARKWAY EB ON/OFF RAMPS/SITE ACCESS DRIVEWAY</b>	TR L	200	177	236	277	342	290	363	217	280	344	472	371	440	*	*	*	*
	WB LT	305	130	267	199	389	296	557	164	358	275	504	478	700	*	*	*	*
	NB LTR	50	0	0	0	0	0	0	0	0	0	0	0	0	*	*	*	*
	SB L	350	179	252	218	337	224	381	191	272	235	419	240	451	*	*	*	*
	TR TR	135	1	35	0	0	1	29	1	43	0	0	1	43	*	*	*	*
	<i>W/ RECONSTRUCTED SITE DRIVEWAY ADDITIONAL LANES &amp; SIGNAL IMPROVEMENTS TIMING CHANGES</i>																	
	EB L	50	*	*	*	*	*	*	*	*	*	*	*	*	*	2	m4	6
	TR L	200	*	*	*	*	*	*	*	*	*	*	*	*	*	205	267	374
	WB L	80	*	*	*	*	*	*	*	*	*	*	*	*	*	18	43	47
	TR TR	305	*	*	*	*	*	*	*	*	*	*	*	*	*	236	351	365
<b>3 U.S. ROUTE 6 &amp; BEAR MOUNTAIN PARKWAY WB ON/OFF RAMPS/SINCLAIR GAS STATION</b>	NB L	50	*	*	*	*	*	*	*	*	*	*	*	*	*	47	89	90
	L TR	50	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	61
	SB L	350	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	4
	TR TR	135	*	*	*	*	*	*	*	*	*	*	*	*	*	208	377	305
	NB L	50	*	*	*	*	*	*	*	*	*	*	*	*	*	1	m4	5
	TR TR	200	*	*	*	*	*	*	*	*	*	*	*	*	*	13	261	71
	WB L	80	*	*	*	*	*	*	*	*	*	*	*	*	*	12	31	14
	TR TR	305	*	*	*	*	*	*	*	*	*	*	*	*	*	174	298	185
	NB LTR	50	*	*	*	*	*	*	*	*	*	*	*	*	*	47	89	96
	R LTR	50	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0
<b>W/ SIGNALIZATION</b>	SB L	135	*	*	*	*	*	*	*	*	*	*	*	*	*	112	170	143
	LT R	350	*	*	*	*	*	*	*	*	*	*	*	*	*	113	171	143
	TR R	135	*	*	*	*	*	*	*	*	*	*	*	*	*	113	46	0
	NB SB	135	*	*	*	*	*	*	*	*	*	*	*	*	*	6	6	48
	TR TR	305	*	*	*	*	*	*	*	*	*	*	*	*	*	3	22	98
	NB NB	75	*	*	*	*	*	*	*	*	*	*	*	*	*	20	41	115
	TR TR	175	*	*	*	*	*	*	*	*	*	*	*	*	*	44	72	107
	LTR LTR	50	*	*	*	*	*	*	*	*	*	*	*	*	*	10	10	20
	LT R	8	*	*	*	*	*	*	*	*	*	*	*	*	*	90	160	15
	TR TR	45	*	*	*	*	*	*	*	*	*	*	*	*	*	13	90	98
<b>NOTES:</b>	EB LTR	305	*	*	*	*	*	*	*	*	*	*	*	*	*	196	185	504
	WB LTR	900	25	65	53	113	5	10	10	10	10	10	10	10	10	115	198	243
	NB L	75	15	5	5	5	8	45	98	98	98	98	98	98	98	33	53	140
	TR TR	175	*	*	*	*	*	*	*	*	*	*	*	*	*	10	10	20
	LTR LTR	50	*	*	*	*	*	*	*	*	*	*	*	*	*	14	39	45
	LT R	8	*	*	*	*	*	*	*	*	*	*	*	*	*	1	31	0
	TR TR	45	*	*	*	*	*	*	*	*	*	*	*	*	*	3	0	0
	NB SB	75	*	*	*	*	*	*	*	*	*	*	*	*	*	22	3	27
	TR TR	175	*	*	*	*	*	*	*	*	*	*	*	*	*	6	6	40
	SB SB	50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

1) ALL QUEUE LENGTHS ARE EXPRESSED IN UNITS OF FEET

**TABLE TSW-1 E**
**SIGNAL WARRANTS ANALYSIS**  
(Based on National Manual of Uniform Traffic Control Devices)

INTERSECTION DATA		CHARACTERISTICS	
MAJOR STREET: US Route 6		Number Of Lanes For Moving Traffic By Approach	
MINOR STREET: Bear Mountain Parkway NB Ramps		Major Street (Excluding Auxiliary Lanes) =	
LOCATION: Cortlandt, NY		Minor Street (Including Auxiliary Lanes) =	
DATE: 4/1/19		Speed	
VOLUME BASIS..... 2019 Existing Traffic Volumes		85 % Speed >= 40 mph (Y or N).....>	
CONDITION ..... Typical Weekday		Population	
		Community < 10,000 (Y or N).....>	

TIME	VOLUMES		WARRANT 1 CONDITION A		WARRANT 1 CONDITION B		WARRANT 1 CONDITION A & B COMBINED				WARRANT MET?				
			Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	1A	1B	1A	1B	
Hour Begin	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	NO	NO	NO	NO	
12:00 AM	189	4	420	140	630	70	338	112	504	56	NO	NO	NO	NO	
01:00 AM	91	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
02:00 AM	67	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
03:00 AM	74	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
04:00 AM	98	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
05:00 AM	243	6	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
06:00 AM	690	17	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
07:00 AM	1480	28	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
08:00 AM	1654	40	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
09:00 AM	1241	30	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
10:00 AM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
11:00 AM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
12:00 PM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
01:00 PM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
02:00 PM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
03:00 PM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
04:00 PM	2012	45	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
05:00 PM	2048	43	420	140	830	70	336	112	504	56	NO	NO	NO	NO	
06:00 PM	1509	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
07:00 PM	1528	34	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
08:00 PM	1073	24	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
09:00 PM	716	16	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
10:00 PM	478	11	420	140	630	70	336	112	504	56	NO	NO	NO	NO	
TOTAL HOURS MEETING WARRANTS												0	0	0	0
TOTAL HOURS NEEDED TO SATISFY												8	8	8*	8*

MINIMUM VEHICULAR VOLUME	WARRANT 1A: NOT SATISFIED -- NO SIGNAL
INTERRUPTION OF CONTINUOUS TRAFFIC	WARRANT 1B: NOT SATISFIED -- NO SIGNAL
COMBINED CONDITION	WARRANT 1A & 1B COMBINED: NOT SATISFIED -- NO SIGNAL
*NOTE: FOR COMBINED WARRANT BOTH CONDITIONS 1A & 1B MUST BE SATISFIED FOR 8 HOURS.	

**TABLE TSW-2 E**

**SIGNAL WARRANTS ANALYSIS**  
(Based on National Manual of Uniform Traffic Control Devices)

INTERSECTION DATA		CHARACTERISTICS	
MAJOR STREET: US Route 6		Number Of Lanes For Moving Traffic By Approach	
MINOR STREET: Bear Mountain Parkway NB Ramps		Major Street (Excluding Auxiliary Lanes) = 2	
LOCATION: Cortlandt, NY		Minor Street (Including Auxiliary Lanes) = 2	
DATE: 4/1/19		Speed	
VOLUME BASIS..... 2019 Existing Traffic Volumes		85 % Speed >= 40 mph (Y or N)-----> Y	
CONDITION ..... Typical Weekday		Median	
		Raised median 4' or more in width on major street (Y or N)?-----> N	
		Population	
		Community < 10,000 (Y or N)-----> N	

TIME Hour Begin	VOLUMES		WARRANT 2 <sup>1</sup>		WARRANT 3 <sup>1</sup>		WARRANT MET?		
	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	2	3	
12:00 AM	169	4					NO	NO	
01:00 AM	91	2					NO	NO	
02:00 AM	67	2					NO	NO	
03:00 AM	74	2					NO	NO	
04:00 AM	98	2					NO	NO	
05:00 AM	243	6					NO	NO	
06:00 AM	690	17					NO	NO	
07:00 AM	1480	28					NO	NO	
08:00 AM	1654	40					NO	NO	
09:00 AM	1241	30					NO	NO	
10:00 AM	1509	34					NO	NO	
11:00 AM	1509	34					NO	NO	
12:00 PM	1509	34					NO	NO	
01:00 PM	1509	34					NO	NO	
02:00 PM	1509	34					NO	NO	
03:00 PM	1509	34					NO	NO	
04:00 PM	2012	45					NO	NO	
05:00 PM	2048	43					NO	NO	
06:00 PM	1509	34					NO	NO	
07:00 PM	1528	34					NO	NO	
08:00 PM	1073	24					NO	NO	
09:00 PM	716	16					NO	NO	
10:00 PM	478	11					NO	NO	

NOTE major peds = highest volume  
on major street crosswalk

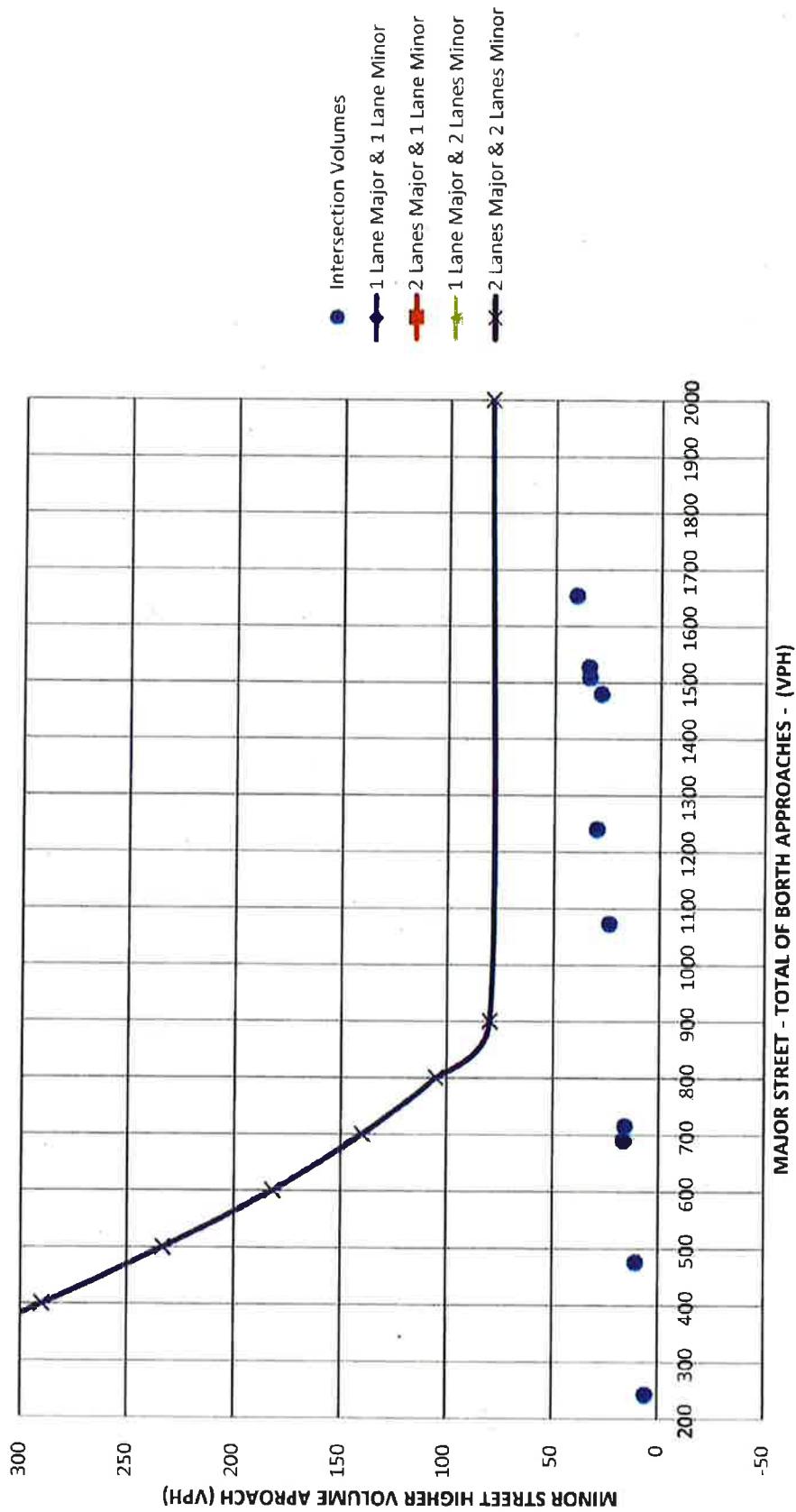
TOTAL HOURS MEETING WARRANTS	0	0
TOTAL HOURS NEEDED TO SATISFY	4	1

FOUR HOUR VEHICULAR VOLUME	WARRANT 2: NOT SATISFIED -- NO SIGNAL
PEAK HOUR VOLUME	WARRANT 3: NOT SATISFIED -- NO SIGNAL

NOTES:

1) VOLUMES FOR WARRANTS 2 AND 3 ARE COMPARED TO MUTCD FIGURE 4C-2 FOR WARRANT 2 AND FIGURE 4C-4 FOR WARRANT 3 ATTACHED

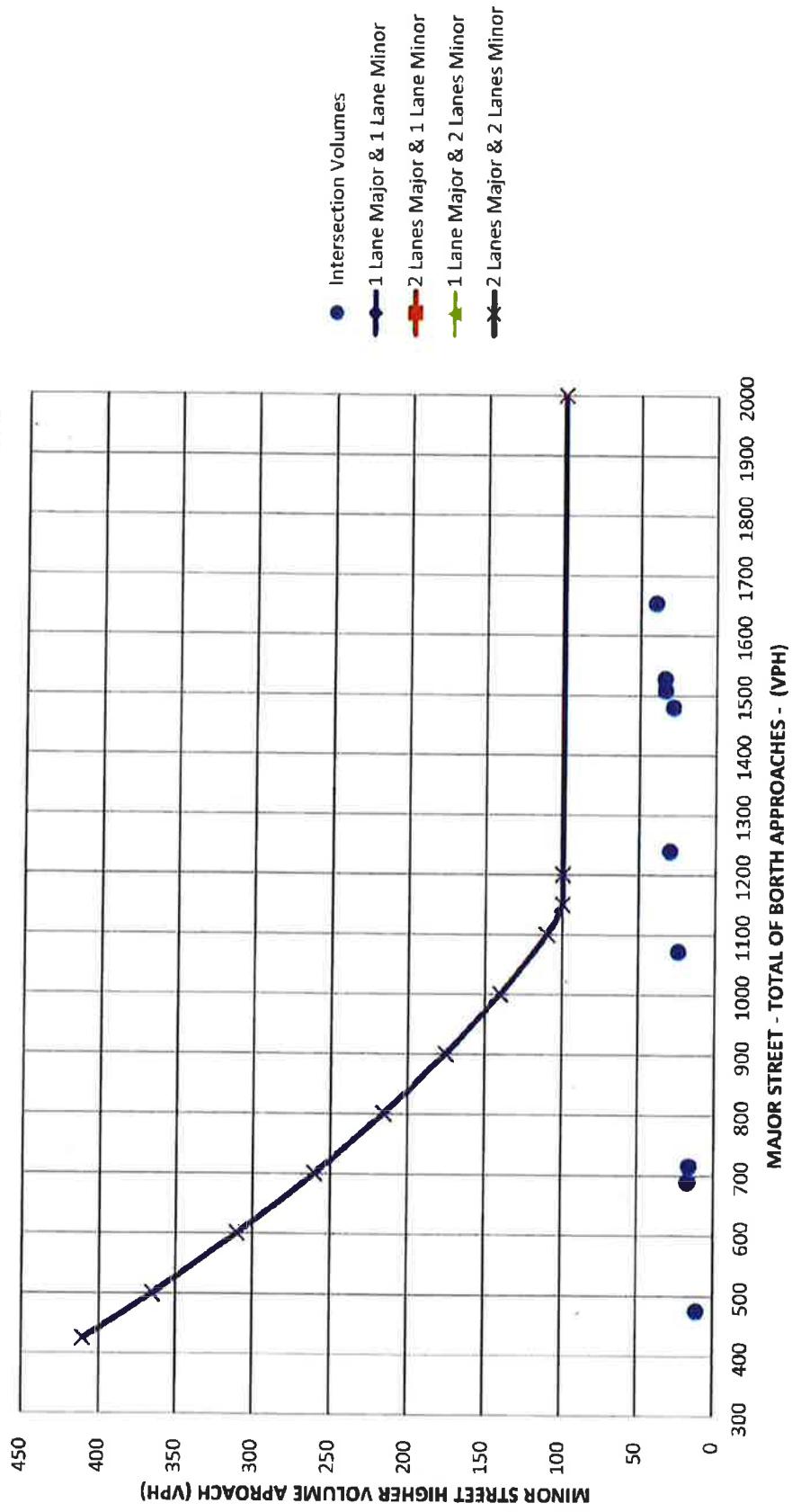
**2019 EXISTING FIGURE 4C-2**  
**WARRANT 2 - FOUR HOUR VEHICULAR WARRANT (>40 MPH)**



4/2/2019

JOB: 19003182A

**2019 EXISTING FIGURE 4C-4**  
**WARRANT 3 - PEAK HOUR WARRANT (>40 MPH)**



4/2/2019

JOB: 19003182A

**TABLE TSW-1 NB**
**SIGNAL WARRANTS ANALYSIS**  
 (Based on National Manual of Uniform Traffic Control Devices)

INTERSECTION DATA		CHARACTERISTICS	
MAJOR STREET: US Route 6		Number Of Lanes For Moving Traffic By Approach	
MINOR STREET: Bear Mountain Parkway NB Ramps		Major Street (Excluding Auxiliary Lanes) =	
LOCATION: Cortlandt, NY		Minor Street (Including Auxiliary Lanes) =	
DATE: 4/1/19		Speed	
VOLUME BASIS..... 2021 No-Build Traffic Volumes		85 % Speed >= 40 mph (Y or N)----->	
CONDITION ..... Typical Weekday		Population	
		Community < 10,000 (Y or N)----->	

TIME	VOLUMES		WARRANT 1 CONDITION A		WARRANT 1 CONDITION B		WARRANT 1 CONDITION A & B COMBINED				WARRANT MET?			
			Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	1A	1B	COMBINED	
Hour Begin	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	1A	1B	1A	1B
12:00 AM	194	4	420	140	630	70	336	112	504	56	NO	NO	NO	NO
01:00 AM	104	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO
02:00 AM	77	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO
03:00 AM	85	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO
04:00 AM	112	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO
05:00 AM	278	6	420	140	630	70	336	112	504	56	NO	NO	NO	NO
06:00 AM	789	17	420	140	630	70	336	112	504	56	NO	NO	NO	NO
07:00 AM	1712	42	420	140	630	70	336	112	504	56	NO	NO	NO	NO
08:00 AM	1893	55	420	140	630	70	336	112	504	56	NO	NO	NO	NO
09:00 AM	1420	31	420	140	630	70	336	112	504	56	NO	NO	NO	NO
10:00 AM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
11:00 AM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
12:00 PM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
01:00 PM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
02:00 PM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
03:00 PM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
04:00 PM	2411	72	420	140	630	70	336	112	504	56	NO	YES	NO	YES
05:00 PM	2449	70	420	140	630	70	336	112	504	56	NO	NO	NO	YES
06:00 PM	1809	35	420	140	630	70	336	112	504	56	NO	NO	NO	NO
07:00 PM	1831	36	420	140	630	70	336	112	504	56	NO	NO	NO	NO
08:00 PM	1286	25	420	140	630	70	336	112	504	56	NO	NO	NO	NO
09:00 PM	858	17	420	140	630	70	336	112	504	56	NO	NO	NO	NO
10:00 PM	570	11	420	140	630	70	336	112	504	56	NO	NO	NO	NO

<b>TOTAL HOURS MEETING WARRANTS</b>										0	1	0	2
<b>TOTAL HOURS NEEDED TO SATISFY</b>										8	8	8*	8*

MINIMUM VEHICULAR VOLUME	WARRANT 1A: NOT SATISFIED -- NO SIGNAL
INTERRUPTION OF CONTINUOUS TRAFFIC	WARRANT 1B: NOT SATISFIED -- NO SIGNAL
COMBINED CONDITION	WARRANT 1A & 1B COMBINED: NOT SATISFIED -- NO SIGNAL
*NOTE: FOR COMBINED WARRANT BOTH CONDITIONS 1A & 1B MUST BE SATISFIED FOR 8 HOURS.	

**TABLE TSW-2 NB**

**SIGNAL WARRANTS ANALYSIS**  
(Based on National Manual of Uniform Traffic Control Devices)

INTERSECTION DATA	
MAJOR STREET:	US Route 6
MINOR STREET:	Bear Mountain Parkway NB Ramps
LOCATION:	Cortlandt, NY
DATE:	4/1/19
VOLUME BASIS.....	2021 No-Build Traffic Volumes
CONDITION	Typical Weekday

CHARACTERISTICS	
Number Of Lanes For Moving Traffic By Approach	
Major Street (Excluding Auxiliary Lanes) =	2
Minor Street (Including Auxiliary Lanes) =	2
Speed	
85 % Speed $\geq$ 40 mph (Y or N)----->	Y
Median	
Raised median 4' or more in width on major street (Y or N)?----->	N
Population	
Community < 10,000 (Y or N)----->	N

TIME Hour Begin	VOLUMES		WARRANT 2 <sup>1</sup>		WARRANT 3 <sup>1</sup>		WARRANT MET?		
	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	2	3	
12:00 AM	194	4							
01:00 AM	104	2							
02:00 AM	77	2							
03:00 AM	85	2							
04:00 AM	112	2							
05:00 AM	278	6							
06:00 AM	789	17							
07:00 AM	1712	42							
08:00 AM	1893	55							
09:00 AM	1420	31							
10:00 AM	1809	35							
11:00 AM	1809	35							
12:00 PM	1809	35							
01:00 PM	1809	35							
02:00 PM	1809	35							
03:00 PM	1809	35							
04:00 PM	2411	72							
05:00 PM	2448	70							
06:00 PM	1809	35							
07:00 PM	1831	36							
08:00 PM	1286	25							
09:00 PM	858	17							
10:00 PM	570	11							

NOTE major peds = highest volume on major street crosswalk

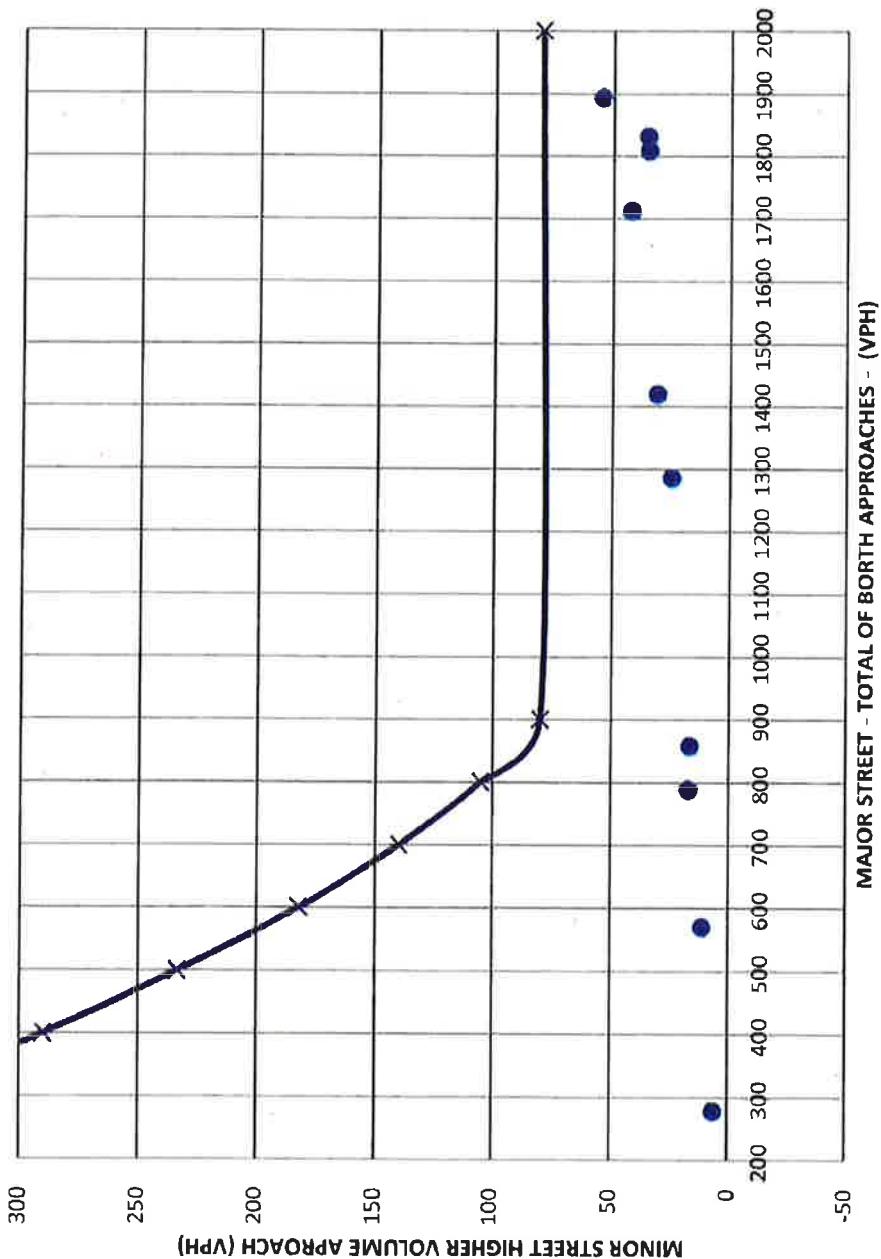
TOTAL HOURS MEETING WARRANTS	0	0
TOTAL HOURS NEEDED TO SATISFY	4	1

FOUR HOUR VEHICULAR VOLUME	WARRANT 2: NOT SATISFIED -- NO SIGNAL
PEAK HOUR VOLUME	WARRANT 3: NOT SATISFIED -- NO SIGNAL

NOTES:

1) VOLUMES FOR WARRANTS 2 AND 3 ARE COMPARED TO MUTCD FIGURE 4C-2 FOR WARRANT 2 AND FIGURE 4C-4 FOR WARRANT 3 ATTACHED

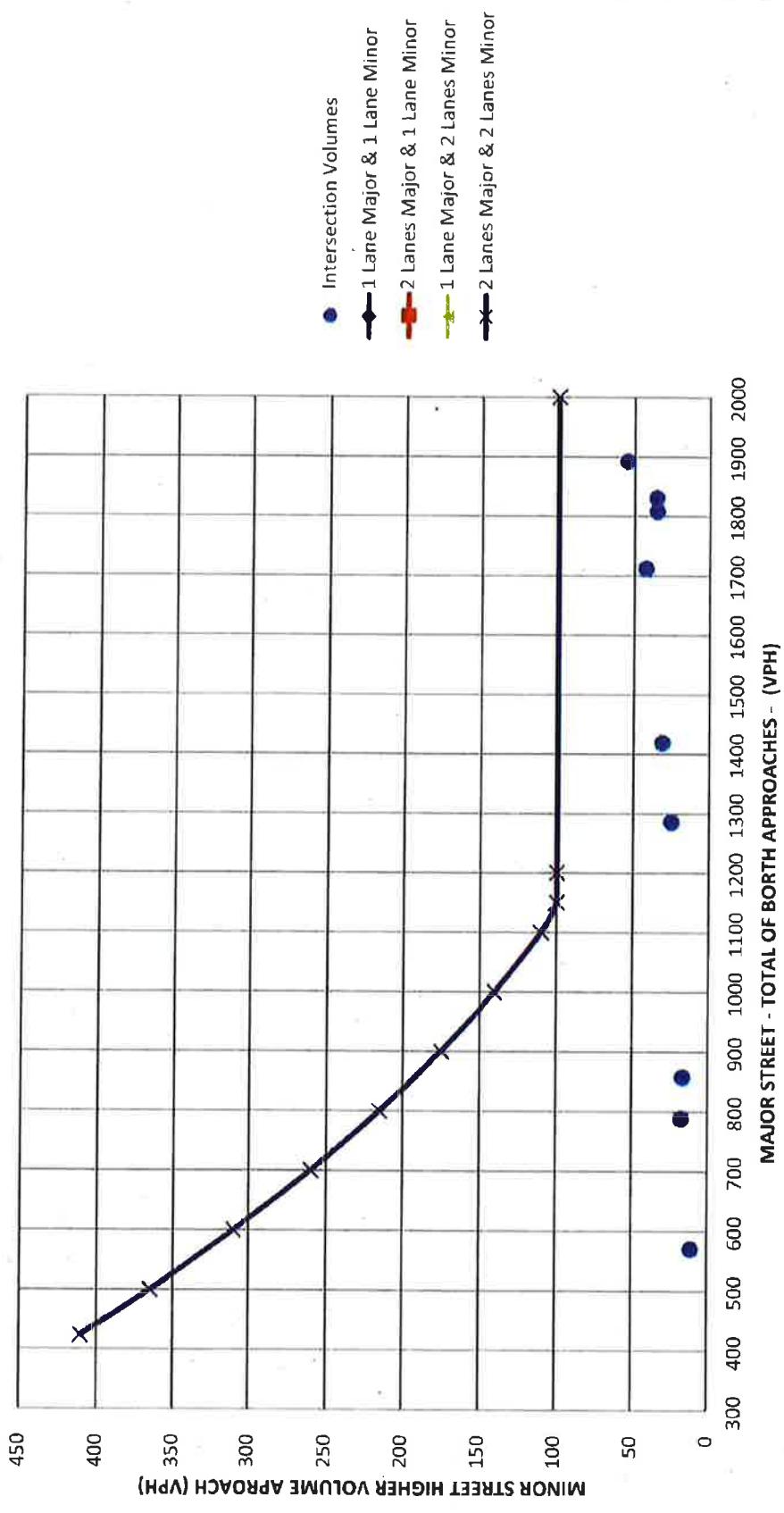
**2021 NO-BUILD FIGURE 4C-2**  
**WARRANT 2 - FOUR HOUR VEHICULAR WARRANT (>40 MPH)**



4/2/2019

JOB: 19003182A

**2021 NO-BUILD FIGURE 4C-4**  
**WARRANT 3 - PEAK HOUR WARRANT (>40 MPH)**



4/2/2019

JOB: 19003182A

**TABLE TSW-1 B**
**SIGNAL WARRANTS ANALYSIS**  
(Based on National Manual of Uniform Traffic Control Devices)

INTERSECTION DATA		CHARACTERISTICS	
MAJOR STREET: US Route 6		Number Of Lanes For Moving Traffic By Approach	
MINOR STREET: Bear Mountain Parkway NB Ramps		Major Street (Excluding Auxiliary Lanes) = 2	
LOCATION: Cortlandt, NY		Minor Street (Including Auxiliary Lanes) = 2	
DATE: 4/1/19		Speed	
VOLUME BASIS..... 2021 Build Traffic Volumes		85 % Speed >= 40 mph (Y or N)----> Y	
CONDITION ..... Typical Weekday		Population	
		Community < 10,000 (Y or N)----> N	

TIME	VOLUMES		WARRANT 1 CONDITION A		WARRANT 1 CONDITION B		WARRANT 1 CONDITION A & B COMBINED				WARRANT MET?			
			Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	1A	1B	COMBINED	
Hour Begin	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	Major Street	Minor Street	1A	1B	1A	1B
12:00 AM	204	5	420	140	630	70	336	112	504	56	NO	NO	NO	NO
01:00 AM	112	3	420	140	630	70	338	112	504	56	NO	NO	NO	NO
02:00 AM	83	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO
03:00 AM	91	2	420	140	630	70	336	112	504	56	NO	NO	NO	NO
04:00 AM	126	3	420	140	630	70	336	112	504	56	NO	NO	NO	NO
05:00 AM	312	8	420	140	630	70	336	112	504	56	NO	NO	NO	NO
06:00 AM	856	22	420	140	630	70	336	112	504	56	NO	NO	NO	NO
07:00 AM	1810	49	420	140	630	70	336	112	504	56	NO	NO	NO	NO
08:00 AM	1982	61	420	140	630	70	336	112	504	56	NO	NO	NO	NO
09:00 AM	1494	36	420	140	630	70	336	112	504	56	NO	NO	NO	YFS
10:00 AM	1875	40	420	140	630	70	336	112	504	56	NO	NO	NO	NO
11:00 AM	1879	40	420	140	630	70	336	112	504	56	NO	NO	NO	NO
12:00 PM	1886	41	420	140	630	70	336	112	504	56	NO	NO	NO	NO
01:00 PM	1879	40	420	140	630	70	336	112	504	56	NO	NO	NO	NO
02:00 PM	1886	41	420	140	630	70	336	112	504	56	NO	NO	NO	NO
03:00 PM	1894	41	420	140	630	70	336	112	504	56	NO	NO	NO	NO
04:00 PM	2507	79	420	140	630	70	336	112	504	56	NO	YES	NO	YES
05:00 PM	2545	77	420	140	630	70	336	112	504	56	NO	YES	NO	YES
06:00 PM	1898	42	420	140	630	70	336	112	504	56	NO	NO	NO	NO
07:00 PM	1605	41	420	140	630	70	336	112	504	56	NO	NO	NO	NO
08:00 PM	1347	29	420	140	630	70	336	112	504	56	NO	NO	NO	NO
09:00 PM	910	20	420	140	630	70	336	112	504	56	NO	NO	NO	NO
10:00 PM	606	14	420	140	630	70	336	112	504	56	NO	NO	NO	NO

TOTAL HOURS MEETING WARRANTS	0	2	0	3
TOTAL HOURS NEEDED TO SATISFY	8	8	8*	8*

MINIMUM VEHICULAR VOLUME	WARRANT 1A: NOT SATISFIED -- NO SIGNAL
INTERRUPTION OF CONTINUOUS TRAFFIC	WARRANT 1B: NOT SATISFIED -- NO SIGNAL
COMBINED CONDITION	WARRANT 1A & 1B COMBINED: NOT SATISFIED -- NO SIGNAL
*NOTE: FOR COMBINED WARRANT BOTH CONDITIONS 1A & 1B MUST BE SATISFIED FOR 8 HOURS.	

**TABLE TSW-2 B**

**SIGNAL WARRANTS ANALYSIS**  
(Based on National Manual of Uniform Traffic Control Devices)

INTERSECTION DATA	
MAJOR STREET:	US Route 6
MINOR STREET:	Bear Mountain Parkway NB Ramps
LOCATION:	Cortlandt, NY
DATE:	4/1/19
VOLUME BASIS.....	2021 Build Traffic Volumes
CONDITION .....	Typical Weekday

CHARACTERISTICS	
Number Of Lanes For Moving Traffic By Approach	
Major Street (Excluding Auxiliary Lanes) =	2
Minor Street (Including Auxiliary Lanes) =	2
Speed	
85 % Speed >= 40 mph (Y or N)----->	Y
Median	
Raised median 4' or more in width on major street (Y or N)?----->	N
Population	
Community < 10,000 (Y or N)----->	N

TIME Hour Begin	VOLUMES		WARRANT 2 <sup>1</sup>  SEE FIGURE 4C-2	WARRANT 3 <sup>1</sup>  SEE FIGURE 4C-4	WARRANT MET?			
	Major Street	Minor Street			Major Street	Minor Street	2	3
12:00 AM	204	5					NO	NO
01:00 AM	112	3					NO	NO
02:00 AM	83	2					NO	NO
03:00 AM	91	2					NO	NO
04:00 AM	126	3					NO	NO
05:00 AM	312	8					NO	NO
06:00 AM	856	22					NO	NO
07:00 AM	1810	49					NO	NO
08:00 AM	1982	61					NO	NO
09:00 AM	1494	36					NO	NO
10:00 AM	1875	40					NO	NO
11:00 AM	1879	40					NO	NO
12:00 PM	1886	41					NO	NO
01:00 PM	1879	40					NO	NO
02:00 PM	1886	41					NO	NO
03:00 PM	1894	41					NO	NO
04:00 PM	2507	79					NO	NO
05:00 PM	2545	77					NO	NO
06:00 PM	1898	42					NO	NO
07:00 PM	1905	41					NO	NO
08:00 PM	1347	29					NO	NO
09:00 PM	910	20					NO	NO
10:00 PM	606	14					NO	NO

NOTE major peds = highest volume  
on major street crosswalk

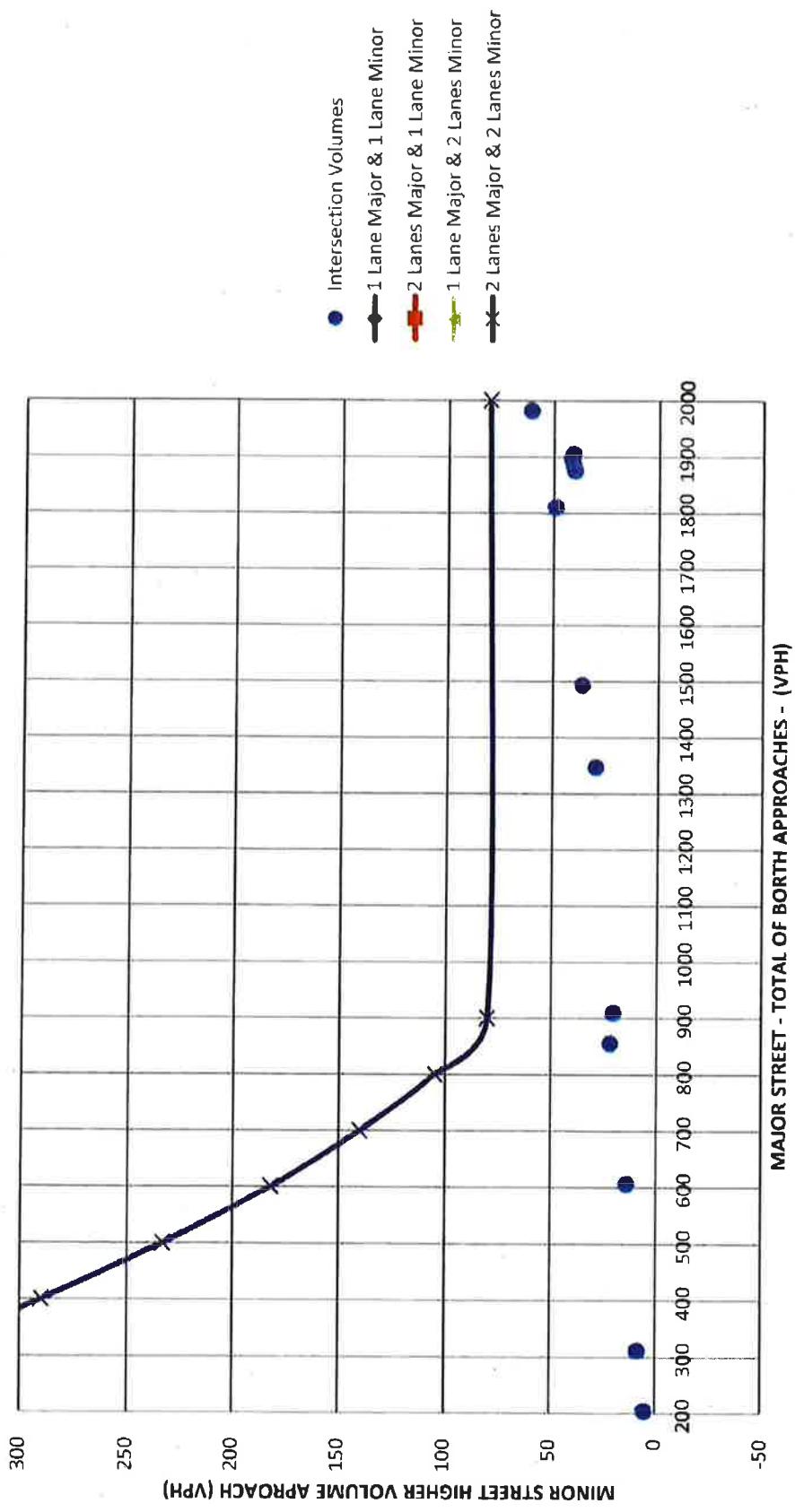
TOTAL HOURS MEETING WARRANTS	0	0
TOTAL HOURS NEEDED TO SATISFY	4	1

FOUR HOUR VEHICULAR VOLUME	WARRANT 2: NOT SATISFIED -- NO SIGNAL
PEAK HOUR VOLUME	WARRANT 3: NOT SATISFIED -- NO SIGNAL

NOTES:

- 1) VOLUMES FOR WARRANTS 2 AND 3 ARE COMPARED TO MUTCD FIGURE 4C-2 FOR WARRANT 2 AND FIGURE 4C-4 FOR WARRANT 3 ATTACHED

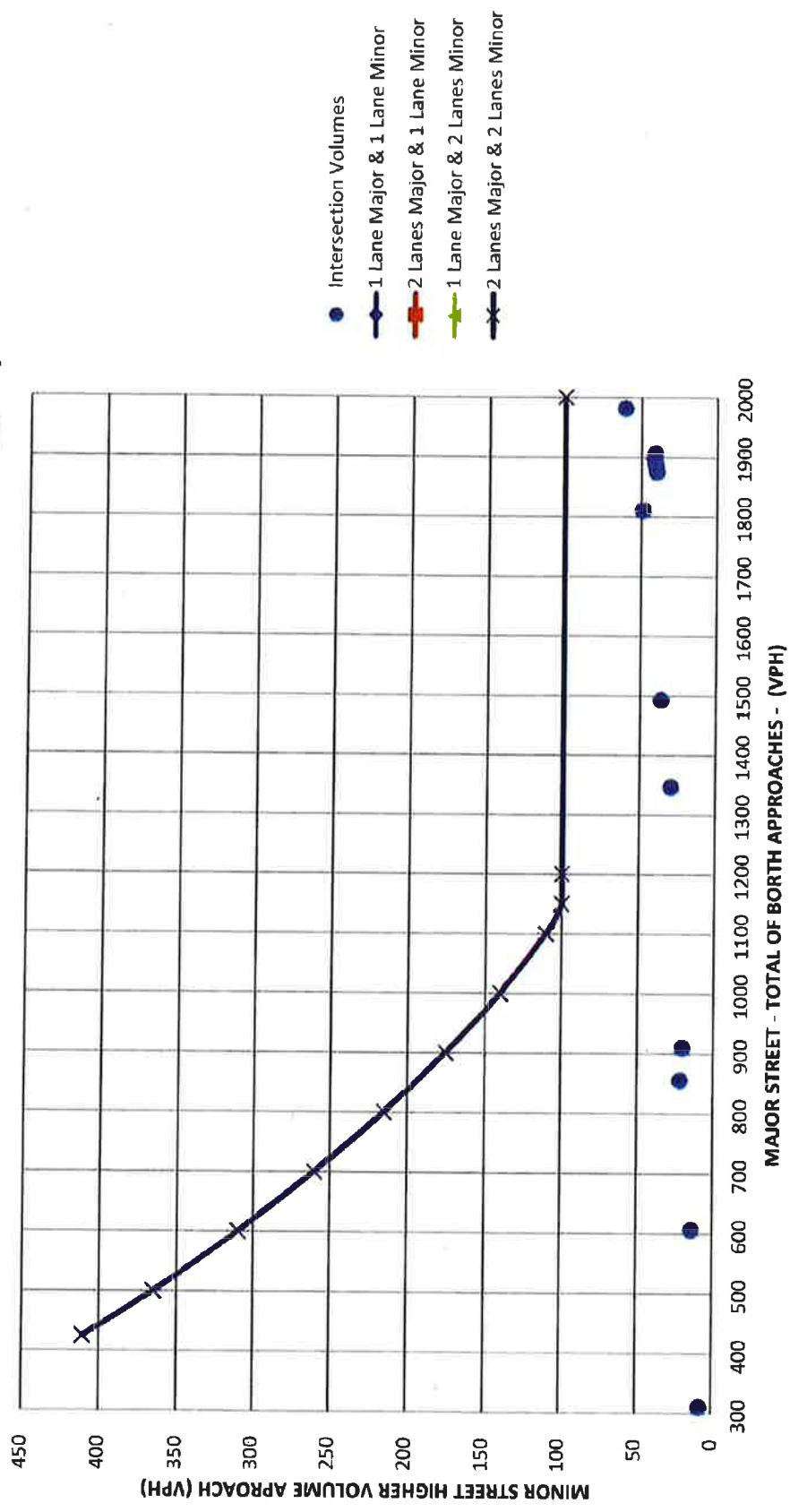
**2021 BUILD FIGURE 4C-2**  
**WARRANT 2 - FOUR HOUR VEHICULAR WARRANT (>40 MPH)**



4/2/2019

JOB: 19003182A

**2021 BUILD FIGURE 4C-4**  
**WARRANT 3 - PEAK HOUR WARRANT (>40 MPH)**



4/2/2019

JOB: 19003182A



Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

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***GASLAND CORTLANDT***

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**APPENDIX C**

**LEVEL OF SERVICE STANDARDS**



## LEVEL OF SERVICE STANDARDS

### **LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS**

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

**LOS A** describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

**LOS B** describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

**LOS C** describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

**LOS D** describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.



**LOS E** describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.

**LOS F** describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 19-8 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 19-8**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c $\leq$ 1.0	v/c > 1.0
$\leq 0$	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.



**LEVEL OF SERVICE CRITERIA**

**FOR TWO-WAY STOP-CONTROLLED (TWSC) UNSIGNALIZED INTERSECTIONS**

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 20-2 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 20-2**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c $\leq 1.0$	v/c $> 1.0$
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street.

LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 20-2 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.



**LEVEL OF SERVICE CRITERIA**

**FOR ALL-WAY STOP-CONTROLLED (AWSC) UNSIGNALIZED INTERSECTIONS**

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 21-8. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 21-8 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 21-8**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c $\leq 1.0$	v/c $> 1.0$
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.



Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

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**GASLAND CORTLANDT**

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**APPENDIX D**

**CAPACITY ANALYSIS**

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	26	0	18	4	0	5	23	515	0	1	561	42
Future Volume (vph)	26	0	18	4	0	5	23	515	0	1	561	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850					0.989	
Flt Protected			0.950			0.950		0.950		0.950		
Satd. Flow (prot)	0	1796	1456	0	1916	1503	1661	3177	0	1719	3292	0
Flt Permitted		0.755			0.740		0.238			0.306		
Satd. Flow (perm)	0	1428	1456	0	1492	1503	416	3177	0	554	3292	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85					11	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			316	
Travel Time (s)		3.5			7.4			5.4			5.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	2%	11%	2%	2%	20%	4%	5%	2%	2%	5%	10%
Adj. Flow (vph)	27	0	19	4	0	5	24	536	0	1	584	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	19	0	4	5	24	536	0	1	628	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	

Synchro 10 Report

Page 1

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases		6			2			7	4	3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	53.3	53.3		53.3	53.3	28.6	24.0		27.9	22.4		
Actuated g/C Ratio	0.59	0.59		0.59	0.59	0.32	0.27		0.31	0.25		
v/c Ratio	0.03	0.02		0.00	0.01	0.11	0.63		0.00	0.76		
Control Delay	11.6	0.1		12.2	0.0	19.0	32.2		22.0	41.8		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.1		
Total Delay	11.6	0.1		12.2	0.0	19.0	32.2		22.0	41.9		
LOS	B	A		B	A	B	C		C	D		
Approach Delay	6.8			5.4			31.6			41.9		
Approach LOS	A			A			C			D		
Queue Length 50th (ft)	5	0		1	0	9	145		0	199		
Queue Length 95th (ft)	23	0		7	0	22	190		m1	242		
Internal Link Dist (ft)	73			247			235			236		
Turn Bay Length (ft)					75	115			90			
Base Capacity (vph)	845	896		882	924	290	1412		327	1469		
Starvation Cap Reductn	0	0		0	0	0	0		0	144		
Spillback Cap Reductn	80	0		0	0	0	0		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.04	0.02		0.00	0.01	0.08	0.38		0.00	0.47		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow											
Natural Cycle:	60											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.76											
Intersection Signal Delay:	35.7											
Intersection LOS: D												

## 2019 Existing Traffic Volumes

Peak AM Hour

### 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

10/18/2019

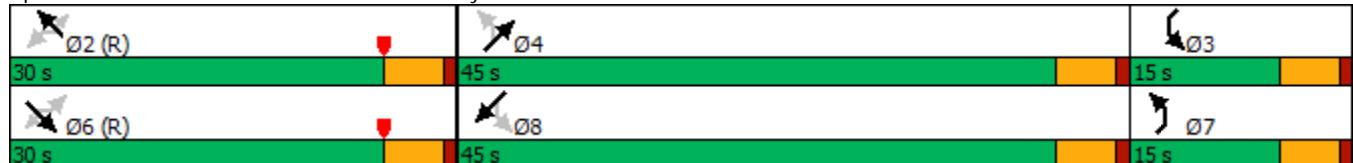
Intersection Capacity Utilization 37.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2019 Existing Traffic Volumes  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour

10/18/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations													
Traffic Volume (vph)	1	0	1	301	2	85	28	517	1	1	518	146	
Future Volume (vph)	1	0	1	301	2	85	28	517	1	1	518	146	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11	
Grade (%)		0%			-6%			1%			0%		
Storage Length (ft)	0		0	135		0	45		0	50		0	
Storage Lanes	0		0	1		0	1		0	0		0	
Taper Length (ft)	25			86			86			86			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	
Ped Bike Factor							1.00				1.00		
Fr <sub>t</sub>		0.932			0.853						0.967		
Flt Protected		0.976		0.950			0.950						
Satd. Flow (prot)	0	1694	0	1745	1582	0	1669	3276	0	0	3222	0	
Flt Permitted			0.950			0.259					0.955		
Satd. Flow (perm)	0	1736	0	1745	1582	0	455	3276	0	0	3077	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		182			94						39		
Link Speed (mph)		30			30			40			40		
Link Distance (ft)		126			290			316			430		
Travel Time (s)		2.9			6.6			5.4			7.3		
Confl. Peds. (#/hr)							1					1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	4%	6%	2%	2%	4%	5%	
Adj. Flow (vph)	1	0	1	334	2	94	31	574	1	1	576	162	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	2	0	334	96	0	31	575	0	0	739	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)	11				11			11			11		
Link Offset(ft)	0				0			0			0		
Crosswalk Width(ft)	16				16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		2	2		2	2		1	2		
Detector Template	Left								Left				
Leading Detector (ft)	20	83		83	83		83	83		20	83		
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		0	-5		
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		0	-5		
Detector 1 Size(ft)	20	40		40	40		40	40		20	40		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		43		43	43		43	43			43		
Detector 2 Size(ft)		40		40	40		40	40			40		
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		

Synchro 10 Report

Page 4

## 2019 Existing Traffic Volumes

Peak AM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Turn Type	Perm	NA		Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4		8	8		1	6			2	
Permitted Phases		4					6			2		
Detector Phase	4	4		8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0		30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%		33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0		24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	5.0		21.5	21.5		54.3	54.3			47.2		
Actuated g/C Ratio	0.06		0.24	0.24		0.60	0.60			0.52		
v/c Ratio	0.01		0.80	0.21		0.09	0.29			0.45		
Control Delay	0.0		46.8	6.8		21.1	20.9			17.4		
Queue Delay	0.0		0.0	0.0		0.0	0.9			0.0		
Total Delay	0.0		46.8	6.8		21.1	21.8			17.4		
LOS	A		D	A		C	C			B		
Approach Delay					37.9			21.8		17.4		
Approach LOS					D			C		B		
Queue Length 50th (ft)	0		179	1		16	177			130		
Queue Length 95th (ft)	0		252	35		47	236			#267		
Internal Link Dist (ft)	46			210			236			350		
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	337		483	505		396	1977			1630		
Starvation Cap Reductn	0		0	0		0	1077			0		
Spillback Cap Reductn	0		0	19		0	0			15		
Storage Cap Reductn	0		0	0		0	0			0		
Reduced v/c Ratio	0.01		0.69	0.20		0.08	0.64			0.46		

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

## 2019 Existing Traffic Volumes

Peak AM Hour

10/18/2019

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 23.8

Intersection LOS: C

Intersection Capacity Utilization 56.6%

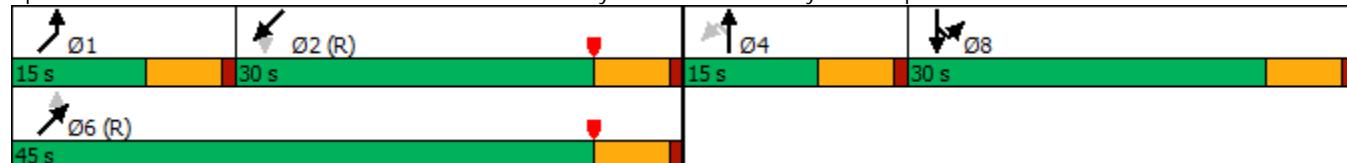
ICU Level of Service B

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

## Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2019 Existing Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	2	11	13	2	25	2	772	41	189	635	15
Future Volume (vph)	3	2	11	13	2	25	2	772	41	189	635	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.905			0.860			0.992			0.997	
Flt Protected		0.991		0.950						0.950		
Satd. Flow (prot)	0	1679	0	1745	1605	0	0	3363	0	1711	3462	0
Flt Permitted		0.991		0.950						0.950		
Satd. Flow (perm)	0	1679	0	1745	1605	0	0	3363	0	1711	3462	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		117			261			430			307	
Travel Time (s)		2.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)	1		1				1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	4%	2%	6%	5%	2%	4%	2%
Adj. Flow (vph)	3	2	12	14	2	27	2	821	44	201	676	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	14	29	0	0	867	0	201	692	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15

2019 Existing Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/18/2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↔			↑	↑		↔	↔		↑	↑	
Traffic Vol, veh/h	3	2	11	13	2	25	2	772	41	189	635	15
Future Vol, veh/h	3	2	11	13	2	25	2	772	41	189	635	15
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	4	2	6	5	2	4	2
Mvmt Flow	3	2	12	14	2	27	2	821	44	201	676	16
Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	1504	1956	348	1589	1942	434	693	0	0	865	0	0
Stage 1	1087	1087	-	847	847	-	-	-	-	-	-	-
Stage 2	417	869	-	742	1095	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.84	6.74	5.74	6.58	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.34	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	91	70	654	103	99	592	898	-	-	774	-	-
Stage 1	245	308	-	390	454	-	-	-	-	-	-	-
Stage 2	598	386	-	441	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	68	52	653	78	73	591	897	-	-	774	-	-
Mov Cap-2 Maneuver	68	52	-	78	73	-	-	-	-	-	-	-
Stage 1	244	228	-	388	452	-	-	-	-	-	-	-
Stage 2	566	384	-	317	271	-	-	-	-	-	-	-
Approach	SE	NW			NE			SW				
HCM Control Delay, s	30	29.9			0			2.5				
HCM LOS	D	D										
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	N1	NWL	N2	SELn1	SWL	SWT	SWR	
Capacity (veh/h)	897	-	-	78	387	161	774	-	-	-	-	
HCM Lane V/C Ratio	0.002	-	-	0.177	0.074	0.106	0.26	-	-	-	-	
HCM Control Delay (s)	9	0	-	60.8	15	30	11.3	-	-	-	-	
HCM Lane LOS	A	A	-	F	C	D	B	-	-	-	-	
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0.3	1	-	-	-	-	

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	51	0	45	1	0	0	38	806	2	1	688	61
Future Volume (vph)	51	0	45	1	0	0	38	806	2	1	688	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850								0.988	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	2080	1694	3270	0	1719	3390	0
Flt Permitted		0.757			0.721		0.199			0.160		
Satd. Flow (perm)	0	1459	1584	0	1454	2080	354	3270	0	290	3390	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85									13	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			316	
Travel Time (s)		3.5			7.4			5.4			5.4	
Confl. Peds. (#/hr)						4					4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	55	0	48	1	0	0	41	867	2	1	740	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	48	0	1	0	41	869	0	1	806	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	45.0	45.0		45.0			36.8	33.0		33.2	28.2	
Actuated g/C Ratio	0.50	0.50		0.50			0.41	0.37		0.37	0.31	
v/c Ratio	0.08	0.06		0.00			0.17	0.72		0.01	0.75	
Control Delay	15.9	1.5		17.0			17.3	27.9		19.0	38.2	
Queue Delay	0.0	0.0		0.0			0.0	6.8		0.0	0.7	
Total Delay	15.9	1.5		17.0			17.3	34.7		19.0	38.9	
LOS	B	A		B			B	C		B	D	
Approach Delay	9.2			17.0				33.9			38.9	
Approach LOS	A			B				C			D	
Queue Length 50th (ft)	17	0		0			13	199		1	257	
Queue Length 95th (ft)	46	8		4			27	270		m1	317	
Internal Link Dist (ft)	73			247				235			236	
Turn Bay Length (ft)						115				90		
Base Capacity (vph)	728	833		726			309	1457		281	1513	
Starvation Cap Reductn	0	0		0			0	0		0	369	
Spillback Cap Reductn	98	0		0			0	534		0	0	
Storage Cap Reductn	0	0		0			0	0		0	0	
Reduced v/c Ratio	0.09	0.06		0.00			0.13	0.94		0.00	0.70	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

## 2019 Existing Traffic Volumes

Peak PM Hour

### 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

10/18/2019

Intersection Signal Delay: 34.7

Intersection LOS: C

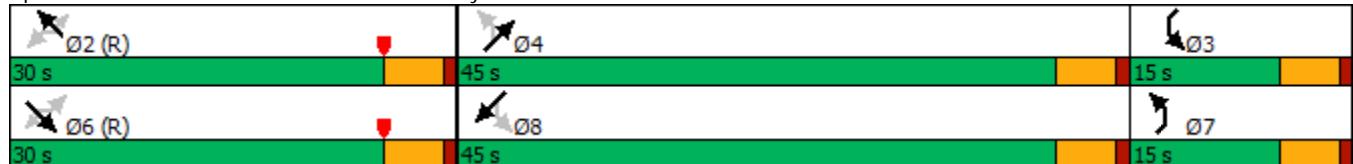
Intersection Capacity Utilization 48.5%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2019 Existing Traffic Volumes  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour

10/18/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations													
Traffic Volume (vph)	1	0	5	402	0	47	31	821	0	2	702	151	
Future Volume (vph)	1	0	5	402	0	47	31	821	0	2	702	151	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11	
Grade (%)		0%			-6%			1%			0%		
Storage Length (ft)	0		0	135		0	45		0	50		0	
Storage Lanes	0		0	1		0	1		0	0		0	
Taper Length (ft)	25			86			86			86			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	
Ped Bike Factor							1.00				1.00		
Fr <sub>t</sub>		0.887			0.850						0.973		
Flt Protected		0.992		0.950			0.950						
Satd. Flow (prot)	0	1639	0	1762	1576	0	1686	3404	0	0	3314	0	
Flt Permitted			0.950			0.167					0.954		
Satd. Flow (perm)	0	1652	0	1762	1576	0	296	3404	0	0	3161	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		182			479						28		
Link Speed (mph)		30			30			40			40		
Link Distance (ft)		126			391			316			430		
Travel Time (s)		2.9			8.9			5.4			7.3		
Confl. Peds. (#/hr)							3				3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	1	0	5	423	0	49	33	864	0	2	739	159	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	6	0	423	49	0	33	864	0	0	900	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)		11			11			11			11		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		2	2		2	2		1	2		
Detector Template	Left								Left				
Leading Detector (ft)	20	83		83	83		83	83		20	83		
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		0	-5		
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		0	-5		
Detector 1 Size(ft)	20	40		40	40		40	40		20	40		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		43		43	43		43	43			43		
Detector 2 Size(ft)		40		40	40		40	40			40		
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex		

Synchro 10 Report

Page 4

## 2019 Existing Traffic Volumes

Peak PM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0				0.0
Turn Type	Perm	NA		Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4		8	8		1	6				2
Permitted Phases		4					6					2
Detector Phase	4	4		8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0		30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%		33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0		24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	5.0		26.0	26.0		49.8	49.8				42.6	
Actuated g/C Ratio	0.06		0.29	0.29		0.55	0.55				0.47	
v/c Ratio	0.02		0.83	0.06		0.13	0.46				0.60	
Control Delay	0.2		45.0	0.1		21.5	28.5				22.6	
Queue Delay	0.0		0.0	0.0		0.0	8.3				0.4	
Total Delay	0.2		45.0	0.2		21.5	36.8				23.0	
LOS	A		D	A		C	D				C	
Approach Delay	0.2			40.3			36.2				23.0	
Approach LOS	A			D			D				C	
Queue Length 50th (ft)	0		218	0		17	277				199	
Queue Length 95th (ft)	0		#357	0		m34	342				#389	
Internal Link Dist (ft)	46			311			236				350	
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	329		524	805		303	1884				1509	
Starvation Cap Reductn	0		0	0		0	977				0	
Spillback Cap Reductn	0		0	240		0	0				220	
Storage Cap Reductn	0		0	0		0	0				0	
Reduced v/c Ratio	0.02		0.81	0.09		0.11	0.95				0.70	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

## 2019 Existing Traffic Volumes

Peak PM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 31.7

Intersection LOS: C

Intersection Capacity Utilization 64.7%

ICU Level of Service C

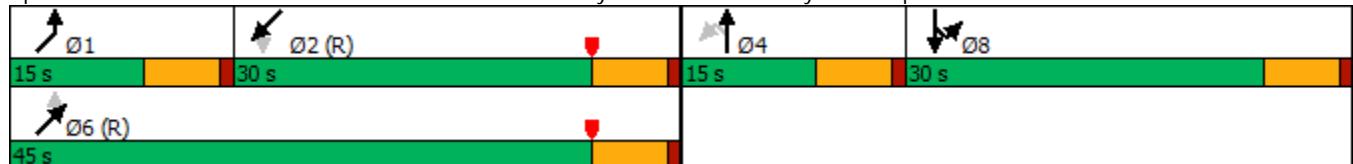
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2019 Existing Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	3	19	15	0	28	12	1140	71	265	826	14
Future Volume (vph)	4	3	19	15	0	28	12	1140	71	265	826	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.901			0.850			0.991			0.998	
Flt Protected		0.992		0.950						0.950		
Satd. Flow (prot)	0	1638	0	1745	1484	0	0	3490	0	1711	3532	0
Flt Permitted		0.992		0.950						0.950		
Satd. Flow (perm)	0	1638	0	1745	1484	0	0	3490	0	1711	3532	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		115			268			430			307	
Travel Time (s)		2.6			6.1			7.3			5.2	
Confl. Peds. (#/hr)	3		3			3						3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	5%	2%	2%	11%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	3	19	15	0	29	12	1163	72	270	843	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	15	29	0	0	1247	0	270	857	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 73.5%

ICU Level of Service D

Analysis Period (min) 15

2019 Existing Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/18/2019

Intersection												
Int Delay, s/veh	5.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↔			↑	↑		↔	↔		↑	↑	
Traffic Vol, veh/h	4	3	19	15	0	28	12	1140	71	265	826	14
Future Vol, veh/h	4	3	19	15	0	28	12	1140	71	265	826	14
Conflicting Peds, #/hr	3	0	3	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	5	2	2	11	2	2	2	2	2	2
Mvmt Flow	4	3	19	15	0	29	12	1163	72	270	843	14
Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	2002	2652	435	2189	2623	621	860	0	0	1235	0	0
Stage 1	1393	1393	-	1223	1223	-	-	-	-	-	-	-
Stage 2	609	1259	-	966	1400	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.9	6.74	5.74	6.72	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.35	3.52	4.02	3.41	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	39	26	568	41	42	438	777	-	-	560	-	-
Stage 1	161	224	-	249	328	-	-	-	-	-	-	-
Stage 2	464	258	-	339	280	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	22	13	565	20	21	437	775	-	-	560	-	-
Mov Cap-2 Maneuver	22	13	-	20	21	-	-	-	-	-	-	-
Stage 1	152	116	-	236	311	-	-	-	-	-	-	-
Stage 2	410	245	-	165	144	-	-	-	-	-	-	-
Approach	SE	NW			NE			SW				
HCM Control Delay, s	111.4	143.9			0.3			4.1				
HCM LOS	F	F										
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	N1	NWL	N2	SEL	N1	SWL	SWT	SWR
Capacity (veh/h)	775	-	-	20	437	58	560	-	-	-	-	-
HCM Lane V/C Ratio	0.016	-	-	0.765	0.065	0.457	0.483	-	-	-	-	-
HCM Control Delay (s)	9.7	0.2	-	\$ 386.7	13.8	111.4	17.3	-	-	-	-	-
HCM Lane LOS	A	A	-	F	B	F	C	-	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	2.1	0.2	1.8	2.6	-	-	-	-	-

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	44	0	25	1	0	7	44	867	2	10	871	61
Future Volume (vph)	44	0	25	1	0	7	44	867	2	10	871	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850			0.850					0.990	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	1768	1694	3270	0	1594	3392	0
Flt Permitted		0.757			0.726		0.143			0.169		
Satd. Flow (perm)	0	1459	1584	0	1464	1768	255	3270	0	284	3392	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			85						10	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			316	
Travel Time (s)		3.5			7.4			5.4			5.4	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	5%
Adj. Flow (vph)	47	0	27	1	0	7	47	922	2	11	927	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	47	27	0	1	7	47	924	0	11	992	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 1

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	40.9	40.9		40.9	40.9	40.1	36.7		37.5	32.5		
Actuated g/C Ratio	0.45	0.45		0.45	0.45	0.45	0.41		0.42	0.36		
v/c Ratio	0.07	0.04		0.00	0.01	0.23	0.69		0.06	0.81		
Control Delay	18.7	0.1		19.0	0.0	17.4	24.7		19.5	37.8		
Queue Delay	0.0	0.0		0.0	0.0	0.0	22.8		0.0	19.0		
Total Delay	18.7	0.1		19.0	0.0	17.4	47.5		19.5	56.9		
LOS	B	A		B	A	B	D		B	E		
Approach Delay	11.9				2.4			46.0			56.5	
Approach LOS	B				A			D			E	
Queue Length 50th (ft)	16	0		0	0	14	189		6	319		
Queue Length 95th (ft)	43	0		4	0	27	284		m8	382		
Internal Link Dist (ft)	73			247			235			236		
Turn Bay Length (ft)					75	115				90		
Base Capacity (vph)	663	766		665	850	285	1528		278	1513		
Starvation Cap Reductn	0	0		0	0	0	0		0	536		
Spillback Cap Reductn	34	0		0	0	0	627		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.07	0.04		0.00	0.01	0.16	1.03		0.04	1.02		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow												
Natural Cycle:	65											
Control Type:	Actuated-Coordinated											

2019 Existing Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/18/2019

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 49.7

Intersection LOS: D

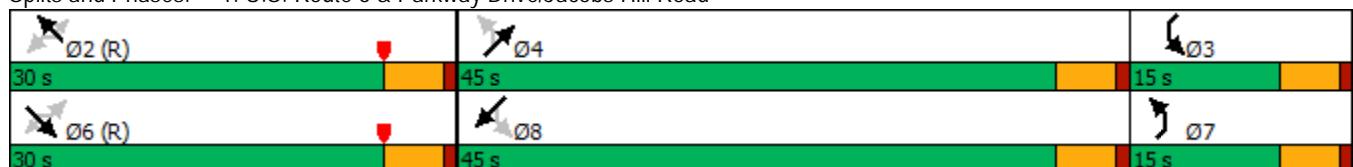
Intersection Capacity Utilization 51.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



## 2019 Existing Traffic Volumes

Peak Saturday Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↙	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	0	8	419	2	61	40	875	3	8	875	199
Future Volume (vph)	6	0	8	419	2	61	40	875	3	8	875	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		0	45		0	50		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99		1.00				0.99	
Fr <sub>t</sub>		0.923			0.855						0.972	
Flt Protected		0.979		0.950			0.950					
Satd. Flow (prot)	0	1583	0	1762	1566	0	1702	3404	0	0	3309	0
Flt Permitted				0.950			0.101				0.947	
Satd. Flow (perm)	0	1617	0	1762	1566	0	181	3404	0	0	3133	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			64						29	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			316			430	
Travel Time (s)		2.9			6.6			5.4			7.3	
Confl. Peds. (#/hr)						1	4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	17%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	6	0	8	441	2	64	42	921	3	8	921	209
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	14	0	441	66	0	42	924	0	0	1138	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11				11			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		1	2	
Detector Template	Left								Left			
Leading Detector (ft)	20	83		83	83		83	83		20	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		0	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		0	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43			43	
Detector 2 Size(ft)		40		40	40		40	40			40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 4

## 2019 Existing Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak Saturday Hour

10/18/2019

	↖	↑	↗	↙	↓	↘	↗	↑	↖	↙	↗	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Turn Type	Perm	NA		Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4		8	8		1	6			2	
Permitted Phases		4					6			2		
Detector Phase	4	4		8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0		30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%		33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0		24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	5.0		27.3	27.3		48.5	48.5				41.0	
Actuated g/C Ratio	0.06		0.30	0.30		0.54	0.54				0.46	
v/c Ratio	0.05		0.83	0.13		0.21	0.50				0.79	
Control Delay	0.4		43.3	7.0		22.7	29.5				28.8	
Queue Delay	0.0		0.0	0.2		0.0	26.8				48.8	
Total Delay	0.4		43.3	7.2		22.7	56.3				77.6	
LOS	A		D	A		C	E				E	
Approach Delay	0.4			38.6			54.8				77.6	
Approach LOS	A			D			D				E	
Queue Length 50th (ft)	0		224	1		20	290				296	
Queue Length 95th (ft)	0		#381	29		m43	363				#557	
Internal Link Dist (ft)	46			210			236				350	
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	325		542	526		249	1833				1443	
Starvation Cap Reductn	0		0	0		0	942				0	
Spillback Cap Reductn	0		0	172		0	0				419	
Storage Cap Reductn	0		0	0		0	0				0	
Reduced v/c Ratio	0.04		0.81	0.19		0.17	1.04				1.11	
<b>Intersection Summary</b>												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow												
Natural Cycle:	90											
Control Type:	Actuated-Coordinated											

## 2019 Existing Traffic Volumes

Peak Saturday Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 61.3

Intersection LOS: E

Intersection Capacity Utilization 76.2%

ICU Level of Service D

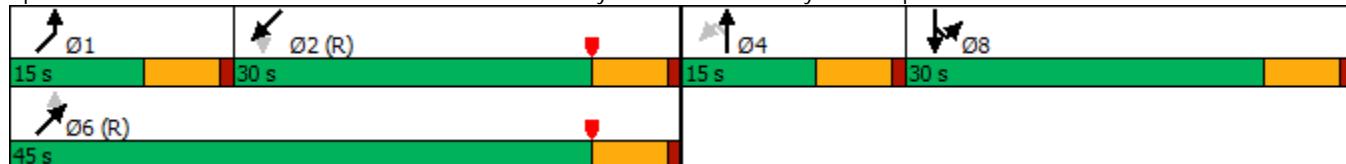
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2019 Existing Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak Saturday Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	29	25	0	49	11	1223	63	267	1032	27
Future Volume (vph)	4	4	29	25	0	49	11	1223	63	267	1032	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.893			0.850			0.993			0.996	
Flt Protected		0.995		0.950						0.950		
Satd. Flow (prot)	0	1663	0	1711	1615	0	0	3497	0	1711	3525	0
Flt Permitted		0.995		0.950						0.950		
Satd. Flow (perm)	0	1663	0	1711	1615	0	0	3497	0	1711	3525	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		117			261			430			307	
Travel Time (s)		2.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)	4		4			4						4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	4	30	26	0	51	11	1274	66	278	1075	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	26	51	0	0	1351	0	278	1103	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 83.5%

ICU Level of Service E

Analysis Period (min) 15

2019 Existing Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak Saturday Hour  
10/18/2019

Intersection												
Int Delay, s/veh 24.4												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↔			↑	↑		↔	↔		↑	↑	
Traffic Vol, veh/h	4	4	29	25	0	49	11	1223	63	267	1032	27
Future Vol, veh/h	4	4	29	25	0	49	11	1223	63	267	1032	27
Conflicting Peds, #/hr	4	0	4	0	0	0	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	4	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	30	26	0	51	11	1274	66	278	1075	28
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	2312	3011	560	2429	2992	674	1107	0	0	1340	0	0
Stage 1	1649	1649	-	1329	1329	-	-	-	-	-	-	-
Stage 2	663	1362	-	1100	1663	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.84	6.78	5.74	6.54	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.78	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.78	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.54	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	23	16	479	28	26	428	626	-	-	510	-	-
Stage 1	113	170	-	216	299	-	-	-	-	-	-	-
Stage 2	432	231	-	285	221	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	11	7	475	~8	11	426	624	-	-	510	-	-
Mov Cap-2 Maneuver	11	7	-	~8	11	-	-	-	-	-	-	-
Stage 1	105	77	-	201	278	-	-	-	-	-	-	-
Stage 2	352	215	-	114	100	-	-	-	-	-	-	-
Approach												
SE			NW			NE			SW			
HCM Control Delay, \$	325.4			\$ 658.2			0.5			4.1		
HCM LOS	F			F								
Minor Lane/Major Mvmt												
Capacity (veh/h)	624	-	-	8	426	37	510	-	-	-	-	
HCM Lane V/C Ratio	0.018	-	-	3.255	0.12	1.042	0.545	-	-	-	-	
HCM Control Delay (s)	10.9	0.4		\$ 1919.8	14.6	\$ 325.4	20.2	-	-	-	-	
HCM Lane LOS	B	A	-	F	B	F	C	-	-	-	-	
HCM 95th %tile Q(veh)	0.1	-	-	4.5	0.4	3.9	3.2	-	-	-	-	
Notes												
~:	Volume exceeds capacity	\$:	Delay exceeds 300s	+	Computation Not Defined	*	All major volume in platoon					

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	27	0	19	4	0	5	24	630	0	1	689	44
Future Volume (vph)	27	0	19	4	0	5	24	630	0	1	689	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850						0.991
Flt Protected			0.950			0.950		0.950			0.950	
Satd. Flow (prot)	0	1796	1456	0	1916	1503	1661	3177	0	1719	3301	0
Flt Permitted		0.755			0.739		0.191			0.255		
Satd. Flow (perm)	0	1428	1456	0	1490	1503	334	3177	0	461	3301	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85						9
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			316	
Travel Time (s)		3.5			7.4			5.4			5.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	2%	11%	2%	2%	20%	4%	5%	2%	2%	5%	10%
Adj. Flow (vph)	28	0	20	4	0	5	25	656	0	1	718	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	28	20	0	4	5	25	656	0	1	764	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	

Synchro 10 Report

Page 1

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases		6			2			7	4	3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	49.1	49.1		49.1	49.1	32.6	28.1		32.1	26.5		
Actuated g/C Ratio	0.55	0.55		0.55	0.55	0.36	0.31		0.36	0.29		
v/c Ratio	0.04	0.02		0.00	0.01	0.12	0.66		0.00	0.78		
Control Delay	14.1	0.1		14.8	0.0	16.8	29.9		19.0	40.5		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.2		0.0	0.4		
Total Delay	14.1	0.1		14.8	0.0	16.8	30.1		19.0	40.9		
LOS	B	A		B	A	B	C		B	D		
Approach Delay	8.2			6.6			29.6			40.9		
Approach LOS	A			A			C			D		
Queue Length 50th (ft)	6	0		1	0	8	173		1	241		
Queue Length 95th (ft)	27	0		8	0	20	220		m1	281		
Internal Link Dist (ft)	73			247			235			236		
Turn Bay Length (ft)					75	115			90			
Base Capacity (vph)	779	833		813	859	284	1413		325	1472		
Starvation Cap Reductn	0	0		0	0	0	0		0	266		
Spillback Cap Reductn	57	0		0	0	0	224		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.04	0.02		0.00	0.01	0.09	0.55		0.00	0.63		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow											
Natural Cycle:	60											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.78											
Intersection Signal Delay:	34.5											
Intersection LOS: C												

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/18/2019

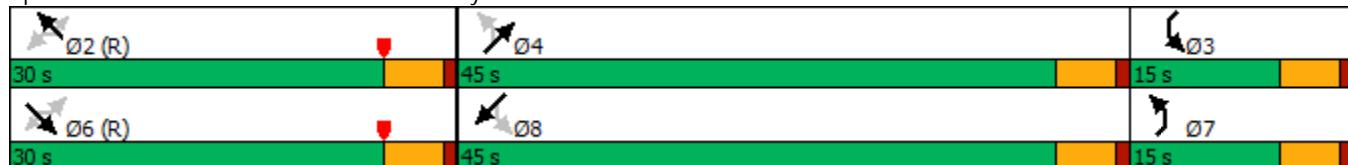
Intersection Capacity Utilization 41.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



## 2021 No-Build Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour

10/18/2019

	↑	↑	↗	↖	↓	↙	↗	↖	↗	↖	↙	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	1	0	1	323	2	137	35	626	1	1	596	163
Future Volume (vph)	1	0	1	323	2	137	35	626	1	1	596	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		0	45		0	50		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor							1.00				1.00	
Fr <sub>t</sub>		0.932			0.852						0.968	
Flt Protected		0.976		0.950			0.950					
Satd. Flow (prot)	0	1694	0	1745	1580	0	1669	3276	0	0	3226	0
Flt Permitted				0.950			0.208				0.955	
Satd. Flow (perm)	0	1736	0	1745	1580	0	365	3276	0	0	3081	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			152						38	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			316			430	
Travel Time (s)		2.9			6.6			5.4			7.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	4%	6%	2%	2%	4%	5%
Adj. Flow (vph)	1	0	1	359	2	152	39	696	1	1	662	181
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	359	154	0	39	697	0	0	844	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11				11			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		1	2	
Detector Template	Left								Left			
Leading Detector (ft)	20	83		83	83		83	83		20	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		0	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		0	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43			43	
Detector 2 Size(ft)		40		40	40		40	40			40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 4

## 2021 No-Build Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour

10/18/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Turn Type	Perm	NA		Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4		8	8		1	6			2	
Permitted Phases		4					6			2		
Detector Phase	4	4		8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0		30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%		33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0		24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	5.0		22.7	22.7		53.1	53.1			45.8		
Actuated g/C Ratio	0.06		0.25	0.25		0.59	0.59			0.51		
v/c Ratio	0.01		0.82	0.30		0.13	0.36			0.53		
Control Delay	0.0		46.8	6.0		21.7	24.8			19.8		
Queue Delay	0.0		0.0	0.6		0.0	1.9			0.0		
Total Delay	0.0		46.8	6.5		21.7	26.6			19.8		
LOS	A		D	A		C	C			B		
Approach Delay				34.7			26.4			19.8		
Approach LOS				C			C			B		
Queue Length 50th (ft)	0		191	1		21	217			164		
Queue Length 95th (ft)	0		272	43		m50	280			#358		
Internal Link Dist (ft)	46			210			236			350		
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	337		489	552		345	1934			1585		
Starvation Cap Reductn	0		0	0		0	1034			0		
Spillback Cap Reductn	0		0	171		0	0			58		
Storage Cap Reductn	0		0	0		0	0			0		
Reduced v/c Ratio	0.01		0.73	0.40		0.11	0.77			0.55		

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 25.7

Intersection LOS: C

Intersection Capacity Utilization 63.6%

ICU Level of Service B

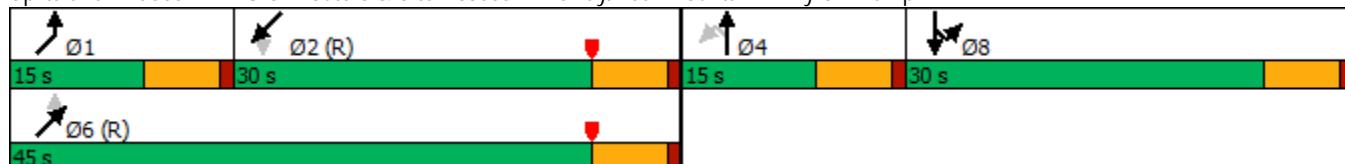
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 No-Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	2	11	18	2	35	2	863	81	208	724	16
Future Volume (vph)	3	2	11	18	2	35	2	863	81	208	724	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.905			0.858			0.987			0.997	
Flt Protected		0.991		0.950						0.950		
Satd. Flow (prot)	0	1679	0	1745	1600	0	0	3348	0	1711	3462	0
Flt Permitted		0.991		0.950						0.950		
Satd. Flow (perm)	0	1679	0	1745	1600	0	0	3348	0	1711	3462	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		91		261			430			307		
Travel Time (s)		2.1			5.9			7.3			5.2	
Confl. Peds. (#/hr)	1		1				1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	4%	2%	6%	5%	2%	4%	2%
Adj. Flow (vph)	3	2	12	19	2	37	2	918	86	221	770	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	19	39	0	0	1006	0	221	787	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	61.0%				ICU Level of Service B							
Analysis Period (min)	15											

2021 No-Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/18/2019

Intersection

Int Delay, s/veh 3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
----------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Lane Configurations												
Traffic Vol, veh/h	3	2	11	18	2	35	2	863	81	208	724	16
Future Vol, veh/h	3	2	11	18	2	35	2	863	81	208	724	16
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	4	2	6	5	2	4	2
Mvmt Flow	3	2	12	19	2	37	2	918	86	221	770	17

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	1687	2230	396	1794	2195	503	788	0	0	1004	0	0
Stage 1	1222	1222	-	965	965	-	-	-	-	-	-	-
Stage 2	465	1008	-	829	1230	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.84	6.74	5.74	6.58	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.34	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	67	48	610	75	73	538	827	-	-	686	-	-
Stage 1	204	268	-	339	411	-	-	-	-	-	-	-
Stage 2	561	335	-	398	326	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	45	32	609	52	49	537	826	-	-	686	-	-
Mov Cap-2 Maneuver	45	32	-	52	49	-	-	-	-	-	-	-
Stage 1	203	181	-	337	409	-	-	-	-	-	-	-
Stage 2	516	333	-	261	221	-	-	-	-	-	-	-

Approach	SE	NW			NE			SW			
HCM Control Delay, s	44	47.2			0			2.8			
HCM LOS	E	E									
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	Ln1	NWL	Ln2	SELn1	SWL	SWT	SWR
Capacity (veh/h)	826	-	-	52	349	109	686	-	-	-	-
HCM Lane V/C Ratio	0.003	-	-	0.368	0.113	0.156	0.323	-	-	-	-
HCM Control Delay (s)	9.4	0	-	110.1	16.6	44	12.7	-	-	-	-
HCM Lane LOS	A	A	-	F	C	E	B	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0.4	0.5	1.4	-	-	-	-

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	53	0	47	1	0	0	40	1003	2	1	866	63
Future Volume (vph)	53	0	47	1	0	0	40	1003	2	1	866	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%				2%			-1%
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850								0.990	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	2080	1694	3270	0	1719	3398	0
Flt Permitted		0.757			0.720		0.151			0.118		
Satd. Flow (perm)	0	1459	1584	0	1452	2080	269	3270	0	214	3398	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85									11	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			316	
Travel Time (s)		3.5			7.4			5.4			5.4	
Confl. Peds. (#/hr)						4					4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	57	0	51	1	0	0	43	1078	2	1	931	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	51	0	1	0	43	1080	0	1	999	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2		2
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83		83
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5		-5
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5		-5
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40		40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex							
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)		43	43		43	43	43	43		43		43
Detector 2 Size(ft)		40	40		40	40	40	40		40		40
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 2 Channel												

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	39.7	39.7		39.7		41.7	38.3		38.9	33.9		
Actuated g/C Ratio	0.44	0.44		0.44		0.46	0.43		0.43	0.38		
v/c Ratio	0.09	0.07		0.00		0.20	0.78		0.01	0.78		
Control Delay	18.9	2.0		19.0		16.2	26.2		17.0	36.0		
Queue Delay	0.0	0.0		0.0		0.0	51.0		0.0	18.4		
Total Delay	18.9	2.0		19.0		16.2	77.2		17.0	54.4		
LOS	B	A		B		B	E		B	D		
Approach Delay	10.9			19.0			74.9			54.4		
Approach LOS	B			B			E			D		
Queue Length 50th (ft)	20	0		0		12	237		1	318		
Queue Length 95th (ft)	50	11		4		25	338		m1	381		
Internal Link Dist (ft)	73			247			235			236		
Turn Bay Length (ft)						115			90			
Base Capacity (vph)	643	745		640		295	1526		271	1516		
Starvation Cap Reductn	0	0		0		0	0		0	530		
Spillback Cap Reductn	56	0		0		0	777		0	0		
Storage Cap Reductn	0	0		0		0	0		0	0		
Reduced v/c Ratio	0.10	0.07		0.00		0.15	1.44		0.00	1.01		

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

## 2021 No-Build Traffic Volumes

Peak PM Hour

## 1: U.S. Route 6 &amp; Parkway Drive/Jacobs Hill Road

10/18/2019

Intersection Signal Delay: 62.6

Intersection LOS: E

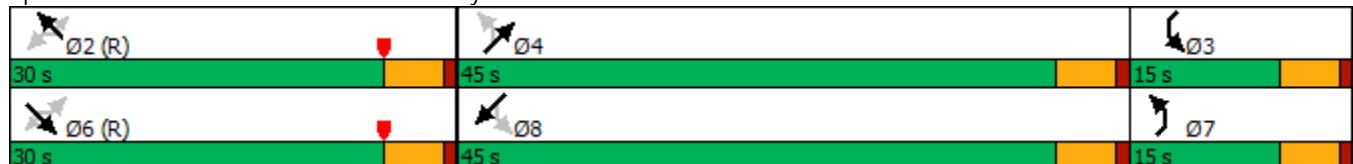
Intersection Capacity Utilization 51.2%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 &amp; Parkway Drive/Jacobs Hill Road



## 2021 No-Build Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour

10/18/2019

	↖	↑	↗	↙	↓	↘	↑	↗	↖	↓	↙	↖	↗	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR		
Lane Configurations														
Traffic Volume (vph)	1	0	5	446	0	104	42	1009	0	2	825	180		
Future Volume (vph)	1	0	5	446	0	104	42	1009	0	2	825	180		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11		
Grade (%)		0%			-6%			1%			0%			
Storage Length (ft)	0		0	135		0	45		0	50		0		
Storage Lanes	0		0	1		0	1		0	0		0		
Taper Length (ft)	25			86			86			86				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95		
Ped Bike Factor							1.00					1.00		
Frt		0.887			0.850							0.973		
Flt Protected		0.992		0.950			0.950							
Satd. Flow (prot)	0	1639	0	1762	1576	0	1686	3404	0	0	3314	0		
Flt Permitted			0.950			0.108					0.953			
Satd. Flow (perm)	0	1652	0	1762	1576	0	192	3404	0	0	3158	0		
Right Turn on Red			Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)		182			472						28			
Link Speed (mph)		30			30			40			40			
Link Distance (ft)		126			290			316			430			
Travel Time (s)		2.9			6.6			5.4			7.3			
Confl. Peds. (#/hr)							3					3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%		
Adj. Flow (vph)	1	0	5	469	0	109	44	1062	0	2	868	189		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	6	0	469	109	0	44	1062	0	0	1059	0		
Enter Blocked Intersection	No													
Lane Alignment	Left	Left	Right											
Median Width(ft)		11			11			11			11			
Link Offset(ft)		0			0			0			0			
Crosswalk Width(ft)		16			16			16			16			
Two way Left Turn Lane														
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04		
Turning Speed (mph)	15		9	15		9	15		9	15		9		
Number of Detectors	1	2		2	2		2	2		1	2			
Detector Template	Left								Left					
Leading Detector (ft)	20	83		83	83		83	83		20	83			
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		0	-5			
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		0	-5			
Detector 1 Size(ft)	20	40		40	40		40	40		20	40			
Detector 1 Type	Cl+Ex	Cl+Ex												
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0			
Detector 2 Position(ft)		43		43	43		43	43			43			
Detector 2 Size(ft)		40		40	40		40	40			40			
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			

Synchro 10 Report

Page 4

## 2021 No-Build Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour

10/18/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Turn Type	Perm	NA		Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4		8	8		1	6			2	
Permitted Phases		4					6			2		
Detector Phase	4	4		8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0		30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%		33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0		24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	5.0		29.9	29.9		45.9	45.9				38.3	
Actuated g/C Ratio	0.06		0.33	0.33		0.51	0.51				0.43	
v/c Ratio	0.02		0.80	0.13		0.22	0.61				0.78	
Control Delay	0.2		39.6	0.3		22.0	32.3				29.6	
Queue Delay	0.0		0.0	0.1		0.0	50.7				49.2	
Total Delay	0.2		39.6	0.4		22.0	83.0				78.8	
LOS	A		D	A		C	F				E	
Approach Delay	0.2			32.2			80.6				78.8	
Approach LOS	A			C			F				E	
Queue Length 50th (ft)	0		235	0		22	344				275	
Queue Length 95th (ft)	0		#419	0		m37	412				#504	
Internal Link Dist (ft)	46			210			236				350	
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	329		586	839		247	1734				1359	
Starvation Cap Reductn	0		0	0		0	886				0	
Spillback Cap Reductn	0		0	268		0	0				413	
Storage Cap Reductn	0		0	0		0	0				0	
Reduced v/c Ratio	0.02		0.80	0.19		0.18	1.25				1.12	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

## 2021 No-Build Traffic Volumes

Peak PM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 69.5

Intersection LOS: E

Intersection Capacity Utilization 76.3%

ICU Level of Service D

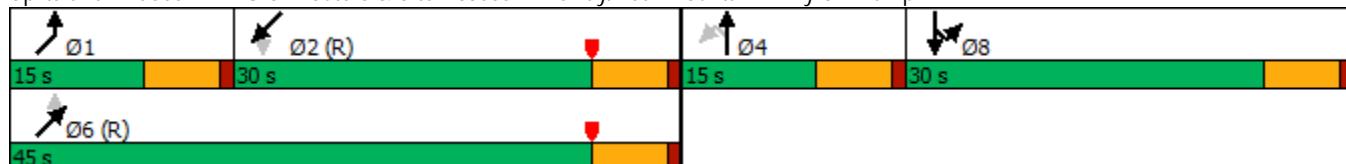
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 No-Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	3	20	26	0	44	12	1303	140	304	967	15
Future Volume (vph)	4	3	20	26	0	44	12	1303	140	304	967	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.900			0.850			0.986			0.998	
Flt Protected		0.993		0.950						0.950		
Satd. Flow (prot)	0	1637	0	1745	1484	0	0	3472	0	1711	3532	0
Flt Permitted		0.993		0.950						0.950		
Satd. Flow (perm)	0	1637	0	1745	1484	0	0	3472	0	1711	3532	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		114			261			430			307	
Travel Time (s)		2.6			5.9			7.3			5.2	
Confl. Peds. (#/hr)	3		3			3						3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	5%	2%	2%	11%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	3	20	27	0	45	12	1330	143	310	987	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	0	27	45	0	0	1485	0	310	1002	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 84.7% ICU Level of Service E

Analysis Period (min) 15

2021 No-Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/18/2019

Intersection

Int Delay, s/veh 47.9

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	3	20	26	0	44	12	1303	140	304	967	15
Future Vol, veh/h	4	3	20	26	0	44	12	1303	140	304	967	15
Conflicting Peds, #/hr	3	0	3	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	5	2	2	11	2	2	2	2	2	2
Mvmt Flow	4	3	20	27	0	45	12	1330	143	310	987	15

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	2310	3115	507	2544	3051	740	1005	0	0	1473	0	0
Stage 1	1618	1618	-	1426	1426	-	-	-	-	-	-	-
Stage 2	692	1497	-	1118	1625	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.9	6.74	5.74	6.72	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.35	3.52	4.02	3.41	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	23	13	510	~ 24	24	369	685	-	-	454	-	-
Stage 1	118	176	-	195	274	-	-	-	-	-	-	-
Stage 2	416	200	-	283	228	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	8	4	507	~ 4	7	368	683	-	-	454	-	-
Mov Cap-2 Maneuver	8	4	-	~ 4	7	-	-	-	-	-	-	-
Stage 1	105	56	-	174	245	-	-	-	-	-	-	-
Stage 2	326	179	-	81	72	-	-	-	-	-	-	-

Approach	SE	NW			NE			SW				
HCM Control Delay, \$	572.4	\$ 1586.5				0.5			6.7			
HCM LOS	F	F										
<hr/>												
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	n1	NWL	n2	SELn1	SWL	SWT	SWR	
Capacity (veh/h)	683	-	-	4	368	21	454	-	-	-	-	
HCM Lane V/C Ratio	0.018	-	-	6.633	0.122	1.312	0.683	-	-	-	-	
HCM Control Delay (s)	10.4	0.5	\$ 4244.2	16.1	\$ 572.4	28.4	-	-	-	-	-	
HCM Lane LOS	B	A	-	F	C	F	D	-	-	-	-	
HCM 95th %tile Q(veh)	0.1	-	-	4.9	0.4	3.6	5.1	-	-	-	-	

Notes

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

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	46	0	26	1	0	7	46	1084	2	10	1105	63
Future Volume (vph)	46	0	26	1	0	7	46	1084	2	10	1105	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850			0.850					0.992	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	1768	1694	3270	0	1594	3401	0
Flt Permitted		0.757			0.725		0.096			0.116		
Satd. Flow (perm)	0	1459	1584	0	1462	1768	171	3270	0	195	3401	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			85						8	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			316	
Travel Time (s)		3.5			7.4			5.4			5.4	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	5%
Adj. Flow (vph)	49	0	28	1	0	7	49	1153	2	11	1176	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	28	0	1	7	49	1155	0	11	1243	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 1

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	35.9	35.9		35.9	35.9	45.3	41.7		41.8	37.3		
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.50	0.46		0.46	0.41		
v/c Ratio	0.08	0.04		0.00	0.01	0.26	0.76		0.06	0.88		
Control Delay	21.3	0.1		21.0	0.0	19.9	23.8		18.5	32.2		
Queue Delay	0.0	0.0		0.0	0.0	0.0	51.7		0.0	49.2		
Total Delay	21.3	0.1		21.0	0.0	19.9	75.5		18.5	81.4		
LOS	C	A		C	A	B	E		B	F		
Approach Delay	13.6			2.6			73.3			80.8		
Approach LOS	B			A			E			F		
Queue Length 50th (ft)	19	0		0	0	12	222		5	398		
Queue Length 95th (ft)	46	0		4	0	26	374		m6	m361		
Internal Link Dist (ft)	73			247			235			236		
Turn Bay Length (ft)					75	115				90		
Base Capacity (vph)	582	683		583	756	263	1605		256	1516		
Starvation Cap Reductn	0	0		0	0	0	0		0	604		
Spillback Cap Reductn	15	0		0	0	0	937		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.09	0.04		0.00	0.01	0.19	1.73		0.04	1.36		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	0 (0%)											
Natural Cycle:	70											
Control Type:	Actuated-Coordinated											

2021 No-Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour  
10/18/2019

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 75.0

Intersection LOS: E

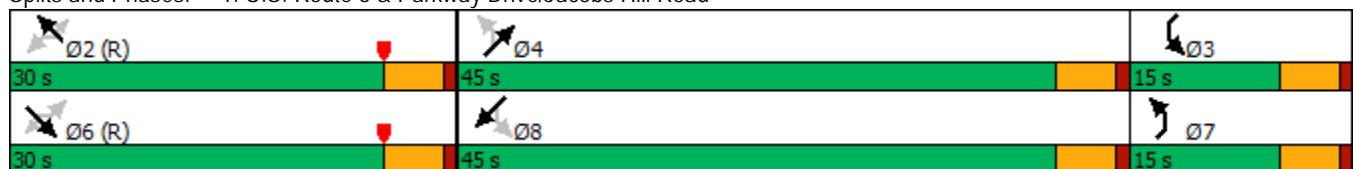
Intersection Capacity Utilization 55.8%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



## 2021 No-Build Traffic Volumes

Peak Saturday Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/18/2019

	↑	↑	↗	↙	↓	↖	↗	↖	↗	↖	↙	↗
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	0	8	467	2	145	53	1081	3	8	1027	238
Future Volume (vph)	6	0	8	467	2	145	53	1081	3	8	1027	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		0	45		0	50		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99		1.00				0.99	
Fr <sub>t</sub>		0.923			0.852						0.972	
Flt Protected		0.979		0.950			0.950					
Satd. Flow (prot)	0	1583	0	1762	1560	0	1702	3404	0	0	3308	0
Flt Permitted				0.950			0.120				0.945	
Satd. Flow (perm)	0	1617	0	1762	1560	0	215	3404	0	0	3126	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			153						30	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			316			430	
Travel Time (s)		2.9			6.6			5.4			7.3	
Confl. Peds. (#/hr)						1	4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	17%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	6	0	8	492	2	153	56	1138	3	8	1081	251
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	14	0	492	155	0	56	1141	0	0	1340	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11				11			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		2	2		1	2	
Detector Template	Left								Left			
Leading Detector (ft)	20	83		83	83		83	83		20	83	
Trailing Detector (ft)	0	-5		-5	-5		-5	-5		0	-5	
Detector 1 Position(ft)	0	-5		-5	-5		-5	-5		0	-5	
Detector 1 Size(ft)	20	40		40	40		40	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43		43	43			43	
Detector 2 Size(ft)		40		40	40		40	40			40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 4

## 2021 No-Build Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak Saturday Hour

10/18/2019

	↖	↑	↗	↙	↓	↘	↗	↑	↖	↙	↗	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Turn Type	Perm	NA		Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4		8	8		1	6			2	
Permitted Phases		4					6			2		
Detector Phase	4	4		8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0		30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%		33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0		24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	5.0		32.5	32.5		43.3	43.3				33.2	
Actuated g/C Ratio	0.06		0.36	0.36		0.48	0.48				0.37	
v/c Ratio	0.05		0.77	0.23		0.27	0.70				1.14	
Control Delay	0.4		36.4	4.9		22.8	34.9				104.2	
Queue Delay	0.0		0.0	0.3		0.0	50.7				2.4	
Total Delay	0.4		36.4	5.2		22.8	85.6				106.7	
LOS	A		D	A		C	F				F	
Approach Delay	0.4			28.9			82.6				106.7	
Approach LOS	A			C			F				F	
Queue Length 50th (ft)	0		240	1		27	371				~478	
Queue Length 95th (ft)	0		#451	43		m47	440				#700	
Internal Link Dist (ft)	46			210			236				350	
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	325		635	660		252	1639				1172	
Starvation Cap Reductn	0		0	0		0	832				0	
Spillback Cap Reductn	0		0	193		0	0				441	
Storage Cap Reductn	0		0	0		0	0				0	
Reduced v/c Ratio	0.04		0.77	0.33		0.22	1.41				1.83	
<b>Intersection Summary</b>												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow												
Natural Cycle:	100											
Control Type:	Actuated-Coordinated											

Maximum v/c Ratio: 1.14

Intersection Signal Delay: 81.5

Intersection LOS: F

Intersection Capacity Utilization 86.6%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

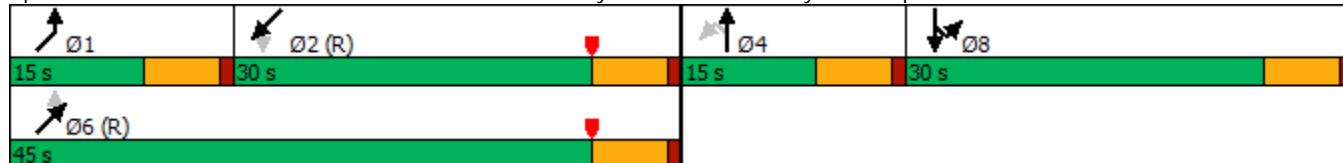
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 No-Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak Saturday Hour  
10/18/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	30	38	0	72	11	1401	139	308	1209	28
Future Volume (vph)	4	4	30	38	0	72	11	1401	139	308	1209	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.893			0.850			0.987			0.997	
Flt Protected		0.995		0.950						0.950		
Satd. Flow (prot)	0	1663	0	1711	1615	0	0	3476	0	1711	3529	0
Flt Permitted		0.995		0.950						0.950		
Satd. Flow (perm)	0	1663	0	1711	1615	0	0	3476	0	1711	3529	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		94			261			430			307	
Travel Time (s)		2.1			5.9			7.3			5.2	
Confl. Peds. (#/hr)	4		4			4						4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	4	31	40	0	75	11	1459	145	321	1259	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	40	75	0	0	1615	0	321	1288	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	96.6%							ICU Level of Service F				
Analysis Period (min)	15											

2021 No-Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak Saturday Hour  
10/18/2019

Intersection

Int Delay, s/veh 41

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	4	30	38	0	72	11	1401	139	308	1209	28
Future Vol, veh/h	4	4	30	38	0	72	11	1401	139	308	1209	28
Conflicting Peds, #/hr	4	0	4	0	0	0	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	4	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	31	40	0	75	11	1459	145	321	1259	29

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	2676	3546	652	2832	3488	806	1292	0	0	1604	0	0
Stage 1	1920	1920	-	1554	1554	-	-	-	-	-	-	-
Stage 2	756	1626	-	1278	1934	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.84	6.78	5.74	6.54	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.78	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.78	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.54	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	12	7	418	~ 15	14	355	532	-	-	404	-	-
Stage 1	77	126	-	164	244	-	-	-	-	-	-	-
Stage 2	382	174	-	230	171	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 3	~ 1	415	-	2	354	530	-	-	404	-	-
Mov Cap-2 Maneuver	~ 3	~ 1	-	-	2	-	-	-	-	-	-	-
Stage 1	60	26	-	127	189	-	-	-	-	-	-	-
Stage 2	233	135	-	~ 37	35	-	-	-	-	-	-	-

Approach	SE	NW			NE			SW		
HCM Control Delay, \$	3117.6				1.3			8.1		
HCM LOS	F									
Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	NWLn2	SELn1	SWL	SWT	SWR	
Capacity (veh/h)	530	-	-	-	354	7	404	-	-	
HCM Lane V/C Ratio	0.022	-	-	-	0.212	5.655	0.794	-	-	
HCM Control Delay (s)	11.9	1.3	-	-	17.9	3117.6	40.6	-	-	
HCM Lane LOS	B	A	-	-	C	F	E	-	-	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8	6.4	6.9	-	-	

Notes

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

2021 Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	33	0	19	4	0	5	24	673	0	1	733	50
Future Volume (vph)	33	0	19	4	0	5	24	673	0	1	733	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850					0.990	
Flt Protected			0.950			0.950		0.950		0.950		
Satd. Flow (prot)	0	1796	1456	0	1916	1503	1661	3177	0	1719	3297	0
Flt Permitted		0.755			0.735		0.177			0.241		
Satd. Flow (perm)	0	1428	1456	0	1482	1503	309	3177	0	436	3297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85					10	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			143	
Travel Time (s)		3.5			7.4			5.4			2.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	2%	11%	2%	2%	20%	4%	5%	2%	2%	5%	10%
Adj. Flow (vph)	34	0	20	4	0	5	25	701	0	1	764	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	20	0	4	5	25	701	0	1	816	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	

Synchro 10 Report

Page 1

2021 Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases		6			2			7	4	3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	47.5	47.5		47.5	47.5	34.3	29.7		33.5	28.1		
Actuated g/C Ratio	0.53	0.53		0.53	0.53	0.38	0.33		0.37	0.31		
v/c Ratio	0.05	0.02		0.01	0.01	0.12	0.67		0.00	0.79		
Control Delay	14.8	0.1		15.8	0.0	16.0	28.8		13.0	29.7		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.2		0.0	0.6		
Total Delay	14.8	0.1		15.8	0.0	16.0	29.1		13.0	30.4		
LOS	B	A		B	A	B	C		B	C		
Approach Delay	9.4			7.0			28.6			30.4		
Approach LOS	A			A			C			C		
Queue Length 50th (ft)	8	0		1	0	8	183		0	251		
Queue Length 95th (ft)	32	0		8	0	19	229		m1	m284		
Internal Link Dist (ft)	73			247			235			63		
Turn Bay Length (ft)					75	115				90		
Base Capacity (vph)	754	808		782	833	282	1425		325	1470		
Starvation Cap Reductn	0	0		0	0	0	0		0	312		
Spillback Cap Reductn	50	0		0	0	0	208		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.05	0.02		0.01	0.01	0.09	0.58		0.00	0.70		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow											
Natural Cycle:	60											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.79											
Intersection Signal Delay:	28.7											
Intersection LOS: C												

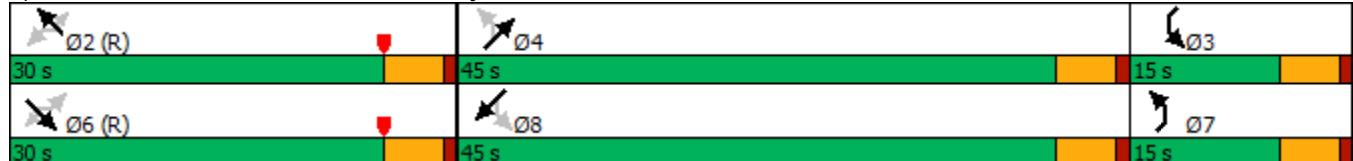
Intersection Capacity Utilization 42.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 &amp; Parkway Drive/Jacobs Hill Road



## 2021 Build Traffic Volumes

Peak AM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/22/2019

	↑	↑	↗	↖	↓	↙	↗	↖	↗	↖	↙	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	51	25	51	323	33	137	35	626	0	45	596	163
Future Volume (vph)	51	25	51	323	33	137	35	626	0	45	596	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		0	45		0	50		0
Storage Lanes	0		1	1		0	1		0	0		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt		0.850			0.879						0.970	
Flt Protected		0.968		0.950			0.950				0.997	
Satd. Flow (prot)	0	1803	1583	1745	1630	0	1669	3276	0	0	3228	0
Flt Permitted		0.371		0.950			0.144				0.862	
Satd. Flow (perm)	0	691	1583	1745	1630	0	253	3276	0	0	2791	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			152						34	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			173			430	
Travel Time (s)		2.9			6.6			2.9			7.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	4%	6%	2%	2%	4%	5%
Adj. Flow (vph)	57	28	57	359	37	152	39	696	0	50	662	181
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	57	359	189	0	39	696	0	0	893	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		1	2	
Detector Template									Left			
Leading Detector (ft)	83	83	83	83	83		83	83		20	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		0	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		0	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 4

## 2021 Build Traffic Volumes

Peak AM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/22/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				0.0
Turn Type	Perm	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8	8		1	6			2
Permitted Phases	4		4		6					2		
Detector Phase	4	4	4	8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0	15.0	30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%	16.7%	33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0	9.0	24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0		
Total Lost Time (s)		6.0	6.0	6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	9.0	9.0	21.4	21.4		41.6	41.6				34.0	
Actuated g/C Ratio	0.10	0.10	0.24	0.24		0.46	0.46				0.38	
v/c Ratio	1.23	0.18	0.87	0.38		0.19	0.46				0.83	
Control Delay	221.7	1.2	54.0	9.6		29.3	35.5				35.8	
Queue Delay	73.8	0.0	0.0	0.1		0.0	2.9				0.9	
Total Delay	295.5	1.2	54.0	9.7		29.3	38.4				36.7	
LOS	F	A	D	A		C	D				D	
Approach Delay	177.4			38.7			37.9				36.7	
Approach LOS	F			D			D				D	
Queue Length 50th (ft)	~60	0	191	16		23	221				~260	
Queue Length 95th (ft)	#154	0	#320	67		m47	279				#421	
Internal Link Dist (ft)	46			210			93				350	
Turn Bay Length (ft)			135			45						
Base Capacity (vph)	69	322	465	546		258	1513				1076	
Starvation Cap Reductn	0	0	0	0		0	682				0	
Spillback Cap Reductn	55	0	0	25		0	0				47	
Storage Cap Reductn	0	0	0	0		0	0				0	
Reduced v/c Ratio	6.07	0.18	0.77	0.36		0.15	0.84				0.87	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay: 46.2

Intersection LOS: D

Intersection Capacity Utilization 82.4%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

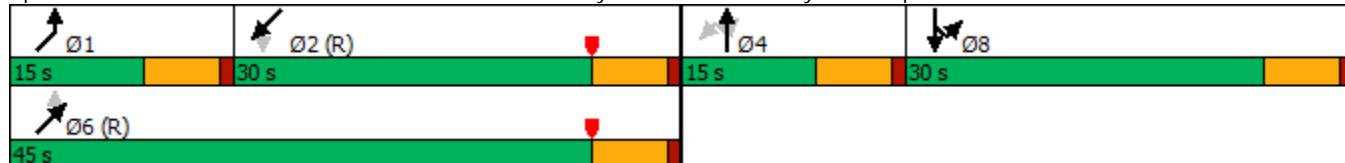
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	2	11	24	2	35	2	900	93	208	762	16
Future Volume (vph)	3	2	11	24	2	35	2	900	93	208	762	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.905			0.858			0.986			0.997	
Flt Protected		0.991		0.950						0.950		
Satd. Flow (prot)	0	1679	0	1745	1600	0	0	3344	0	1711	3462	0
Flt Permitted		0.991		0.950						0.950		
Satd. Flow (perm)	0	1679	0	1745	1600	0	0	3344	0	1711	3462	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		87		261			430			307		
Travel Time (s)		2.0			5.9			7.3			5.2	
Confl. Peds. (#/hr)	1		1				1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	4%	2%	6%	5%	2%	4%	2%
Adj. Flow (vph)	3	2	12	26	2	37	2	957	99	221	811	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	26	39	0	0	1058	0	221	828	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

2021 Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

Intersection												
Int Delay, s/veh	3.9											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	2	11	24	2	35	2	900	93	208	762	16
Future Vol, veh/h	3	2	11	24	2	35	2	900	93	208	762	16
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	4	2	6	5	2	4	2
Mvmt Flow	3	2	12	26	2	37	2	957	99	221	811	17
Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	1748	2323	416	1861	2282	529	829	0	0	1056	0	0
Stage 1	1263	1263	-	1011	1011	-	-	-	-	-	-	-
Stage 2	485	1060	-	850	1271	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.84	6.74	5.74	6.58	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.34	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	60	42	592	68	65	519	798	-	-	655	-	-
Stage 1	193	257	-	321	395	-	-	-	-	-	-	-
Stage 2	547	317	-	388	315	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	39	28	591	46	43	519	797	-	-	655	-	-
Mov Cap-2 Maneuver	39	28	-	46	43	-	-	-	-	-	-	-
Stage 1	192	170	-	319	393	-	-	-	-	-	-	-
Stage 2	502	315	-	249	209	-	-	-	-	-	-	-
Approach	SE	NW			NE			SW				
HCM Control Delay, s	50.4	71.7			0			2.8				
HCM LOS	F	F										
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	N1	NWL	N2	SELn1	SWL	SWT	SWR	
Capacity (veh/h)	797	-	-	46	325	96	655	-	-	-	-	
HCM Lane V/C Ratio	0.003	-	-	0.555	0.121	0.177	0.338	-	-	-	-	
HCM Control Delay (s)	9.5	0	-	155.1	17.6	50.4	13.3	-	-	-	-	
HCM Lane LOS	A	A	-	F	C	F	B	-	-	-	-	
HCM 95th %tile Q(veh)	0	-	-	2.1	0.4	0.6	1.5	-	-	-	-	

2021 Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	60	0	47	1	0	0	40	1052	2	1	914	70
Future Volume (vph)	60	0	47	1	0	0	40	1052	2	1	914	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%				2%			-1%
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850								0.989	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	2080	1694	3270	0	1719	3395	0
Flt Permitted		0.757			0.715		0.137			0.114		
Satd. Flow (perm)	0	1459	1584	0	1442	2080	244	3270	0	206	3395	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85									11	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			140	
Travel Time (s)		3.5			7.4			5.4			2.4	
Confl. Peds. (#/hr)						4					4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	0	51	1	0	0	43	1131	2	1	983	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	51	0	1	0	43	1133	0	1	1058	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2		2
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83		83
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5		-5
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5		-5
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40		40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex							
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)		43	43		43	43	43	43		43		43
Detector 2 Size(ft)		40	40		40	40	40	40		40		40
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 2 Channel												

2021 Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	38.3	38.3		38.3		42.9	39.5		40.4	35.2		
Actuated g/C Ratio	0.43	0.43		0.43		0.48	0.44		0.45	0.39		
v/c Ratio	0.10	0.07		0.00		0.21	0.79		0.01	0.79		
Control Delay	19.8	2.1		20.0		16.2	26.1		13.0	27.2		
Queue Delay	0.1	0.0		0.0		0.0	50.7		0.0	41.8		
Total Delay	19.9	2.1		20.0		16.2	76.8		13.0	69.0		
LOS	B	A		B		B	E		B	E		
Approach Delay	12.1			20.0			74.5			69.0		
Approach LOS	B			B			E			E		
Queue Length 50th (ft)	23	0		0		12	246		1	331		
Queue Length 95th (ft)	56	11		4		24	362		m1	m276		
Internal Link Dist (ft)	73			247			235			60		
Turn Bay Length (ft)						115				90		
Base Capacity (vph)	621	723		613		289	1547		271	1515		
Starvation Cap Reductn	0	0		0		0	0		0	536		
Spillback Cap Reductn	121	0		0		0	767		0	0		
Storage Cap Reductn	0	0		0		0	0		0	0		
Reduced v/c Ratio	0.13	0.07		0.00		0.15	1.45		0.00	1.08		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow												
Natural Cycle:	70											
Control Type: Actuated-Coordinated												
Maximum v/c Ratio:	0.79											

## 2021 Build Traffic Volumes

Peak PM Hour

### 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

10/22/2019

Intersection Signal Delay: 68.9

Intersection LOS: E

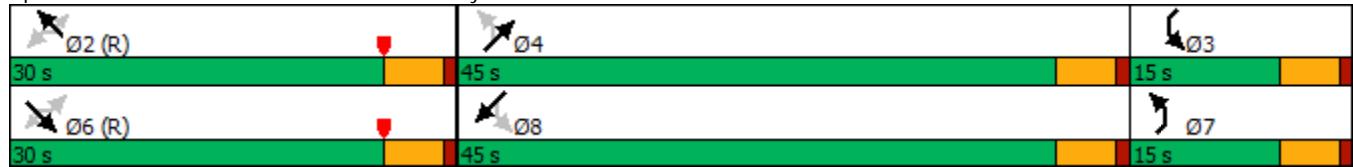
Intersection Capacity Utilization 51.6%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



## 2021 Build Traffic Volumes

Peak PM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/22/2019

	↑	↑	↗	↖	↓	↙	↗	↖	↗	↖	↙	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	56	28	60	446	35	104	42	1009	0	50	825	180
Future Volume (vph)	56	28	60	446	35	104	42	1009	0	50	825	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		0	45		0	50		0
Storage Lanes	0		1	1		0	1		0	0		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor							1.00				1.00	
Fr <sub>t</sub>		0.850			0.888						0.974	
Flt Protected		0.968		0.950			0.950				0.998	
Satd. Flow (prot)	0	1803	1583	1762	1647	0	1686	3404	0	0	3311	0
Flt Permitted		0.371		0.950			0.114				0.778	
Satd. Flow (perm)	0	691	1583	1762	1647	0	202	3404	0	0	2581	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			109						26	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			176			430	
Travel Time (s)		2.9			6.6			3.0			7.3	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Adj. Flow (vph)	59	29	63	469	37	109	44	1062	0	53	868	189
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	88	63	469	146	0	44	1062	0	0	1110	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		1	2	
Detector Template									Left			
Leading Detector (ft)	83	83	83	83	83		83	83		20	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		0	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		0	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 4

## 2021 Build Traffic Volumes

Peak PM Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/22/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				0.0
Turn Type	Perm	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8	8		1	6			2
Permitted Phases	4		4		4			6			2	
Detector Phase	4	4	4	8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0	15.0	30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%	16.7%	33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0	9.0	24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	9.0	9.0	24.0	24.0			39.0	39.0			31.4	
Actuated g/C Ratio	0.10	0.10	0.27	0.27			0.43	0.43			0.35	
v/c Ratio	1.28	0.20	1.00	0.28			0.24	0.72			1.21	
Control Delay	236.4	1.4	76.6	10.2			25.2	38.4			134.4	
Queue Delay	586.3	0.0	0.0	0.1			0.0	50.7			1.5	
Total Delay	822.7	1.4	76.6	10.3			25.2	89.1			135.9	
LOS	F	A	E	B			C	F			F	
Approach Delay	480.0			60.8			86.6				135.9	
Approach LOS	F			E				F			F	
Queue Length 50th (ft)	~64	0	266	16			24	345			~446	
Queue Length 95th (ft)	#158	0	#466	62			m36	411			#592	
Internal Link Dist (ft)	46			210			96				350	
Turn Bay Length (ft)			135				45					
Base Capacity (vph)	69	322	469	519			235	1475			916	
Starvation Cap Reductn	0	0	0	0			0	693			0	
Spillback Cap Reductn	69	0	0	31			0	0			209	
Storage Cap Reductn	0	0	0	0			0	0			0	
Reduced v/c Ratio	88.00	0.20	1.00	0.30			0.19	1.36			1.57	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 119.6

Intersection LOS: F

Intersection Capacity Utilization 107.2%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

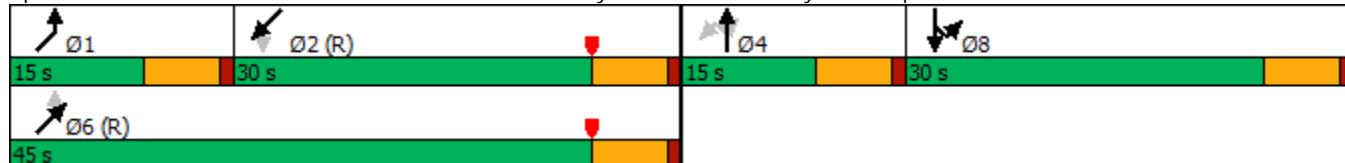
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	3	20	33	0	44	12	1344	154	304	1008	15
Future Volume (vph)	4	3	20	33	0	44	12	1344	154	304	1008	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.900			0.850			0.985			0.998	
Flt Protected		0.993		0.950						0.950		
Satd. Flow (prot)	0	1637	0	1745	1484	0	0	3469	0	1711	3532	0
Flt Permitted		0.993		0.950						0.950		
Satd. Flow (perm)	0	1637	0	1745	1484	0	0	3469	0	1711	3532	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		117			261			430			307	
Travel Time (s)		2.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)	3		3			3						3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	5%	2%	2%	11%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	3	20	34	0	45	12	1371	157	310	1029	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	0	34	45	0	0	1540	0	310	1044	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 89.2%

ICU Level of Service E

Analysis Period (min) 15

2021 Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Intersection

Int Delay, s/veh 10.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	3	20	33	0	44	12	1344	154	304	1008	15
Future Vol, veh/h	4	3	20	33	0	44	12	1344	154	304	1008	15
Conflicting Peds, #/hr	3	0	3	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	5	2	2	11	2	2	2	2	2	2
Mvmt Flow	4	3	20	34	0	45	12	1371	157	310	1029	15

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	2373	3212	528	2613	3141	767	1047	0	0	1528	0	0
Stage 1	1660	1660	-	1474	1474	-	-	-	-	-	-	-
Stage 2	713	1552	-	1139	1667	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.9	6.74	5.74	6.72	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.74	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.35	3.52	4.02	3.41	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	21	12	494	~ 21	22	355	660	-	-	432	-	-
Stage 1	111	168	-	184	262	-	-	-	-	-	-	-
Stage 2	405	189	-	276	220	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	7	~ 3	491	-	5	354	658	-	-	432	-	-
Mov Cap-2 Maneuver	7	~ 3	-	-	5	-	-	-	-	-	-	-
Stage 1	96	47	-	159	226	-	-	-	-	-	-	-
Stage 2	304	163	-	70	62	-	-	-	-	-	-	-

Approach	SE	NW			NE			SW			
HCM Control Delay, \$	773.5	0.7			7.3						
HCM LOS	F	-									
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	n1	NWL	n2	SELn1	SWL	SWT	SWR
Capacity (veh/h)	658	-	-	-	354	17	432	-	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	0.127	1.621	0.718	-	-	-	-
HCM Control Delay (s)	10.6	0.7	-	-	16.6	\$ 773.5	31.9	-	-	-	-
HCM Lane LOS	B	A	-	-	C	F	D	-	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	3.9	5.6	-	-	-	-

Notes

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

2021 Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	52	0	26	1	0	7	46	1124	2	10	1145	69
Future Volume (vph)	52	0	26	1	0	7	46	1124	2	10	1145	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850			0.850					0.992	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	1768	1694	3270	0	1594	3400	0
Flt Permitted		0.757			0.721		0.094			0.109		
Satd. Flow (perm)	0	1459	1584	0	1454	1768	167	3270	0	183	3400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			85						9	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			117	
Travel Time (s)		3.5			7.4			5.4			2.0	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	5%
Adj. Flow (vph)	55	0	28	1	0	7	49	1196	2	11	1218	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	28	0	1	7	49	1198	0	11	1291	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 1

2021 Build Traffic Volumes  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak Saturday Hour

10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	35.1	35.1		35.1	35.1	46.2	42.6		42.7	38.2		
Actuated g/C Ratio	0.39	0.39		0.39	0.39	0.51	0.47		0.47	0.42		
v/c Ratio	0.10	0.04		0.00	0.01	0.26	0.77		0.06	0.89		
Control Delay	21.6	0.1		21.0	0.0	19.9	23.9		16.6	29.1		
Queue Delay	0.0	0.0		0.0	0.0	0.0	51.5		0.0	48.8		
Total Delay	21.6	0.1		21.0	0.0	19.9	75.3		16.6	77.9		
LOS	C	A		C	A	B	E		B	E		
Approach Delay	14.4			2.6			73.2			77.4		
Approach LOS	B			A			E			E		
Queue Length 50th (ft)	22	0		0	0	12	228		5	412		
Queue Length 95th (ft)	50	0		4	0	26	394		m4	m266		
Internal Link Dist (ft)	73			247			235			37		
Turn Bay Length (ft)					75	115				90		
Base Capacity (vph)	568	669		566	740	262	1613		253	1516		
Starvation Cap Reductn	0	0		0	0	0	0		0	604		
Spillback Cap Reductn	53	0		0	0	0	929		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.11	0.04		0.00	0.01	0.19	1.75		0.04	1.42		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	0 (0%)											
Natural Cycle:	75											
Control Type:	Actuated-Coordinated											

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 73.2

Intersection LOS: E

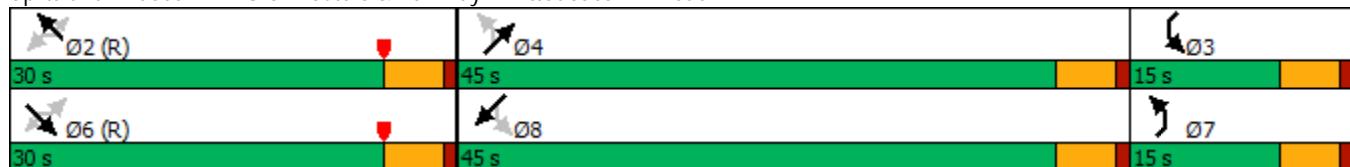
Intersection Capacity Utilization 56.1%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 &amp; Parkway Drive/Jacobs Hill Road



## 2021 Build Traffic Volumes

Peak Saturday Hour

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

10/22/2019

	↖	↑	↗	↙	↓	↘	↑	↗	↖	↙	↘	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	53	23	55	467	31	145	53	1081	0	49	1027	238
Future Volume (vph)	53	23	55	467	31	145	53	1081	0	49	1027	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		0	45		0	50		0
Storage Lanes	0		1	1		0	1		0	0		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor					0.99		1.00				1.00	
Frt		0.850			0.877						0.973	
Flt Protected		0.966		0.950			0.950				0.998	
Satd. Flow (prot)	0	1631	1583	1762	1609	0	1702	3404	0	0	3306	0
Flt Permitted		0.378		0.950			0.119				0.766	
Satd. Flow (perm)	0	638	1583	1762	1609	0	213	3404	0	0	2537	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			153						29	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			199			430	
Travel Time (s)		2.9			6.6			3.4			7.3	
Confl. Peds. (#/hr)						1	4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	17%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	56	24	58	492	33	153	56	1138	0	52	1081	251
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	80	58	492	186	0	56	1138	0	0	1384	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		1	2	
Detector Template									Left			
Leading Detector (ft)	83	83	83	83	83		83	83		20	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		0	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		0	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 4

## 2021 Build Traffic Volumes

## 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak Saturday Hour

10/22/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Turn Type	Perm	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8	8		1	6			2
Permitted Phases	4			4				6			2	
Detector Phase	4	4	4	8	8		1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	16.0		16.0	16.0	
Total Split (s)	15.0	15.0	15.0	30.0	30.0		15.0	45.0		30.0	30.0	
Total Split (%)	16.7%	16.7%	16.7%	33.3%	33.3%		16.7%	50.0%		33.3%	33.3%	
Maximum Green (s)	9.0	9.0	9.0	24.0	24.0		9.0	39.0		24.0	24.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	
Walk Time (s)				8.0	8.0							
Flash Dont Walk (s)				18.0	18.0							
Pedestrian Calls (#/hr)				5	5							
Act Effct Green (s)	9.0	9.0	24.0	24.0			39.0	39.0			28.8	
Actuated g/C Ratio	0.10	0.10	0.27	0.27			0.43	0.43			0.32	
v/c Ratio	1.27	0.18	1.05	0.34			0.28	0.77			1.67	
Control Delay	239.8	1.2	89.2	8.9			25.1	39.0			330.6	
Queue Delay	583.6	0.0	0.0	0.1			0.0	50.4			3.1	
Total Delay	823.4	1.2	89.2	9.1			25.1	89.4			333.7	
LOS	F	A	F	A			C	F			F	
Approach Delay	477.8			67.2			86.4				333.7	
Approach LOS		F			E			F			F	
Queue Length 50th (ft)	~58	0	~307	14			28	370			~629	
Queue Length 95th (ft)	#148	0	#497	65			m44	436			#782	
Internal Link Dist (ft)	46			210			119				350	
Turn Bay Length (ft)			135				45					
Base Capacity (vph)	63	322	469	541			241	1475			830	
Starvation Cap Reductn	0	0	0	0			0	690			0	
Spillback Cap Reductn	63	0	0	49			0	0			305	
Storage Cap Reductn	0	0	0	0			0	0			0	
Reduced v/c Ratio	80.00	0.18	1.05	0.38			0.23	1.45			2.64	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SWTL and 6:NETL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.67

Intersection Signal Delay: 199.3

Intersection LOS: F

Intersection Capacity Utilization 117.4%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

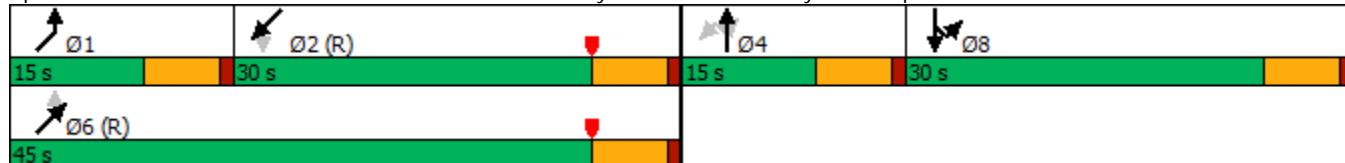
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 &amp; Site Access Driveway/Bear Mountain Pkwy SB Ramp



## 2021 Build Traffic Volumes

Peak Saturday Hour

## 3: U.S. Route 6 &amp; Bear Mountain Pkwy NB Ramp/Sinclair Gas

10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	30	44	0	72	11	1436	150	308	1244	28
Future Volume (vph)	4	4	30	44	0	72	11	1436	150	308	1244	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.893			0.850			0.986			0.997	
Flt Protected		0.995		0.950						0.950		
Satd. Flow (prot)	0	1663	0	1711	1615	0	0	3472	0	1711	3529	0
Flt Permitted		0.995		0.950						0.950		
Satd. Flow (perm)	0	1663	0	1711	1615	0	0	3472	0	1711	3529	0
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		118			261			430			307	
Travel Time (s)		2.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	4	31	46	0	75	11	1496	156	321	1296	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	46	75	0	0	1663	0	321	1325	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	99.2%							ICU Level of Service F				
Analysis Period (min)	15											

2021 Build Traffic Volumes  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak Saturday Hour  
10/22/2019

Intersection

Int Delay, s/veh 47.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	4	30	44	0	72	11	1436	150	308	1244	28
Future Vol, veh/h	4	4	30	44	0	72	11	1436	150	308	1244	28
Conflicting Peds, #/hr	0	0	0	0	0	0	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	-4	-	-	1	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	4	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	31	46	0	75	11	1496	156	321	1296	29

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	2727	3631	667	2888	3567	826	1329	0	0	1652	0	0
Stage 1	1957	1957	-	1596	1596	-	-	-	-	-	-	-
Stage 2	770	1674	-	1292	1971	-	-	-	-	-	-	-
Critical Hdwy	7.34	6.34	6.84	6.78	5.74	6.54	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.34	5.34	-	5.78	4.74	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.34	5.34	-	5.78	4.74	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.54	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	11	6	409	~ 13	12	345	515	-	-	387	-	-
Stage 1	73	121	-	155	235	-	-	-	-	-	-	-
Stage 2	375	165	-	226	165	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 2	~ 1	407	-	1	345	513	-	-	387	-	-
Mov Cap-2 Maneuver	~ 2	~ 1	-	-	1	-	-	-	-	-	-	-
Stage 1	49	21	-	104	157	-	-	-	-	-	-	-
Stage 2	196	110	-	~ 29	28	-	-	-	-	-	-	-

Approach	SE	NW			NE			SW			
HCM Control Delay, \$	3699.4				1.9			9			
HCM LOS	F										
Minor Lane/Major Mvmt	NEL	NET	NER	NWL	n1	NWL	n2	SELn1	SWL	SWT	SWR
Capacity (veh/h)	513	-	-	-	345	6	387	-	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-	0.217	6.597	0.829	-	-	-	-
HCM Control Delay (s)	12.2	2	-	-	18.	\$ 3699.4	46.2	-	-	-	-
HCM Lane LOS	B	A	-	-	C	F	E	-	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8	6.5	7.6	-	-	-	-

Notes

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

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Group												
Lane Configurations												
Traffic Volume (vph)	33	0	19	4	0	5	24	673	0	1	733	50
Future Volume (vph)	33	0	19	4	0	5	24	673	0	1	733	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%				2%			-1%
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850						0.990
Flt Protected			0.950			0.950		0.950			0.950	
Satd. Flow (prot)	0	1796	1456	0	1916	1503	1661	3177	0	1719	3297	0
Flt Permitted		0.755			0.735		0.177			0.240		
Satd. Flow (perm)	0	1428	1456	0	1482	1503	309	3177	0	434	3297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85						10
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			156	
Travel Time (s)		3.5			7.4			5.4			2.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	2%	11%	2%	2%	20%	4%	5%	2%	2%	5%	10%
Adj. Flow (vph)	34	0	20	4	0	5	25	701	0	1	764	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	20	0	4	5	25	701	0	1	816	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

	→	↓→	↑↓	←↑	↑	↓↑	↑↓	←↑	↑	↓→	↑→	→
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases		6			2			7	4	3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	47.9	47.9		47.9	47.9	33.6	29.6		33.4	28.1		
Actuated g/C Ratio	0.53	0.53		0.53	0.53	0.37	0.33		0.37	0.31		
v/c Ratio	0.04	0.02		0.01	0.01	0.13	0.67		0.00	0.79		
Control Delay	14.5	0.1		15.2	0.0	16.8	29.0		13.0	31.7		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.1		0.0	0.2		
Total Delay	14.5	0.1		15.2	0.0	16.8	29.1		13.0	31.8		
LOS	B	A		B	A	B	C		B	C		
Approach Delay	9.1			6.8			28.7			31.8		
Approach LOS	A			A			C			C		
Queue Length 50th (ft)	8	0		1	0	8	183		0	187		
Queue Length 95th (ft)	31	0		8	0	19	229		m0	174		
Internal Link Dist (ft)	73			247			235			76		
Turn Bay Length (ft)					75	115				90		
Base Capacity (vph)	759	814		788	839	282	1418		325	1470		
Starvation Cap Reductn	0	0		0	0	0	0		0	122		
Spillback Cap Reductn	0	0		0	0	0	109		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.04	0.02		0.01	0.01	0.09	0.54		0.00	0.61		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	45 (50%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow											
Natural Cycle:	60											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.79											
Intersection Signal Delay:	29.5											
Intersection LOS: C												

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

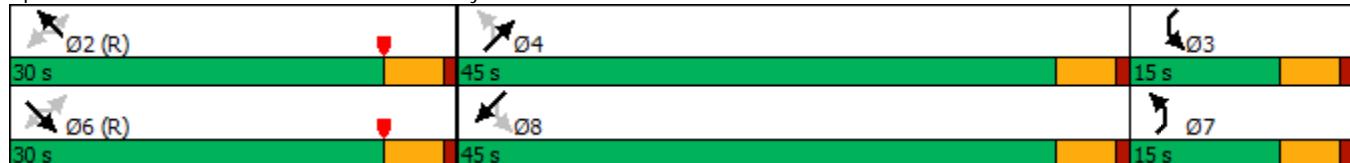
Intersection Capacity Utilization 42.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour  
 10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	51	25	51	323	33	137	35	626	0	45	596	163
Future Volume (vph)	51	25	51	323	33	137	35	626	0	45	596	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	11	11	12	11	11	12	10	11	11
Grade (%)				0%		-6%			1%			0%
Storage Length (ft)	0			0	135		135	45		0	80	
Storage Lanes	0			1	0		1	1		0	1	
Taper Length (ft)	25				86			86			86	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt				0.850		0.995	0.850				0.968	
Flt Protected				0.968		0.958		0.950			0.950	
Satd. Flow (prot)	0	1923	1689	0	1665	1549	1669	3276	0	1652	3226	0
Flt Permitted				0.968		0.958		0.157			0.213	
Satd. Flow (perm)	0	1923	1689	0	1665	1549	276	3276	0	370	3226	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)				145		2	145				38	
Link Speed (mph)				30		30		40			40	
Link Distance (ft)				126		290		160			430	
Travel Time (s)				2.9		6.6		2.7			7.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	4%	6%	2%	2%	4%	5%
Adj. Flow (vph)	57	28	57	359	37	152	39	696	0	50	662	181
Shared Lane Traffic (%)						10%						
Lane Group Flow (vph)	0	85	57	0	411	137	39	696	0	50	843	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)					0			11			11	
Link Offset(ft)					0			0			0	
Crosswalk Width(ft)				16		16		16			16	
Two way Left Turn Lane												
Headway Factor	0.92	0.92	0.92	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2	2	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83	83	83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43	43	43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex								

Synchro 10 Report

Page 4

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour  
 10/22/2019

	↑	↑	↗	↖	↓	↙	↗	↖	↗	↖	↙	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases	2	2		6	6		7	4		3	8	
Permitted Phases			2			6	4			8		
Detector Phase	2	2	2	6	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Total Split (s)	28.0	28.0	28.0	22.0	22.0	22.0	10.0	30.0		10.0	30.0	
Total Split (%)	31.1%	31.1%	31.1%	24.4%	24.4%	24.4%	11.1%	33.3%		11.1%	33.3%	
Maximum Green (s)	23.0	23.0	23.0	17.0	17.0	17.0	5.0	25.0		5.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		3.0	2.0	
Recall Mode	None	None	None	Min	Min	Min	None	C-Min		None	C-Min	
Walk Time (s)				7.0	7.0	7.0		7.0			8.0	
Flash Dont Walk (s)				16.0	16.0	16.0		14.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			1	
Act Effct Green (s)	8.5	8.5		34.0	34.0	31.5	28.5			31.5	28.5	
Actuated g/C Ratio	0.09	0.09		0.38	0.38	0.35	0.32			0.35	0.32	
v/c Ratio	0.47	0.20		0.65	0.20	0.23	0.67			0.25	0.81	
Control Delay	46.4	1.5		31.2	4.5	8.6	12.9			19.3	34.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	1.2			0.0	0.0	
Total Delay	46.4	1.5		31.2	4.5	8.6	14.1			19.3	34.6	
LOS	D	A		C	A	A	B			B	C	
Approach Delay	28.4			24.5			13.8				33.7	
Approach LOS	C			C			B				C	
Queue Length 50th (ft)	47	0		208	0	2	205			18	236	
Queue Length 95th (ft)	89	0		#377	37	m4	267			43	#351	
Internal Link Dist (ft)	46			210			80				350	
Turn Bay Length (ft)					135	45				80		
Base Capacity (vph)	491	539		630	675	173	1037			202	1047	
Starvation Cap Reductn	0	0		0	0	0	156			0	0	
Spillback Cap Reductn	0	0		0	0	0	0			0	0	
Storage Cap Reductn	0	0		0	0	0	0			0	0	
Reduced v/c Ratio	0.17	0.11		0.65	0.20	0.23	0.79			0.25	0.81	
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow												
Natural Cycle:	70											
Control Type:	Actuated-Coordinated											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour  
10/22/2019

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 24.9

Intersection LOS: C

Intersection Capacity Utilization 67.4%

ICU Level of Service C

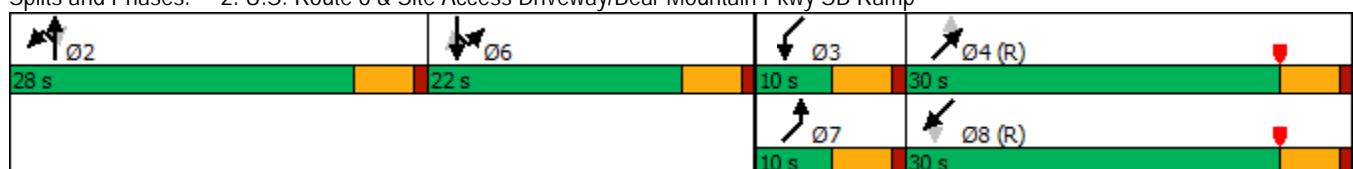
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	2	11	24	2	35	2	900	93	208	762	16
Future Volume (vph)	3	2	11	24	2	35	2	900	93	208	762	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99							1.00			1.00	
Fr <sub>t</sub>	0.905				0.858			0.986			0.997	
Flt Protected	0.991			0.950						0.950		
Satd. Flow (prot)	0	1663	0	1745	1600	0	0	3344	0	1711	3461	0
Flt Permitted	0.929		0.784					0.954		0.241		
Satd. Flow (perm)	0	1559	0	1440	1600	0	0	3191	0	434	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			37			16			4	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		74			261			430			307	
Travel Time (s)		1.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)	1		1				1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	4%	2%	6%	5%	2%	4%	2%
Adj. Flow (vph)	3	2	12	26	2	37	2	957	99	221	811	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	26	39	0	0	1058	0	221	828	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11				11			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		2	2	
Detector Template	Left						Left					
Leading Detector (ft)	20	83		83	83		20	83		83	82	
Trailing Detector (ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		20	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43			43		43	42	
Detector 2 Size(ft)		40		40	40			40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

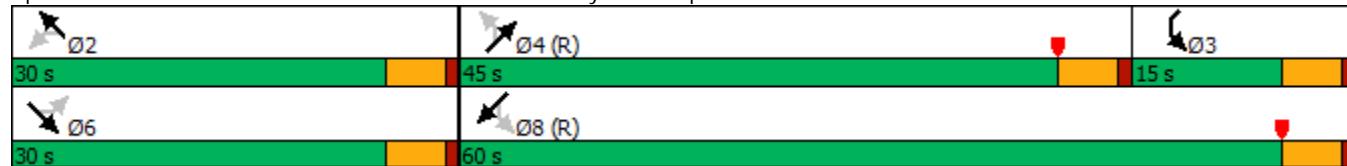
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		6			2			4		3	8	
Permitted Phases		6			2		4			8		
Detector Phase		6	6		2	2		4	4		3	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		23.0	23.0		10.0	23.0	
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		15.0	60.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		50.0%	50.0%		16.7%	66.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		40.0	40.0		10.0	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		Min	C-Min	
Act Effct Green (s)		7.3		7.4	7.4			64.5		76.9	78.9	
Actuated g/C Ratio		0.08		0.08	0.08			0.72		0.85	0.88	
v/c Ratio		0.12		0.22	0.24			0.46		0.46	0.27	
Control Delay		24.6		42.3	17.4			12.2		8.2	2.0	
Queue Delay		0.0		0.0	0.0			0.3		0.0	0.0	
Total Delay		24.6		42.3	17.4			12.5		8.2	2.0	
LOS		C		D	B			B		A	A	
Approach Delay		24.6			27.3			12.5			3.3	
Approach LOS		C			C			B		A		
Queue Length 50th (ft)		3		14	1			196		20	44	
Queue Length 95th (ft)		22		39	31			185		41	72	
Internal Link Dist (ft)		1			181			350			227	
Turn Bay Length (ft)				65								
Base Capacity (vph)		441		400	471			2292		534	3036	
Starvation Cap Reductn		0		0	0			606		0	0	
Spillback Cap Reductn		0		0	0			0		0	0	
Storage Cap Reductn		0		0	0			0		0	0	
Reduced v/c Ratio		0.04		0.07	0.08			0.63		0.41	0.27	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow												
Natural Cycle: 50												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.46												
Intersection Signal Delay: 8.6	Intersection LOS: A											
Intersection Capacity Utilization 67.2%	ICU Level of Service C											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

Analysis Period (min) 15

Splits and Phases: 3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	60	0	47	1	0	0	40	1052	2	1	914	70
Future Volume (vph)	60	0	47	1	0	0	40	1052	2	1	914	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850								0.989	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	2080	1694	3270	0	1719	3395	0
Flt Permitted		0.757			0.715		0.137			0.114		
Satd. Flow (perm)	0	1459	1584	0	1442	2080	244	3270	0	206	3395	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85									11	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			136	
Travel Time (s)		3.5			7.4			5.4			2.3	
Confl. Peds. (#/hr)						4					4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	0	51	1	0	0	43	1131	2	1	983	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	51	0	1	0	43	1133	0	1	1058	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2		2
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83		83
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5		-5
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5		-5
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40		40
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex							
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)		43	43		43	43	43	43		43		43
Detector 2 Size(ft)		40	40		40	40	40	40		40		40
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 2 Channel												

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	38.3	38.3		38.3		42.9	39.5		40.4	35.2		
Actuated g/C Ratio	0.43	0.43		0.43		0.48	0.44		0.45	0.39		
v/c Ratio	0.10	0.07		0.00		0.21	0.79		0.01	0.79		
Control Delay	19.8	2.1		20.0		16.2	26.1		3.0	20.5		
Queue Delay	0.0	0.0		0.0		0.0	10.2		0.0	0.4		
Total Delay	19.8	2.1		20.0		16.2	36.3		3.0	20.8		
LOS	B	A		B		B	D		A	C		
Approach Delay	12.0			20.0				35.5			20.8	
Approach LOS	B			B			D			C		
Queue Length 50th (ft)	23	0		0		12	246		0	142		
Queue Length 95th (ft)	56	11		4		24	362		m0	m102		
Internal Link Dist (ft)	73			247			235			56		
Turn Bay Length (ft)						115				90		
Base Capacity (vph)	621	723		613		289	1547		271	1515		
Starvation Cap Reductn	0	0		0		0	0		0	118		
Spillback Cap Reductn	0	0		0		0	395		0	0		
Storage Cap Reductn	0	0		0		0	0		0	0		
Reduced v/c Ratio	0.10	0.07		0.00		0.15	0.98		0.00	0.76		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow												
Natural Cycle:	70											
Control Type: Actuated-Coordinated												
Maximum v/c Ratio:	0.79											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Intersection Signal Delay: 27.7

Intersection LOS: C

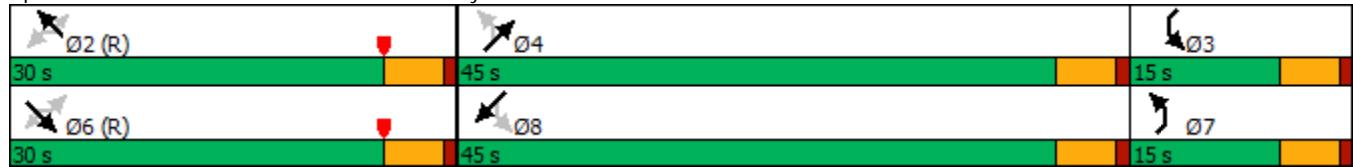
Intersection Capacity Utilization 51.6%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour  
 10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	56	28	60	446	35	104	42	1009	0	50	825	180
Future Volume (vph)	56	28	60	446	35	104	42	1009	0	50	825	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		135	45		0	80		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Fr <sub>t</sub>		0.850			0.997	0.850					0.973	
Flt Protected		0.968			0.957		0.950			0.950		
Satd. Flow (prot)	0	1923	1689	0	1681	1549	1686	3404	0	1652	3314	0
Flt Permitted		0.968			0.957		0.147			0.142		
Satd. Flow (perm)	0	1923	1689	0	1681	1549	261	3404	0	247	3314	0
Right Turn on Red		Yes			Yes				Yes			Yes
Satd. Flow (RTOR)		182			1	182					29	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			179			430	
Travel Time (s)		2.9			6.6			3.1			7.3	
Confl. Peds. (#/hr)							3				3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Adj. Flow (vph)	59	29	63	469	37	109	44	1062	0	53	868	189
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	88	63	0	517	98	44	1062	0	53	1057	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	0.92	0.92	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2	2	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83	83	83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43	43	43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex								

Synchro 10 Report

Page 4

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour  
10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↙	↖
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases	2	2		6	6		7	4		3	8	
Permitted Phases			2			6	4			8		
Detector Phase	2	2	2	6	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	32.0	32.0	32.0	11.0	11.0		11.0	11.0	
Total Split (s)	14.0	14.0	14.0	34.0	34.0	34.0	11.0	31.0		11.0	31.0	
Total Split (%)	15.6%	15.6%	15.6%	37.8%	37.8%	37.8%	12.2%	34.4%		12.2%	34.4%	
Maximum Green (s)	8.0	8.0	8.0	28.0	28.0	28.0	5.0	25.0		5.0	25.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0	6.0		6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		3.0	2.0	
Recall Mode	None	None	None	Min	Min	Min	None	C-Max		None	C-Min	
Walk Time (s)				8.0	8.0	8.0		8.0			8.0	
Flash Dont Walk (s)				18.0	18.0	18.0		18.0			18.0	
Pedestrian Calls (#/hr)				5	5	5		5			5	
Act Effct Green (s)	7.3	7.3		28.6	28.6	33.5	29.5		34.7	31.7		
Actuated g/C Ratio	0.08	0.08		0.32	0.32	0.37	0.33		0.39	0.35		
v/c Ratio	0.57	0.21		0.97	0.16	0.25	0.95		0.30	0.89		
Control Delay	54.4	1.6		63.8	0.5	13.5	33.8		20.8	37.2		
Queue Delay	0.0	0.1		0.0	0.0	0.0	45.0		0.0	0.0		
Total Delay	54.4	1.6		63.8	0.5	13.5	78.9		20.8	37.2		
LOS	D	A		E	A	B	E		C	D		
Approach Delay	32.4			53.7			76.3			36.4		
Approach LOS	C			D			E			D		
Queue Length 50th (ft)	49	0		305	0	6	-374		17	~365		
Queue Length 95th (ft)	96	0		#528	0	m9	#479		41	#488		
Internal Link Dist (ft)	46			210			99			350		
Turn Bay Length (ft)					135	45			80			
Base Capacity (vph)	170	315		535	617	176	1116		175	1186		
Starvation Cap Reductn	0	0		0	0	0	34		0	0		
Spillback Cap Reductn	0	21		0	0	0	405		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.52	0.21		0.97	0.16	0.25	1.49		0.30	0.89		

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 42 (47%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour  
10/22/2019

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 54.6

Intersection LOS: D

Intersection Capacity Utilization 83.1%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

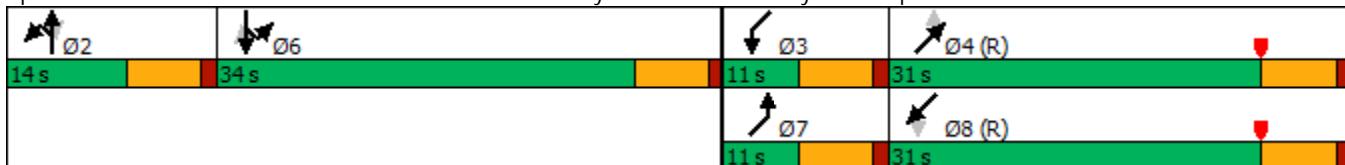
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	3	20	33	0	44	12	1344	154	304	1008	15
Future Volume (vph)	4	3	20	33	0	44	12	1344	154	304	1008	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99							1.00			1.00	
Fr <sub>t</sub>	0.900				0.850			0.985			0.998	
Flt Protected	0.993			0.950						0.950		
Satd. Flow (prot)	0	1617	0	1745	1484	0	0	3469	0	1711	3531	0
Flt Permitted	0.971		0.740					0.944		0.085		
Satd. Flow (perm)	0	1581	0	1359	1484	0	0	3274	0	153	3531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	20			365			18			4		
Link Speed (mph)	30			30			40			40		
Link Distance (ft)	74			261			430			307		
Travel Time (s)	1.7			5.9			7.3			5.2		
Confl. Peds. (#/hr)	3		3			3					3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	5%	2%	2%	11%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	3	20	34	0	45	12	1371	157	310	1029	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	0	34	45	0	0	1540	0	310	1044	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11			11			11			11		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		2	2	
Detector Template	Left					Left						
Leading Detector (ft)	20	83		83	83		20	83		83	82	
Trailing Detector (ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		20	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43			43		43	42	
Detector 2 Size(ft)		40		40	40			40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Turn Type	Perm	NA		custom	NA		Perm	NA		pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6			2	2		4			8		
Detector Phase	6	6		2	2		4	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		10.0	23.0	
Total Split (s)	18.0	18.0		18.0	18.0		47.0	47.0		25.0	72.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		52.2%	52.2%		27.8%	80.0%	
Maximum Green (s)	13.0	13.0		13.0	13.0		42.0	42.0		20.0	67.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		16.9		16.9	16.9			42.0		63.1	63.1	
Actuated g/C Ratio		0.19		0.19	0.19			0.47		0.70	0.70	
v/c Ratio		0.09		0.13	0.08			1.00		0.80	0.42	
Control Delay		18.4		34.6	0.3			32.4		43.2	6.0	
Queue Delay		0.0		0.0	0.0			36.5		0.0	0.0	
Total Delay		18.4		34.6	0.3			69.0		43.2	6.0	
LOS	B		C	A			E		D	A		
Approach Delay		18.4			15.0			69.0			14.5	
Approach LOS	B			B			E				B	
Queue Length 50th (ft)	3		17	0			~504		115	107		
Queue Length 95th (ft)	27		45	0			m#554		199	118		
Internal Link Dist (ft)	1			181			350			227		
Turn Bay Length (ft)				65								
Base Capacity (vph)	312		254	574			1537		460	2629		
Starvation Cap Reductn	0		0	0			356		0	0		
Spillback Cap Reductn	0		0	0			0		0	0		
Storage Cap Reductn	0		0	0			0		0	0		
Reduced v/c Ratio		0.09		0.13	0.08			1.30		0.67	0.40	
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	90											
Control Type:	Actuated-Coordinated											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 42.5

Intersection LOS: D

Intersection Capacity Utilization 98.3%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

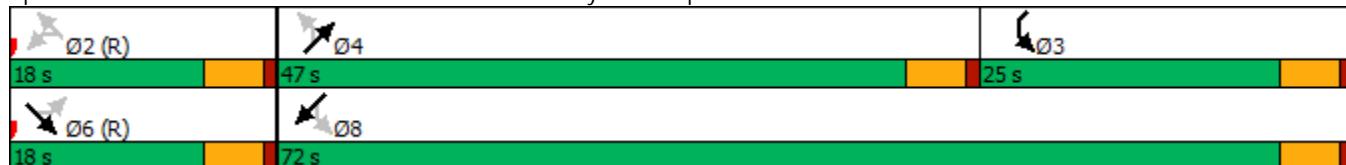
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas



## 2021 Build Traffic Volumes (W/ Signalization &amp; Signal Timing Imp)

1: U.S. Route 6 &amp; Parkway Drive/Jacobs Hill Road

Saturday Peak Hour

10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	52	0	26	1	0	7	46	1124	2	10	1145	69
Future Volume (vph)	52	0	26	1	0	7	46	1124	2	10	1145	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt			0.850			0.850					0.992	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	1768	1694	3270	0	1594	3399	0
Flt Permitted		0.950			0.950		0.170			0.201		
Satd. Flow (perm)	0	1832	1584	0	1916	1768	303	3270	0	337	3399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		109			109						7	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			124	
Travel Time (s)		3.5			7.4			5.4			2.1	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	5%
Adj. Flow (vph)	55	0	28	1	0	7	49	1196	2	11	1218	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	28	0	1	7	49	1198	0	11	1291	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 1

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Saturday Peak Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	6	6		2	2		7	4		3	8	
Permitted Phases			6			2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	10.0	23.0		10.0	23.0	
Total Split (s)	25.0	25.0	25.0	20.0	20.0	20.0	15.0	60.0		15.0	60.0	
Total Split (%)	20.8%	20.8%	20.8%	16.7%	16.7%	16.7%	12.5%	50.0%		12.5%	50.0%	
Maximum Green (s)	20.0	20.0	20.0	15.0	15.0	15.0	10.0	55.0		10.0	55.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	C-Min		None	C-Min							
Walk Time (s)	7.0	7.0	7.0							7.0		
Flash Dont Walk (s)	11.0	11.0	11.0							11.0		
Pedestrian Calls (#/hr)	5	5	5							5		
Act Effct Green (s)	9.5	9.5		5.0	5.0	99.1	98.7		95.1	92.2		
Actuated g/C Ratio	0.08	0.08		0.04	0.04	0.83	0.82		0.79	0.77		
v/c Ratio	0.38	0.12		0.01	0.04	0.15	0.45		0.03	0.49		
Control Delay	58.2	1.2		56.0	0.4	5.7	6.8		5.2	9.2		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.2		0.0	0.7		
Total Delay	58.2	1.2		56.0	0.4	5.7	7.0		5.2	9.9		
LOS	E	A		E	A	A	A		A	A		
Approach Delay	38.9				7.4			6.9			9.9	
Approach LOS	D				A			A			A	
Queue Length 50th (ft)	42	0		1	0	4	83		3	253		
Queue Length 95th (ft)	78	0		7	0	24	393		m2	m150		
Internal Link Dist (ft)	73			247			235			44		
Turn Bay Length (ft)					75	115			90			
Base Capacity (vph)	305	354		239	316	373	2688		380	2614		
Starvation Cap Reductn	0	0		0	0	0	0		0	879		
Spillback Cap Reductn	0	0		0	0	0	648		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.18	0.08		0.00	0.02	0.13	0.59		0.03	0.74		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Saturday Peak Hour  
10/22/2019

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 9.4

Intersection LOS: A

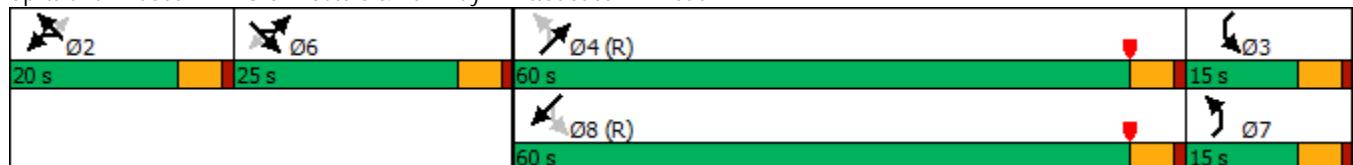
Intersection Capacity Utilization 56.1%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Saturday Peak Hour

10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	53	23	55	467	31	145	53	1081	0	49	1027	238
Future Volume (vph)	53	23	55	467	31	145	53	1081	0	49	1027	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	11	11	12	11	11	12	10	11	11
Grade (%)				0%		-6%			1%			0%
Storage Length (ft)	0			0	135		135	45		0	80	
Storage Lanes	0			1	0		1	1		0	1	
Taper Length (ft)	25				86			86			86	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor						1.00						0.99
Fr <sub>t</sub>				0.850		0.996	0.850					0.972
Flt Protected			0.966			0.956		0.950			0.950	
Satd. Flow (prot)	0	1740	1689	0	1677	1549	1702	3404	0	1652	3307	0
Flt Permitted		0.966			0.956		0.071			0.133		
Satd. Flow (perm)	0	1740	1689	0	1677	1549	127	3404	0	231	3307	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)			109		1	69					33	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			191			430	
Travel Time (s)		2.9			6.6			3.3			7.3	
Confl. Peds. (#/hr)						1	4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	17%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	56	24	58	492	33	153	56	1138	0	52	1081	251
Shared Lane Traffic (%)						10%						
Lane Group Flow (vph)	0	80	58	0	540	138	56	1138	0	52	1332	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	0.92	0.92	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2	2	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83	83	83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43	43	43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex								

Synchro 10 Report

Page 4

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Saturday Peak Hour

10/22/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA	pt+ov	pm+pt	NA	pm+pt	NA		
Protected Phases	2	2		6	6	67	7	4		3	8	
Permitted Phases			2				4			8		
Detector Phase	2	2	2	6	6	67	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	31.0	31.0	31.0	28.0	28.0		10.0	31.0		9.5	31.0	
Total Split (s)	10.0	10.0	10.0	35.0	35.0		10.0	65.0		10.0	65.0	
Total Split (%)	8.3%	8.3%	8.3%	29.2%	29.2%		8.3%	54.2%		8.3%	54.2%	
Maximum Green (s)	5.0	5.0	5.0	30.0	30.0		5.0	60.0		5.5	60.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.5	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0			0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		4.5	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		3.0	2.0	
Recall Mode	None	None	None	Min	Min		None	C-Min		None	C-Min	
Walk Time (s)				7.0	7.0			7.0			8.0	
Flash Dont Walk (s)				16.0	16.0			14.0			18.0	
Pedestrian Calls (#/hr)				1	1			0			4	
Act Effct Green (s)	8.9	8.9		31.1	41.1	61.0	57.0		61.0	55.0		
Actuated g/C Ratio	0.07	0.07		0.26	0.34	0.51	0.48		0.51	0.46		
v/c Ratio	0.62	0.26		1.24	0.24	0.43	0.70		0.29	0.87		
Control Delay	76.6	3.1		164.5	15.9	31.2	25.1		14.3	32.8		
Queue Delay	83.2	0.0		0.0	0.0	0.0	1.2		0.0	0.3		
Total Delay	159.8	3.2		164.5	15.9	31.2	26.3		14.3	33.1		
LOS	F	A		F	B	C	C		B	C		
Approach Delay	94.0			134.3			26.5			32.4		
Approach LOS	F			F			C			C		
Queue Length 50th (ft)	61	0		-563	38	22	388		15	467		
Queue Length 95th (ft)	#175	4		#793	91	35	271		29	246		
Internal Link Dist (ft)	46			210			111			350		
Turn Bay Length (ft)					135	45			80			
Base Capacity (vph)	128	225		436	576	130	1702		182	1670		
Starvation Cap Reductn	0	0		0	0	0	324		0	58		
Spillback Cap Reductn	62	5		0	4	0	156		0	1		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	1.21	0.26		1.24	0.24	0.43	0.83		0.29	0.83		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Saturday Peak Hour  
10/22/2019

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 53.2

Intersection LOS: D

Intersection Capacity Utilization 89.5%

ICU Level of Service E

Analysis Period (min) 15

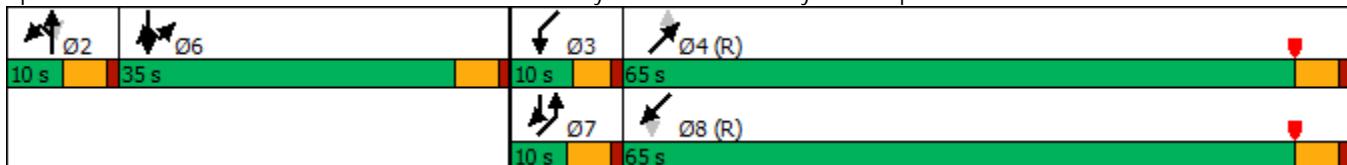
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Saturday Peak Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	30	44	0	72	11	1436	150	308	1244	28
Future Volume (vph)	4	4	30	44	0	72	11	1436	150	308	1244	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor								1.00			1.00	
Fr <sub>t</sub>		0.893				0.850			0.986			0.997
Flt Protected		0.995		0.950						0.950		
Satd. Flow (prot)	0	1663	0	1711	1615	0	0	3472	0	1711	3527	0
Flt Permitted		0.962		0.906				0.941		0.080		
Satd. Flow (perm)	0	1608	0	1632	1615	0	0	3267	0	144	3527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			414			11			4	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		74			261			430			307	
Travel Time (s)		1.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	4	31	46	0	75	11	1496	156	321	1296	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	46	75	0	0	1663	0	321	1325	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		2	2	
Detector Template	Left						Left					
Leading Detector (ft)	20	83		83	83		20	83		83		82
Trailing Detector (ft)	0	-5		-5	-5		0	-5		-5		-5
Detector 1 Position(ft)	0	-5		-5	-5		0	-5		-5		-5
Detector 1 Size(ft)	20	40		40	40		20	40		40		40
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43			43		43		42
Detector 2 Size(ft)		40		40	40			40		40		40
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Saturday Peak Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		6			2			4		3	8	
Permitted Phases		6			2		4			8		
Detector Phase		6	6		2	2		4	4		3	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		23.0	23.0		10.0	23.0	
Total Split (s)	30.0	30.0		30.0	30.0		55.0	55.0		35.0	90.0	
Total Split (%)	25.0%	25.0%		25.0%	25.0%		45.8%	45.8%		29.2%	75.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		50.0	50.0		30.0	85.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		Min	C-Min	
Act Effct Green (s)	9.7		9.7	9.7			76.7		102.4	103.4		
Actuated g/C Ratio	0.08		0.08	0.08			0.64		0.85	0.86		
v/c Ratio	0.25		0.35	0.15			0.80		0.82	0.44		
Control Delay	24.8		58.2	0.6			12.5		48.2	3.1		
Queue Delay	0.0		0.0	0.0			0.0		0.0	0.1		
Total Delay	24.8		58.2	0.6			12.5		48.2	3.1		
LOS	C		E	A			B		D	A		
Approach Delay	24.8			22.5			12.5			11.9		
Approach LOS	C			C			B			B		
Queue Length 50th (ft)	6		34	0			243		157	105		
Queue Length 95th (ft)	40		71	0			m#731		251	168		
Internal Link Dist (ft)	1			181			350			227		
Turn Bay Length (ft)		65										
Base Capacity (vph)	359		340	664			2091		521	3040		
Starvation Cap Reductn	0		0	0			0		0	0		
Spillback Cap Reductn	2		0	0			0		0	368		
Storage Cap Reductn	0		0	0			0		0	0		
Reduced v/c Ratio	0.11		0.14	0.11			0.80		0.62	0.50		
Intersection Summary												
Area Type:	Other											
Cycle Length:	120											
Actuated Cycle Length:	120											
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow												
Natural Cycle:	70											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.82											
Intersection Signal Delay: 12.7							Intersection LOS: B					
Intersection Capacity Utilization 101.7%							ICU Level of Service G					

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Saturday Peak Hour  
10/22/2019

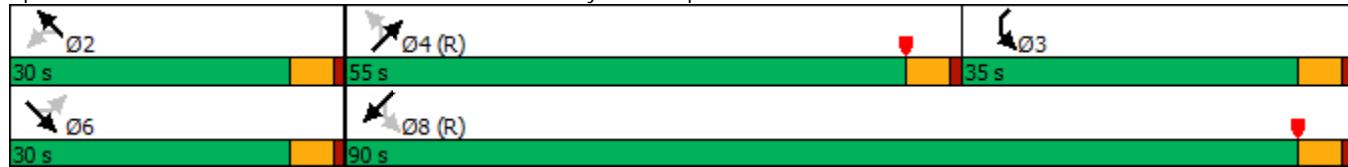
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Group												
Lane Configurations												
Traffic Volume (vph)	33	0	19	4	0	5	24	673	0	1	733	50
Future Volume (vph)	33	0	19	4	0	5	24	673	0	1	733	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%				2%			-1%
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850						0.990
Flt Protected			0.950			0.950		0.950			0.950	
Satd. Flow (prot)	0	1796	1456	0	1916	1503	1661	3177	0	1719	3297	0
Flt Permitted		0.755			0.735		0.177			0.240		
Satd. Flow (perm)	0	1428	1456	0	1482	1503	309	3177	0	434	3297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85						10
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			156	
Travel Time (s)		3.5			7.4			5.4			2.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	4%	2%	11%	2%	2%	20%	4%	5%	2%	2%	5%	10%
Adj. Flow (vph)	34	0	20	4	0	5	25	701	0	1	764	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	20	0	4	5	25	701	0	1	816	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	

Synchro 10 Report

Page 1

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

	→	↓→	↑↓	←↑	↑	↓↑	↑↓	←↑	↑	↓→	↑→	→
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases		6			2			7	4	3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	47.9	47.9		47.9	47.9	33.6	29.6		33.4	28.1		
Actuated g/C Ratio	0.53	0.53		0.53	0.53	0.37	0.33		0.37	0.31		
v/c Ratio	0.04	0.02		0.01	0.01	0.13	0.67		0.00	0.79		
Control Delay	14.5	0.1		15.2	0.0	16.8	29.0		9.0	26.5		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.1		0.0	0.1		
Total Delay	14.5	0.1		15.2	0.0	16.8	29.1		9.0	26.6		
LOS	B	A		B	A	B	C		A	C		
Approach Delay	9.1			6.8			28.7			26.6		
Approach LOS	A			A			C			C		
Queue Length 50th (ft)	8	0		1	0	8	183		0	90		
Queue Length 95th (ft)	31	0		8	0	19	229		m0	161		
Internal Link Dist (ft)	73			247			235			76		
Turn Bay Length (ft)				75	115				90			
Base Capacity (vph)	759	814		788	839	282	1418		325	1470		
Starvation Cap Reductn	0	0		0	0	0	0		0	99		
Spillback Cap Reductn	0	0		0	0	0	90		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.04	0.02		0.01	0.01	0.09	0.53		0.00	0.60		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset:	45 (50%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow											
Natural Cycle:	60											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.79											
Intersection Signal Delay:	26.9											
Intersection LOS: C												

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak AM Hour  
10/22/2019

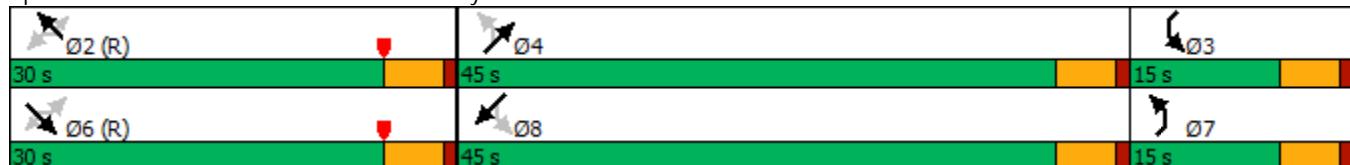
Intersection Capacity Utilization 42.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour  
 10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	51	25	51	323	33	137	35	626	0	45	596	163
Future Volume (vph)	51	25	51	323	33	137	35	626	0	45	596	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	11	11	12	11	11	12	10	11	11
Grade (%)		0%			-6%			1%			0%	
Storage Length (ft)	0		0	135		135	45		0	80		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt		0.850				0.850					0.968	
Flt Protected		0.968		0.950	0.961		0.950			0.950		
Satd. Flow (prot)	0	1923	1689	1658	1680	1631	1669	3276	0	1652	3226	0
Flt Permitted		0.968		0.950	0.961		0.261			0.315		
Satd. Flow (perm)	0	1923	1689	1658	1680	1631	458	3276	0	548	3226	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		145			152						38	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			160			430	
Travel Time (s)		2.9			6.6			2.7			7.3	
Confl. Peds. (#/hr)							1				1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	4%	6%	2%	2%	4%	5%
Adj. Flow (vph)	57	28	57	359	37	152	39	696	0	50	662	181
Shared Lane Traffic (%)				45%								
Lane Group Flow (vph)	0	85	57	197	199	152	39	696	0	50	843	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	0.92	0.92	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2	2	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83	83	83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43	43	43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex								

Synchro 10 Report

Page 4

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour  
 10/22/2019

	↖	↑	↗	↙	↓	↘	↗	↖	↙	↖	↗	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases	2	2		6	6		7	4		3	8	
Permitted Phases			2			6	4			8		
Detector Phase	2	2	2	6	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Total Split (s)	28.0	28.0	28.0	22.0	22.0	22.0	10.0	30.0		10.0	30.0	
Total Split (%)	31.1%	31.1%	31.1%	24.4%	24.4%	24.4%	11.1%	33.3%		11.1%	33.3%	
Maximum Green (s)	23.0	23.0	23.0	17.0	17.0	17.0	5.0	25.0		5.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		3.0	2.0	
Recall Mode	None	None	None	Min	Min	Min	None	C-Min		None	C-Min	
Walk Time (s)				7.0	7.0	7.0		7.0			8.0	
Flash Dont Walk (s)				16.0	16.0	16.0		14.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			1	
Act Effct Green (s)	8.5	8.5	15.4	15.4	15.4	49.2	45.4			50.9	46.3	
Actuated g/C Ratio	0.09	0.09	0.17	0.17	0.17	0.55	0.50			0.57	0.51	
v/c Ratio	0.47	0.20	0.69	0.69	0.38	0.12	0.42			0.13	0.50	
Control Delay	46.4	1.5	47.2	46.8	7.8	4.0	5.9			10.6	18.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1			0.0	0.0	
Total Delay	46.4	1.5	47.2	46.8	7.8	4.0	6.1			10.6	18.2	
LOS	D	A	D	D	A	A	A			B	B	
Approach Delay	28.4				36.1			5.9			17.8	
Approach LOS	C				D			A			B	
Queue Length 50th (ft)	47	0	112	113	0	1	13			12	174	
Queue Length 95th (ft)	89	0	170	171	46	m4	261			31	298	
Internal Link Dist (ft)	46			210			80				350	
Turn Bay Length (ft)			135		135	45				80		
Base Capacity (vph)	491	539	338	342	453	328	1653			395	1676	
Starvation Cap Reductn	0	0	0	0	0	0	222			0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0			0	0	
Storage Cap Reductn	0	0	0	0	0	0	0			0	0	
Reduced v/c Ratio	0.17	0.11	0.58	0.58	0.34	0.12	0.49			0.13	0.50	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak AM Hour  
10/22/2019

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 19.0

Intersection LOS: B

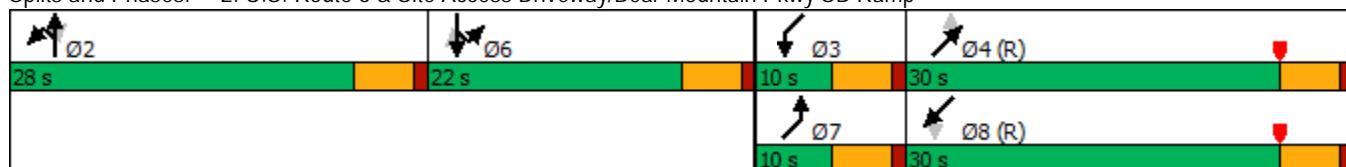
Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	2	11	24	2	35	2	900	93	208	762	16
Future Volume (vph)	3	2	11	24	2	35	2	900	93	208	762	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99							1.00			1.00	
Fr <sub>t</sub>	0.905				0.858			0.986			0.997	
Flt Protected	0.991			0.950						0.950		
Satd. Flow (prot)	0	1663	0	1745	1600	0	0	3344	0	1711	3461	0
Flt Permitted	0.929		0.784					0.954		0.241		
Satd. Flow (perm)	0	1559	0	1440	1600	0	0	3191	0	434	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			37			16			4	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		74			261			430			307	
Travel Time (s)		1.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)	1		1				1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	4%	2%	6%	5%	2%	4%	2%
Adj. Flow (vph)	3	2	12	26	2	37	2	957	99	221	811	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	26	39	0	0	1058	0	221	828	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11				11			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		2	2	
Detector Template	Left						Left					
Leading Detector (ft)	20	83		83	83		20	83		83	82	
Trailing Detector (ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		20	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43			43		43	42	
Detector 2 Size(ft)		40		40	40			40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex		

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

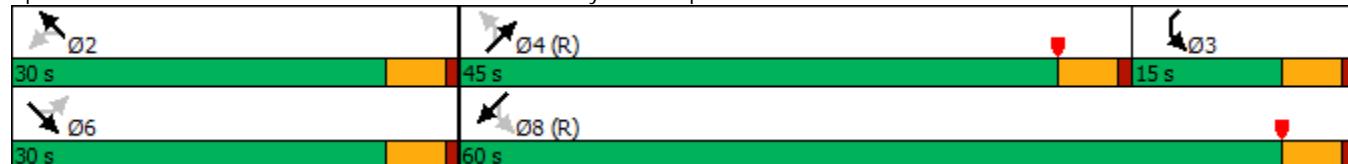
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		6			2			4		3	8	
Permitted Phases		6			2		4			8		
Detector Phase		6	6		2	2		4	4		3	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		23.0	23.0		10.0	23.0	
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		15.0	60.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		50.0%	50.0%		16.7%	66.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		40.0	40.0		10.0	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		Min	C-Min	
Act Effct Green (s)		7.3		7.4	7.4			64.5		76.9	78.9	
Actuated g/C Ratio		0.08		0.08	0.08			0.72		0.85	0.88	
v/c Ratio		0.12		0.22	0.24			0.46		0.46	0.27	
Control Delay		24.6		42.3	17.4			8.3		8.2	2.0	
Queue Delay		0.0		0.0	0.0			0.2		0.0	0.0	
Total Delay		24.6		42.3	17.4			8.5		8.2	2.0	
LOS		C		D	B			A		A	A	
Approach Delay		24.6			27.3			8.5			3.3	
Approach LOS		C			C			A		A		
Queue Length 50th (ft)		3		14	1			88		20	44	
Queue Length 95th (ft)		22		39	31			226		41	72	
Internal Link Dist (ft)		1			181			350			227	
Turn Bay Length (ft)				65								
Base Capacity (vph)		441		400	471			2292		534	3036	
Starvation Cap Reductn		0		0	0			392		0	0	
Spillback Cap Reductn		0		0	0			0		0	0	
Storage Cap Reductn		0		0	0			0		0	0	
Reduced v/c Ratio		0.04		0.07	0.08			0.56		0.41	0.27	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow												
Natural Cycle: 50												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.46												
Intersection Signal Delay: 6.7	Intersection LOS: A											
Intersection Capacity Utilization 67.2%	ICU Level of Service C											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak AM Hour  
10/22/2019

Analysis Period (min) 15

Splits and Phases: 3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas



## 2021 Build Traffic Volumes (W/ Signalization &amp; Signal Timing Imp)

1: U.S. Route 6 &amp; Parkway Drive/Jacobs Hill Road

Saturday Peak Hour

10/22/2019

	→	↓→	↑↓	←	↑	↓	↑↓	←	↑	↓→	↑↓	←
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑	↑		↑	↑	↑	↑↑		↑	↑↑	
Traffic Volume (vph)	52	0	26	1	0	7	46	1124	2	10	1145	69
Future Volume (vph)	52	0	26	1	0	7	46	1124	2	10	1145	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt			0.850			0.850					0.992	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	1768	1694	3270	0	1594	3399	0
Flt Permitted		0.950			0.950		0.170			0.201		
Satd. Flow (perm)	0	1832	1584	0	1916	1768	303	3270	0	337	3399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109					7	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			124	
Travel Time (s)		3.5			7.4			5.4			2.1	
Confl. Peds. (#/hr)							4				4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	5%
Adj. Flow (vph)	55	0	28	1	0	7	49	1196	2	11	1218	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	28	0	1	7	49	1198	0	11	1291	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			11			11	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 1

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Saturday Peak Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	6	6		2	2		7	4		3	8	
Permitted Phases			6			2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	10.0	23.0		10.0	23.0	
Total Split (s)	25.0	25.0	25.0	20.0	20.0	20.0	15.0	60.0		15.0	60.0	
Total Split (%)	20.8%	20.8%	20.8%	16.7%	16.7%	16.7%	12.5%	50.0%		12.5%	50.0%	
Maximum Green (s)	20.0	20.0	20.0	15.0	15.0	15.0	10.0	55.0		10.0	55.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	C-Min		None	C-Min							
Walk Time (s)	7.0	7.0	7.0							7.0		
Flash Dont Walk (s)	11.0	11.0	11.0							11.0		
Pedestrian Calls (#/hr)	5	5	5							5		
Act Effct Green (s)	9.5	9.5		5.0	5.0	99.1	98.7		95.1	92.2		
Actuated g/C Ratio	0.08	0.08		0.04	0.04	0.83	0.82		0.79	0.77		
v/c Ratio	0.38	0.12		0.01	0.04	0.15	0.45		0.03	0.49		
Control Delay	58.2	1.2		56.0	0.4	5.7	6.8		4.9	7.2		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.2		0.0	0.5		
Total Delay	58.2	1.2		56.0	0.4	5.7	6.9		4.9	7.6		
LOS	E	A		E	A	A	A		A	A		
Approach Delay	38.9				7.4			6.9		7.6		
Approach LOS	D				A			A		A		
Queue Length 50th (ft)	42	0		1	0	4	83		2	177		
Queue Length 95th (ft)	78	0		7	0	24	393		m2	150		
Internal Link Dist (ft)	73			247			235			44		
Turn Bay Length (ft)					75	115			90			
Base Capacity (vph)	305	354		239	316	373	2688		380	2614		
Starvation Cap Reductn	0	0		0	0	0	0		0	769		
Spillback Cap Reductn	0	0		0	0	0	610		0	0		
Storage Cap Reductn	0	0		0	0	0	0		0	0		
Reduced v/c Ratio	0.18	0.08		0.00	0.02	0.13	0.58		0.03	0.70		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Saturday Peak Hour  
10/22/2019

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 8.3

Intersection LOS: A

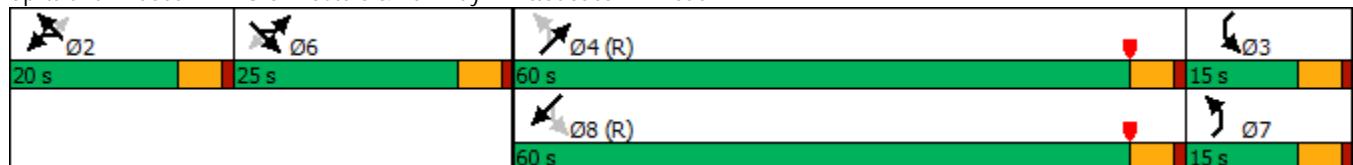
Intersection Capacity Utilization 56.1%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Saturday Peak Hour  
10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	53	23	55	467	31	145	53	1081	0	49	1027	238
Future Volume (vph)	53	23	55	467	31	145	53	1081	0	49	1027	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	11	11	12	11	11	12	10	11	11
Grade (%)				0%		-6%			1%			0%
Storage Length (ft)	0			0	135		135	45		0	80	
Storage Lanes	0			1	1		1	1		0	1	
Taper Length (ft)	25				86			86			86	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor												0.99
Frt				0.850			0.850					0.972
Flt Protected				0.966		0.950	0.958		0.950			0.950
Satd. Flow (prot)	0	1740	1689	1674	1688	1631	1702	3404	0	1652	3307	0
Flt Permitted		0.966		0.950	0.958		0.095				0.155	
Satd. Flow (perm)	0	1740	1689	1674	1688	1631	170	3404	0	269	3307	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)				109			69					33
Link Speed (mph)				30		30		40			40	
Link Distance (ft)				126		290		191			430	
Travel Time (s)				2.9		6.6		3.3			7.3	
Confl. Peds. (#/hr)						1	4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	17%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	56	24	58	492	33	153	56	1138	0	52	1081	251
Shared Lane Traffic (%)				47%								
Lane Group Flow (vph)	0	80	58	261	264	153	56	1138	0	52	1332	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	0.92	0.92	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2	2	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83	83	83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43	43	43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex								

Synchro 10 Report

Page 4

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Saturday Peak Hour

10/22/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA	pt+ov	pm+pt	NA	pm+pt	NA		
Protected Phases	2	2		6	6	67	7	4		3	8	
Permitted Phases				2				4		8		
Detector Phase	2	2	2	6	6	67	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	31.0	31.0	31.0	28.0	28.0		10.0	31.0		9.5	31.0	
Total Split (s)	10.0	10.0	10.0	35.0	35.0		10.0	65.0		10.0	65.0	
Total Split (%)	8.3%	8.3%	8.3%	29.2%	29.2%		8.3%	54.2%		8.3%	54.2%	
Maximum Green (s)	5.0	5.0	5.0	30.0	30.0		5.0	60.0		5.5	60.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.5	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0			5.0	5.0		4.5	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		3.0	2.0	
Recall Mode	None	None	None	Min	Min		None	C-Min		None	C-Min	
Walk Time (s)				7.0	7.0			7.0			8.0	
Flash Dont Walk (s)				16.0	16.0			14.0			18.0	
Pedestrian Calls (#/hr)				1	1			0			4	
Act Effct Green (s)	9.9	9.9	23.3	23.3	34.0	67.6	62.9			68.1	61.1	
Actuated g/C Ratio	0.08	0.08	0.19	0.19	0.28	0.56	0.52			0.57	0.51	
v/c Ratio	0.56	0.24	0.80	0.81	0.30	0.33	0.64			0.23	0.78	
Control Delay	69.9	2.8	64.2	64.3	18.4	18.7	20.2			12.2	25.7	
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.5			0.0	0.2	
Total Delay	69.9	2.9	64.2	64.3	18.4	18.7	20.7			12.2	25.9	
LOS	E	A	E	E	B	B	C			B	C	
Approach Delay	41.7			53.9			20.6			25.4		
Approach LOS	D			D			C			C		
Queue Length 50th (ft)	59	0	203	205	48	20	376			15	460	
Queue Length 95th (ft)	#175	4	287	289	98	22	271			29	246	
Internal Link Dist (ft)	46			210			111			350		
Turn Bay Length (ft)			135		135	45				80		
Base Capacity (vph)	142	238	418	422	518	168	1813			227	1724	
Starvation Cap Reductn	0	0	0	0	0	0	262			0	59	
Spillback Cap Reductn	0	7	0	0	0	0	253			0	0	
Storage Cap Reductn	0	0	0	0	0	0	0			0	0	
Reduced v/c Ratio	0.56	0.25	0.62	0.63	0.30	0.33	0.73			0.23	0.80	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Saturday Peak Hour

10/22/2019

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 30.1

Intersection LOS: C

Intersection Capacity Utilization 72.8%

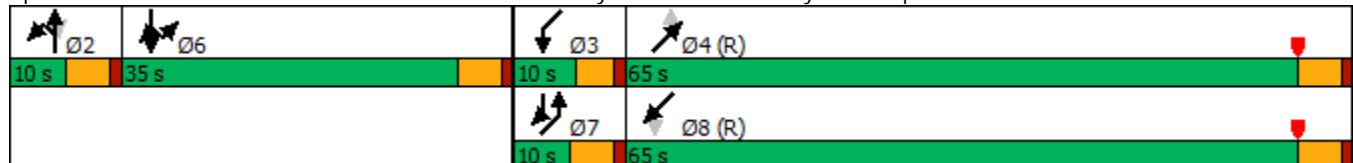
ICU Level of Service C

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Saturday Peak Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	30	44	0	72	11	1436	150	308	1244	28
Future Volume (vph)	4	4	30	44	0	72	11	1436	150	308	1244	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor								1.00			1.00	
Fr <sub>t</sub>		0.893				0.850			0.986			0.997
Flt Protected		0.995		0.950						0.950		
Satd. Flow (prot)	0	1663	0	1711	1615	0	0	3472	0	1711	3527	0
Flt Permitted		0.962		0.906				0.941		0.080		
Satd. Flow (perm)	0	1608	0	1632	1615	0	0	3267	0	144	3527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			414			11			4	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		74			261			430			307	
Travel Time (s)		1.7			5.9			7.3			5.2	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	4	31	46	0	75	11	1496	156	321	1296	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	46	75	0	0	1663	0	321	1325	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		2	2	
Detector Template	Left						Left					
Leading Detector (ft)	20	83		83	83		20	83		83		82
Trailing Detector (ft)	0	-5		-5	-5		0	-5		-5		-5
Detector 1 Position(ft)	0	-5		-5	-5		0	-5		-5		-5
Detector 1 Size(ft)	20	40		40	40		20	40		40		40
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43			43		43		42
Detector 2 Size(ft)		40		40	40			40		40		40
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	

Synchro 10 Report

Page 7

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Saturday Peak Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		6			2			4		3	8	
Permitted Phases		6			2		4			8		
Detector Phase		6	6		2	2		4	4		3	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		23.0	23.0		10.0	23.0	
Total Split (s)	30.0	30.0		30.0	30.0		55.0	55.0		35.0	90.0	
Total Split (%)	25.0%	25.0%		25.0%	25.0%		45.8%	45.8%		29.2%	75.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		50.0	50.0		30.0	85.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		Min	C-Min	
Act Effct Green (s)	9.7		9.7	9.7			76.7		102.4	103.4		
Actuated g/C Ratio	0.08		0.08	0.08			0.64		0.85	0.86		
v/c Ratio	0.25		0.35	0.15			0.80		0.82	0.44		
Control Delay	24.8		58.2	0.6			18.2		48.2	3.1		
Queue Delay	0.0		0.0	0.0			0.2		0.0	0.1		
Total Delay	24.8		58.2	0.6			18.3		48.2	3.1		
LOS	C		E	A			B		D	A		
Approach Delay	24.8			22.5			18.3			11.9		
Approach LOS	C			C			B			B		
Queue Length 50th (ft)	6		34	0			635		157	105		
Queue Length 95th (ft)	40		71	0			#852		251	168		
Internal Link Dist (ft)	1			181			350			227		
Turn Bay Length (ft)			65									
Base Capacity (vph)	359		340	664			2091		521	3040		
Starvation Cap Reductn	0		0	0			57		0	0		
Spillback Cap Reductn	2		0	0			0		0	350		
Storage Cap Reductn	0		0	0			0		0	0		
Reduced v/c Ratio	0.11		0.14	0.11			0.82		0.62	0.49		
<b>Intersection Summary</b>												
Area Type:	Other											
Cycle Length:	120											
Actuated Cycle Length:	120											
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow												
Natural Cycle:	70											
Control Type:	Actuated-Coordinated											
Maximum v/c Ratio:	0.82											
Intersection Signal Delay:	15.5						Intersection LOS: B					
Intersection Capacity Utilization	101.7%						ICU Level of Service G					

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

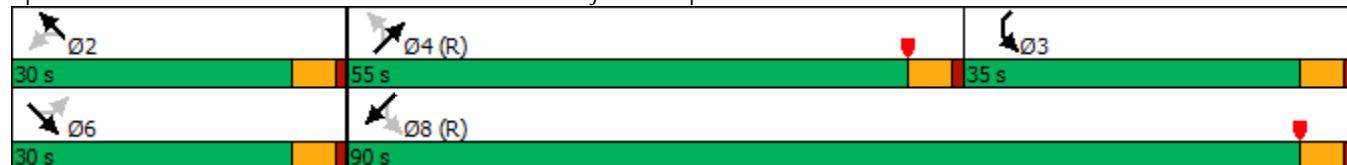
Saturday Peak Hour  
10/22/2019

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	60	0	47	1	0	0	40	1052	2	1	914	70
Future Volume (vph)	60	0	47	1	0	0	40	1052	2	1	914	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	14	15	11	10	12	11	11	13
Grade (%)	-7%				-3%			2%			-1%	
Storage Length (ft)	0		0	0		75	115		0	90		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor							1.00				1.00	
Frt			0.850								0.989	
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1832	1584	0	1916	2080	1694	3270	0	1719	3395	0
Flt Permitted		0.757			0.715		0.137			0.114		
Satd. Flow (perm)	0	1459	1584	0	1442	2080	244	3270	0	206	3395	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85									11	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		153			327			315			136	
Travel Time (s)		3.5			7.4			5.4			2.3	
Confl. Peds. (#/hr)						4					4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	0	51	1	0	0	43	1131	2	1	983	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	51	0	1	0	43	1133	0	1	1058	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	1.00	0.98	0.90	0.86	1.06	1.11	1.01	1.04	1.04	0.95
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2	2	2	2		2	2	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83	83	83	83		83	83	
Trailing Detector (ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	0	-5	-5	0	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	20	40	40	20	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43	43		43	43	43	43		43	43	
Detector 2 Size(ft)		40	40		40	40	40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	30.0	30.0	30.0	10.0	10.0	10.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	15.0	45.0		15.0	45.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	50.0%		16.7%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	10.0	40.0		10.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag									Lag	Lead	Lag	Lead
Lead-Lag Optimize?									Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	Min		None	Min	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	19.0	19.0	19.0					19.0				
Pedestrian Calls (#/hr)	5	5	5					5				
Act Effct Green (s)	38.3	38.3		38.3		42.9	39.5		40.4	35.2		
Actuated g/C Ratio	0.43	0.43		0.43		0.48	0.44		0.45	0.39		
v/c Ratio	0.10	0.07		0.00		0.21	0.79		0.01	0.79		
Control Delay	19.8	2.1		20.0		16.2	26.1		3.0	20.9		
Queue Delay	0.0	0.0		0.0		0.0	1.2		0.0	0.4		
Total Delay	19.8	2.1		20.0		16.2	27.2		3.0	21.3		
LOS	B	A		B		B	C		A	C		
Approach Delay	12.0			20.0				26.8			21.3	
Approach LOS	B			B			C				C	
Queue Length 50th (ft)	23	0		0		12	246		0	90		
Queue Length 95th (ft)	56	11		4		24	362		m0	121		
Internal Link Dist (ft)	73			247			235			56		
Turn Bay Length (ft)						115				90		
Base Capacity (vph)	621	723		613		289	1547		271	1515		
Starvation Cap Reductn	0	0		0		0	0		0	115		
Spillback Cap Reductn	0	0		0		0	206		0	0		
Storage Cap Reductn	0	0		0		0	0		0	0		
Reduced v/c Ratio	0.10	0.07		0.00		0.15	0.84		0.00	0.76		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Yellow												
Natural Cycle:	70											
Control Type: Actuated-Coordinated												
Maximum v/c Ratio:	0.79											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road

Peak PM Hour  
10/22/2019

Intersection Signal Delay: 23.6

Intersection LOS: C

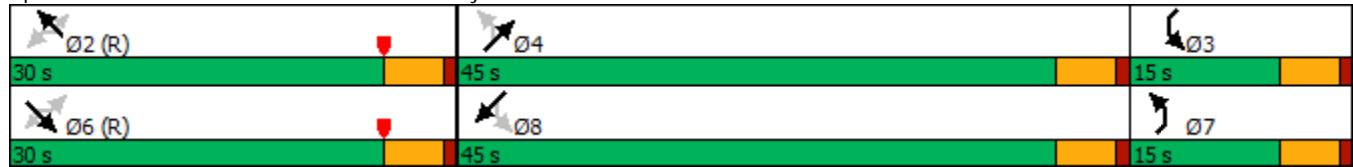
Intersection Capacity Utilization 51.6%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: U.S. Route 6 & Parkway Drive/Jacobs Hill Road



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour  
 10/22/2019

	↑	↑	↗	↙	↓	↗	↑	↗	↖	↖	↖	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	56	28	60	446	35	104	42	1009	0	50	825	180
Future Volume (vph)	56	28	60	446	35	104	42	1009	0	50	825	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	11	11	12	11	11	12	10	11	11
Grade (%)				0%		-6%			1%			0%
Storage Length (ft)	0			0	135		135	45		0	80	
Storage Lanes	0			1	1		1	1		0	1	
Taper Length (ft)	25				86			86			86	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				1.00
Frt				0.850			0.850					0.973
Flt Protected				0.968		0.950	0.959		0.950			0.950
Satd. Flow (prot)	0	1923	1689	1674	1690	1631	1686	3404	0	1652	3314	0
Flt Permitted		0.968		0.950	0.959		0.146				0.137	
Satd. Flow (perm)	0	1923	1689	1674	1690	1631	259	3404	0	238	3314	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)				182			182					29
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		126			290			179			430	
Travel Time (s)		2.9			6.6			3.1			7.3	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Adj. Flow (vph)	59	29	63	469	37	109	44	1062	0	53	868	189
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	88	63	253	253	109	44	1062	0	53	1057	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.92	0.92	0.92	1.01	1.01	0.96	1.05	1.05	1.01	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2	2	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83	83	83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43	43	43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40	40	40	40		40	40	
Detector 2 Type	Cl+Ex		Cl+Ex	Cl+Ex								

Synchro 10 Report

Page 4

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour  
 10/22/2019

	↖	↑	↗	↙	↓	↘	↗	↖	↙	↖	↗	↙
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	pm+pt	NA		
Protected Phases	2	2		6	6		7	4		3	8	
Permitted Phases			2			6	4			8		
Detector Phase	2	2	2	6	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	32.0	32.0	32.0	11.0	11.0		11.0	11.0	
Total Split (s)	14.0	14.0	14.0	34.0	34.0	34.0	11.0	31.0		11.0	31.0	
Total Split (%)	15.6%	15.6%	15.6%	37.8%	37.8%	37.8%	12.2%	34.4%		12.2%	34.4%	
Maximum Green (s)	8.0	8.0	8.0	28.0	28.0	28.0	5.0	25.0		5.0	25.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		3.0	2.0	
Recall Mode	None	None	None	Min	Min	Min	None	C-Max		None	C-Min	
Walk Time (s)				8.0	8.0	8.0		8.0			8.0	
Flash Dont Walk (s)				18.0	18.0	18.0		18.0			18.0	
Pedestrian Calls (#/hr)				5	5	5		5			5	
Act Effct Green (s)	7.3	7.3	18.5	18.5	18.5	44.3	40.5		45.4	41.0		
Actuated g/C Ratio	0.08	0.08	0.21	0.21	0.21	0.49	0.45		0.50	0.46		
v/c Ratio	0.57	0.21	0.74	0.73	0.23	0.20	0.69		0.24	0.69		
Control Delay	54.4	1.6	45.5	44.9	1.6	11.1	16.7		16.3	24.0		
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	43.0		0.0	0.0		
Total Delay	54.4	1.6	45.5	44.9	1.6	11.1	59.7		16.3	24.0		
LOS	D	A	D	D	A	B	E		B	C		
Approach Delay	32.4			37.5			57.8			23.6		
Approach LOS	C			D			E			C		
Queue Length 50th (ft)	49	0	143	143	0	5	71		14	185		
Queue Length 95th (ft)	96	0	205	204	6	m9	#479		42	#488		
Internal Link Dist (ft)	46		210			99				350		
Turn Bay Length (ft)			135		135	45			80			
Base Capacity (vph)	170	315	520	525	632	219	1531		225	1526		
Starvation Cap Reductn	0	0	0	0	0	0	65		0	0		
Spillback Cap Reductn	0	29	0	0	0	0	551		0	0		
Storage Cap Reductn	0	0	0	0	0	0	0		0	0		
Reduced v/c Ratio	0.52	0.22	0.49	0.48	0.17	0.20	1.08		0.24	0.69		

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 42 (47%), Referenced to phase 4:NETL and 8:SWTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp

Peak PM Hour  
10/22/2019

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 39.6

Intersection LOS: D

Intersection Capacity Utilization 67.7%

ICU Level of Service C

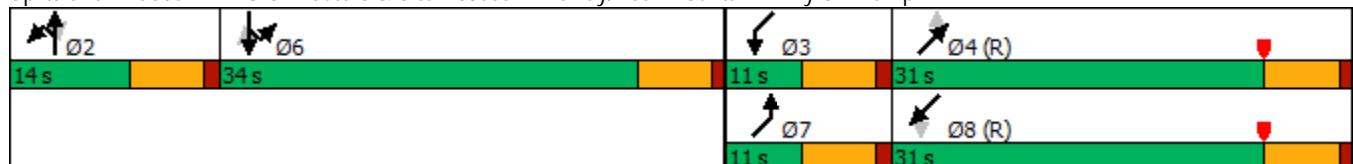
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 6 & Site Access Driveway/Bear Mountain Pkwy SB Ramp



2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	3	20	33	0	44	12	1344	154	304	1008	15
Future Volume (vph)	4	3	20	33	0	44	12	1344	154	304	1008	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	12	12	12	12	12	11	12	12
Grade (%)	-1%				-4%			1%			0%	
Storage Length (ft)	0		0	65		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99							1.00			1.00	
Fr <sub>t</sub>	0.900				0.850			0.985			0.998	
Flt Protected	0.993			0.950						0.950		
Satd. Flow (prot)	0	1617	0	1745	1484	0	0	3469	0	1711	3531	0
Flt Permitted	0.971		0.740					0.944		0.085		
Satd. Flow (perm)	0	1581	0	1359	1484	0	0	3274	0	153	3531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	20			365			18			4		
Link Speed (mph)	30			30			40			40		
Link Distance (ft)	74			261			430			307		
Travel Time (s)	1.7			5.9			7.3			5.2		
Confl. Peds. (#/hr)	3		3			3					3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	5%	2%	2%	11%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	4	3	20	34	0	45	12	1371	157	310	1029	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	0	34	45	0	0	1540	0	310	1044	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11			11			11			11		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.02	0.97	0.97	1.01	1.01	1.01	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		2	2	
Detector Template	Left					Left						
Leading Detector (ft)	20	83		83	83		20	83		83	82	
Trailing Detector (ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Position(ft)	0	-5		-5	-5		0	-5		-5	-5	
Detector 1 Size(ft)	20	40		40	40		20	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43		43	43			43		43	42	
Detector 2 Size(ft)		40		40	40			40		40	40	
Detector 2 Type		Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Turn Type	Perm	NA		custom	NA		Perm	NA		pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6			2	2		4			8		
Detector Phase	6	6		2	2		4	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		10.0	23.0	
Total Split (s)	18.0	18.0		18.0	18.0		47.0	47.0		25.0	72.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		52.2%	52.2%		27.8%	80.0%	
Maximum Green (s)	13.0	13.0		13.0	13.0		42.0	42.0		20.0	67.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		16.9		16.9	16.9			42.0		63.1	63.1	
Actuated g/C Ratio		0.19		0.19	0.19			0.47		0.70	0.70	
v/c Ratio		0.09		0.13	0.08			1.00		0.80	0.42	
Control Delay		18.4		34.6	0.3			41.8		43.2	6.0	
Queue Delay		0.0		0.0	0.0			36.5		0.0	0.0	
Total Delay		18.4		34.6	0.3			78.4		43.2	6.0	
LOS	B		C	A			E		D	A		
Approach Delay		18.4			15.0			78.4			14.5	
Approach LOS	B			B			E				B	
Queue Length 50th (ft)	3		17	0			-503		115	107		
Queue Length 95th (ft)	27		45	0			#643		199	118		
Internal Link Dist (ft)	1			181			350			227		
Turn Bay Length (ft)		65										
Base Capacity (vph)	312		254	574			1537		460	2629		
Starvation Cap Reductn	0		0	0			356		0	0		
Spillback Cap Reductn	0		0	0			0		0	0		
Storage Cap Reductn	0		0	0			0		0	0		
Reduced v/c Ratio	0.09		0.13	0.08			1.30		0.67	0.40		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	90											
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green												
Natural Cycle:	90											
Control Type:	Actuated-Coordinated											

2021 Build Traffic Volumes (W/ Signalization & Signal Timing Imp)  
3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas

Peak PM Hour  
10/22/2019

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 47.3

Intersection LOS: D

Intersection Capacity Utilization 98.3%

ICU Level of Service F

Analysis Period (min) 15

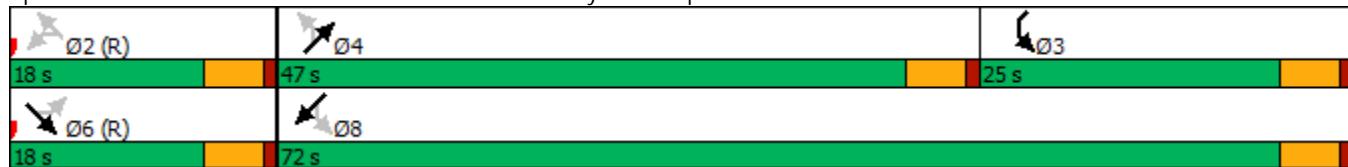
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 3: U.S. Route 6 & Bear Mountain Pkwy NB Ramp/Sinclair Gas





Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

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***GASLAND CORTLANDT***

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**APPENDIX E**

**ACCIDENT DATA**

**TABLE A-2**  
**SUMMARY OF ACCIDENT RATES AND**  
**COMPARISON TO STATE WIDE AVERAGE**

<b>U.S. ROUTE 6 &amp; JACOBS HILL ROAD/PARKWAY DRIVE</b>					
<b>YEARS</b> <b>AADT</b>	3 22,712 VPD				
<b>ACCIDENT TYPE</b>	<b>NUMBER OF ACCIDENTS</b>	<b>RATE</b>		<b>STATEWIDE AVERAGE</b>	
Wet Road	0	0.00	ACC/MEV	0.04	ACC/MEV
Left Turn	0	0.00	ACC/MEV	0.01	ACC/MEV
Rear End	2	0.08	ACC/MEV	0.11	ACC/MEV
Overtaking	0	0.00	ACC/MEV	0.04	ACC/MEV
Right Angle	0	0.00	ACC/MEV	0.03	ACC/MEV
Right Turn	0	0.00	ACC/MEV	0.01	ACC/MEV
Head-On	1	0.04	ACC/MEV	0.00	ACC/MEV
Sideswipe	0	0.00	ACC/MEV	0.00	ACC/MEV
Other	1	-	-	-	-
All Types	4	0.16	ACC/MEV	0.25	ACC/MEV
<b>U.S. ROUTE 6 &amp; BEAR MOUNTAIN PARKWAY EB ON/OFF RAMPS/SITE ACCESS</b>					
<b>YEARS</b> <b>AADT</b>	3 22,712 VPD				
<b>ACCIDENT TYPE</b>	<b>NUMBER OF ACCIDENTS</b>	<b>RATE</b>		<b>STATE WIDE AVERAGE</b>	
Wet Road	0	0.00	ACC/MEV	0.04	ACC/MEV
Left Turn	1	0.04	ACC/MEV	0.01	ACC/MEV
Rear End	3	0.12	ACC/MEV	0.11	ACC/MEV
Overtaking	1	0.04	ACC/MEV	0.04	ACC/MEV
Right Angle	0	0.00	ACC/MEV	0.03	ACC/MEV
Right Turn	0	0.00	ACC/MEV	0.01	ACC/MEV
Head-On	0	0.00	ACC/MEV	0.00	ACC/MEV
Sideswipe	0	0.00	ACC/MEV	0.00	ACC/MEV
Other	2	-	-	-	-
All Types	7	0.28	ACC/MEV	0.25	ACC/MEV
<b>U.S. ROUTE 6 &amp; BEAR MOUNTAIN PARKWAY WB ON/OFF RAMPS/SINCLAIR GAS</b>					
<b>YEARS</b> <b>AADT</b>	3 19,006 VPD				
<b>ACCIDENT TYPE</b>	<b>NUMBER OF ACCIDENTS</b>	<b>RATE</b>		<b>STATE WIDE AVERAGE</b>	
Wet Road	0	0.00	ACC/MEV	0.04	ACC/MEV
Left Turn	0	0.00	ACC/MEV	0.03	ACC/MEV
Rear End	2	0.10	ACC/MEV	0.08	ACC/MEV
Overtaking	4	0.19	ACC/MEV	0.02	ACC/MEV
Right Angle	6	0.29	ACC/MEV	0.07	ACC/MEV
Right Turn	0	0.00	ACC/MEV	0.01	ACC/MEV
Head-On	1	0.05	ACC/MEV	0.00	ACC/MEV
Sideswipe	0	0.00	ACC/MEV	0.00	ACC/MEV
Other	1	-	-	-	-
All Types	14	0.67	ACC/MEV	0.29	ACC/MEV

TABLE A  
ACCIDENT SUMMARY - TOWN ACCIDENT DATA  
VARIOUS INTERSECTIONS IN THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, NY

Node/Link	Location	Mile Marker	Date	Time	Traffic Control	Accident Class	# of Vehicles Involved	Road Condition	Weather	Intersection	Apparent Contributing Factors
E MAIN ST	At Int. w/ Pike Plz	6 87033001	07/18/2016	05:18am	TRAFFIC SIGNAL	N/R	2-0	DAYLIGHT	DRY	REAR END	UNSAFE SPEED
E MAIN ST	At Int. w/ Pike Plz	6 87033001	11/23/2016	01:37pm	TRAFFIC SIGNAL	PDO & I	2-2	DARK-ROAD LIGHTED	DRY	HEAD ON	REACTION TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Pike Plz	6 87033001	12/01/2016	04:50pm	TRAFFIC SIGNAL	N/R	2-0	DARK-ROAD LIGHTED	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	At Int. w/ Ramp	6 87033003	01/28/2016	06:40pm	STOP SIGN	N/R	3-0	DARK-ROAD LIGHTED	DRY	OTHER	REACTION TO OTHER UNINVOLVED VEHICL
E MAIN ST	At Int. w/ Ramp	6 87033002	05/14/2016	05:58pm	TRAFFIC SIGNAL	N/R	2-0	DAYLIGHT	DRY	REAR END	REACTION TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Ramp	6 87033002	07/30/2016	09:05pm	TRAFFIC SIGNAL	I	2-2	DARK-ROAD LIGHTED	WET	OVERTAKING	NOT APPLICABLE
E MAIN ST	At Int. w/ Ramp	6 87033003	08/25/2016	08:57pm	NO PASSING ZONE	NONE	2-1	DARK-ROAD LIGHTED	DRY	RIGHT ANGLE	UNSAFE LANE CHANGE
E MAIN ST	At Int. w/ Ramp	6 87033002	09/15/2016	12:30pm	TRAFFIC SIGNAL	N/R	2-0	DAYLIGHT	DRY	OVERTAKING	FOLLOWING TOO CLOSELY
E MAIN ST	At Int. w/ Ramp	6 87033002	10/21/2016	12:10pm	TRAFFIC SIGNAL	*	3-0	DAYLIGHT	WET	OTHER	NOT APPLICABLE
E MAIN ST	At Int. w/ Ramp	6 87033003	10/22/2016	03:52pm	STOP SIGN	PDO & I	2-1	DAYLIGHT	DRY	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Ramp	6 87033003	04/03/2017	09:29pm	STOP SIGN	*	2-0	DARK-ROAD LIGHTED	DRY	RIGHT ANGLE	FOLLOWING TOO CLOSELY
E MAIN ST	At Int. w/ Ramp	6 87033002	04/13/2017	05:00pm	TRAFFIC SIGNAL	PDO & I	4-1	DAYLIGHT	DRY	OTHER	NOT APPLICABLE
E MAIN ST	At Int. w/ Ramp	6 87033003	08/23/2017	06:50pm	NO PASSING ZONE	*	2-0	DAYLIGHT	DRY	OVERTAKING	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Ramp	6 87033002	10/24/2017	06:55pm	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	WET	LEFT TURN (WITH OTHER CAR)	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Ramp	6 87033002	11/09/2017	02:09pm	TRAFFIC SIGNAL	PDO & I	2-2	DAYLIGHT	DRY	REAR END	UNSAFE SPEED
E MAIN ST	At Int. w/ Ramp	6 87033003	11/27/2017	06:27pm	None	*	2-0	DARK-ROAD LIGHTED	DRY	OVERTAKING	UNSAFE LANE CHANGE
E MAIN ST	At Int. w/ Ramp	6 87033003	12/05/2017	06:45pm	NO PASSING ZONE	*	2-0	DARK-ROAD LIGHTED	WET	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	At Int. w/ Ramp	6 87033002	12/22/2017	12:41pm	TRAFFIC SIGNAL	*	2-0	DARK-ROAD UNLIGHTED	DRY	RIGHT ANGLE	UNSAFE LANE CHANGE
E MAIN ST	At Int. w/ Ramp	6 87033002	01/04/2018	01:45pm	None	*	2-0	DAYLIGHT	DRY	OVERTAKING	BACKING UNSAFELY
E MAIN ST	At Int. w/ Ramp	6 87033003	03/24/2018	06:25pm	None	*	2-0	DAYLIGHT	DRY	RIGHT ANGLE	UNSAFE LANE CHANGE
E MAIN ST	At Int. w/ Ramp	6 87033003	08/14/2018	03:51pm	None	*	2-0	DARK-ROAD LIGHTED	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Ramp	6 87033003	09/18/2018	05:42pm	NO PASSING ZONE	*	2-0	DAYLIGHT	DRY	RIGHT ANGLE	FOLLOWING TOO CLOSELY
E MAIN ST	At Int. w/ Ramp	6 87033003	12/29/2018	04:16pm	STOP SIGN	N/R	2-0	DARK-ROAD LIGHTED	DRY	REAR END	UNSAFE LANE CHANGE
E MAIN ST	At Int. w/ Ramp	6 87033003	12/03/2016	06:19pm	TRAFFIC SIGNAL	N/R	2-0	DUSK	DRY	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	At Int. w/ Ramp	6 87033003	08/09/2018	08:48pm	STOP SIGN	PDO & I	2-1	DAYLIGHT	DRY	OTHER	TURNING IMPROPER
E MAIN ST	At Int. w/ Ramp	6 87033003	03/01/2017	04:22pm	STOP SIGN	*	2-0	DUSK	DRY	HEAD ON	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	08/14/2017	04:10pm	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	DRY	REAR END	DRIVER INATTENTION
E MAIN ST	Non-Intersection	6 87033003	09/09/2017	01:15pm	None	*	2-0	DAYLIGHT	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	Non-Intersection	6 87033003	05/10/2017	06:29pm	YIELD SIGN	*	2-0	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	987H87012007	05/23/2017	05:16pm	None	*	2-0	DAYLIGHT	DRY	REAR END	UNSAFE LANE CHANGE
E MAIN ST	Non-Intersection	987H87012007	06/27/2018	10:00pm	None	*	2-0	DAYLIGHT	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	Non-Intersection	987H87012007	02/07/2018	06:45pm	STOP SIGN	*	2-0	DARK-ROAD UNLIGHTED	DRY	REAR END	PAVEMENT SLIPPERY
E MAIN ST	Non-Intersection	987H87012007	02/14/2018	01:40pm	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	DRY	REAR END	DRIVER INATTENTION
E MAIN ST	Non-Intersection	987H87012007	05/28/2018	03:34pm	None	*	2-0	DAYLIGHT	DRY	REAR END	TIRE FAILURE/INADEQUATE
E MAIN ST	Non-Intersection	N/P	07/17/2018	06:40pm	None	*	2-0	DAYLIGHT	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	Non-Intersection	987H87012007	09/20/2016	03:26pm	STOP SIGN	PDO & I	2-3	DAYLIGHT	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	Non-Intersection	987H87012007	07/08/2017	11:18pm	None	*	2-0	DAYLIGHT	DRY	REAR END	NOT APPLICABLE
E MAIN ST	Non-Intersection	6 87033002	02/13/2007	06:45pm	STOP SIGN	*	2-0	DARK-ROAD UNLIGHTED	DRY	REAR END	DRIVER INATTENTION
E MAIN ST	Non-Intersection	987H87012007	05/28/2018	03:26pm	None	*	2-0	DAYLIGHT	DRY	REAR END	TIRE FAILURE/INADEQUATE
E MAIN ST	Non-Intersection	N/P	07/17/2018	06:40pm	None	*	2-0	DAYLIGHT	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	Non-Intersection	987H87012007	02/07/2018	06:45pm	STOP SIGN	PDO & I	2-3	DAYLIGHT	DRY	REAR END	PAVEMENT SLIPPERY
E MAIN ST	Non-Intersection	987H87012007	07/08/2017	11:18pm	None	*	2-0	DAYLIGHT	DRY	REAR END	DRIVER INATTENTION
E MAIN ST	Non-Intersection	6 87033002	02/13/2018	04:00pm	HIGHWAY WORK AREA	N/R	2-0	DAYLIGHT	DRY	REAR END	REACTION TO OTHER UNINVOLVED VEHICL
E MAIN ST	Non-Intersection	6 87033002	10/19/2018	05:53pm	None	*	2-0	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	09/26/2016	04:10pm	STOP SIGN	*	2-0	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	09/18/2018	09:10am	None	*	2-0	DAYLIGHT	WET	REAR END	UNSAFE LANE CHANGE
E MAIN ST	Non-Intersection	6 87033002	09/22/2017	08:15pm	NO PASSING ZONE	N/R	2-0	DARK-ROAD LIGHTED	DRY	REAR END	NOT ENTERED
E MAIN ST	Non-Intersection	6 87033002	08/04/2016	04:00pm	NO PASSING ZONE	I	3-2	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	05/28/2018	12:42pm	NO PASSING ZONE	PDO & I	2-1	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	12/02/2016	12:53pm	TRAFFIC SIGNAL	N/R	2-0	DAYLIGHT	DRY	REAR END	DRIVER INATTENTION
E MAIN ST	Non-Intersection	6 87033002	12/22/2016	09:14am	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	01/05/2017	02:20pm	None	*	2-0	DAYLIGHT	DRY	REAR END	UNSAFE LANE CHANGE
E MAIN ST	Non-Intersection	6 87033002	03/02/2017	01:23pm	UNKNOWN	*	2-0	DARK-ROAD LIGHTED	DRY	REAR END	REACTION TO OTHER UNINVOLVED VEHICL
E MAIN ST	Non-Intersection	6 87033003	03/13/2017	08:30pm	NO PASSING ZONE	*	2-0	DAWN	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	10/03/2017	06:08am	TRAFFIC SIGNAL	N/R	2-0	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	02/19/2018	11:53am	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	DRY	REAR END	DRIVER INATTENTION
E MAIN ST	Non-Intersection	6 87033002	05/06/2018	02:20pm	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	DRY	REAR END	FOLLOWING TOO CLOSELY
E MAIN ST	Non-Intersection	6 87033002	06/25/2018	11:13am	TRAFFIC SIGNAL	*	2-0	DAYLIGHT	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY
E MAIN ST	Non-Intersection	N/P	11/27/2018	07:26pm	NO PASSING ZONE	*	2-0	DARK-ROAD UNLIGHTED	DRY	REAR END	FAILURE TO YIELD RIGHT OF WAY

\*PDO = PROPERTY DAMAGE ONLY    I = INJURY    F = FATALITY    N/R = NON-REPORTABLE    N/P = NOT PROVIDED

# NYSDOT QRA ACCIDENT SEVERITY SUMMARY

Print Date 1/31/2019 Print Time 11:05:37AM

<u>Query Number/Name</u>	<u>Query Type</u>	<u>Query Sub Type</u>	<u>Accident Date Range</u>		
43470 15722	AttributeQuery	None	1/1/2016 12:00:00AM To 1/30/2019 12:00:00AM		
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
2016	8	0	4	7	19
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
2017	2	0	15	2	19
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
2018	1	1	10	4	16
<b>Grand Total:</b>	<b>11</b>	<b>1</b>	<b>29</b>	<b>13</b>	

**Legend**

— Railroad

# Accident Location Information System(ALIS)

## Accident Verbal Description

### 15722\_VDR

Date in this report covers the period -1/1/2016-1/30/2019

**Complete Accident data from NYSDMV is only available thru 9/30/2018 12:00:00 AM**

County: Westchester	Muni: Cortlandt(1)	Ref. Marker: 6 87033003	Street: E MAIN ST	Persons Injured: 0	Extent of Injuries:	Police Agency: NYSP CORTLANDT	Traffic Control: STOP SIGN	Case: 2016-36079491	Num of Veh: 3
1/28/2016	AT INTERSECTION WITH Ramp	Thu 18:40 PM	Persons Killed: 0				Weather: CLEAR		
			Accident Class: NON-REPORTABLE				Light Condition: DARK-ROAD LIGHTED		
			Type Of Accident: COLLISION WITH MOTOR VEHICLE						
			Manner of Collision: OTHER	Road Char.: STRAIGHT AND LEVEL	Action of Ped/Bicycle: NOT APPLICABLE				
			Road Surface Condition: DRY						
			Loc. of Ped/Bicycle: NOT APPLICABLE						
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	Driver's Age:	State of Registration: NY	Sex: M	Citation Issued: N		
			Direction of Travel: NORTH-WEST	Public Property Damage: OTHER	School Bus Involved: OTHER				
			Pre-Accd Action: MAKING LEFT TURN						
			Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, TRAFFIC CONTROL DEVICES DISREGARDED						
Veh :2	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	Driver's Age:	State of Registration: NY	Sex: F	Citation Issued: N		
			Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER				
			Pre-Accd Action: GOING STRAIGHT AHEAD						
			Apparent Factors: NOT APPLICABLE, NOT APPLICABLE						
Veh :3	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	Driver's Age:	State of Registration: NY	Sex: F	Citation Issued: N		
			Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER				
			Pre-Accd Action: GOING STRAIGHT AHEAD						
			Apparent Factors: NOT APPLICABLE, NOT APPLICABLE						
County: Westchester	Muni: Cortlandt(1)	Ref. Marker: 6 87033002	Street: E MAIN ST	Persons Injured: 0	Extent of Injuries:	Police Agency: PD WESTCHESTER COUNTY DPS	Traffic Control: STOP SIGN	Case: 2016-36097366	Num of Veh: 2
1/13/2016	Sat 16:20 PM	Persons Killed: 0					Weather: CLEAR		
		Accident Class: NON-REPORTABLE					Light Condition: DAYLIGHT		
		Type Of Accident: COLLISION WITH MOTOR VEHICLE							
		Manner of Collision: REAR END	Road Char.: STRAIGHT AND LEVEL	Action of Ped/Bicycle: NOT APPLICABLE					
		Road Surface Condition: DRY							
		Loc. of Ped/Bicycle: NOT APPLICABLE							
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 2	Registered Weight:	Driver's Age:	State of Registration: CT	Sex: M	Citation Issued: N		
			Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER				

Pre-Acc Action: MAKING LEFT TURN  
 Apparent Factors: REACTION TO OTHER UNINVOLVED VEHICL, DRIVER INATTENTION

Veh :2	CAR/VAN/PICKUP	Muni: Cortland(T) Ref. Marker: 6 87033002	Street: E MAIN ST	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 62	Sex: F	Citation Issued: N
	Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER	
	Pre-Acc Action: GOING STRAIGHT AHEAD			
	Apparent Factors: GLARE, REACTION TO OTHER UNINVOLVED VEHICL			
	County: Westchester	At INTERSECTION WITH Ramp Sat 09:58 AM	Persons Killed: 0	Extent of Injuries:
		Accident Class: NON-REPORTABLE	Police Agency: NYSP CORTLANDT	Traffic Control: TRAFFIC SIGNAL
		Type Of Accident: COLLISION WITH MOTOR VEHICLE		
		Manner of Collision: REAR END	Road Char: STRAIGHT AND LEVEL	Weather: CLEAR
		Road Surface Condition: DRY	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DAYLIGHT
		Loc. of Ped/Bicycle: NOT APPLICABLE		
	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	State of Registration: NY
		Direction of Travel: EAST	Driver's Age: 45	Sex: M
		Pre-Acc Action: STOPPED IN TRAFFIC	Public Property Damage: OTHER	Citation Issued: N
		Apparent Factors: NOT APPLICABLE, REACTION TO OTHER UNINVOLVED VEHICL	School Bus Involved: OTHER	
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	State of Registration: NY
		Direction of Travel: EAST	Driver's Age: 60	Sex: M
		Pre-Acc Action: GOING STRAIGHT AHEAD	Public Property Damage: OTHER	Citation Issued: N
		Apparent Factors: NOT APPLICABLE, REACTION TO OTHER UNINVOLVED VEHICL	School Bus Involved: OTHER	
	County: Westchester	At INTERSECTION WITH Pike Plz Mon 09:16 AM	Persons Injured: 0	Extent of Injuries:
		Accident Class: NON-REPORTABLE	Police Agency: NYSP CORTLANDT	Traffic Control: TRAFFIC SIGNAL
		Type Of Accident: COLLISION WITH MOTOR VEHICLE		
		Manner of Collision: REAR END	Road Char: STRAIGHT AND LEVEL	Weather: CLEAR
		Road Surface Condition: DRY	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DAYLIGHT
		Loc. of Ped/Bicycle: NOT APPLICABLE		
	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	State of Registration: NY
		Direction of Travel: EAST	Driver's Age: 68	Sex: F
		Pre-Acc Action: STOPPED IN TRAFFIC	Public Property Damage: OTHER	Citation Issued: N
		Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	School Bus Involved: OTHER	
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1	Registered Weight:	State of Registration: NY

Num of Occupants: 1	Driver's Age: 47	Sex: F	Citation Issued: Y
Direction of Travel: EAST	Public Property Damage: OTHER		School Bus Involved: OTHER
Pre-Accident Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, UNSAFE SPEED			
County: Westchester Muni: Cortlandt(T) Ref Marker: 6 87033002 Street: E MAIN ST AT INTERSECTION WITH Ramp Sat 21:06 PM Persons Killed: 0	Persons Injured: 2 Police Agency: NYSP CORTLANDT	Extent of Injuries: CC	Case: 2016-36320433
Accident Class: INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE	Manner of Collision: OVERTAKING	Traffic Control: TRAFFIC SIGNAL	Num of Veh: 2
Road Surface Condition: WET	Road Char.: STRAIGHT AND LEVEL	Weather: RAIN	
Loc. of Ped/Bicycle: NOT APPLICABLE	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DARK-ROAD LIGHTED	
Veh : 2 CAR/VAN/PICKUP Num of Occupants: 3	Registered Weight: 3316 Driver's Age: 45	State of Registration: NY Sex: M	Citation Issued: N
Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Accident Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
Veh : 1 CAR/VAN/PICKUP Num of Occupants: 2	Registered Weight: 3040 Driver's Age: 48	State of Registration: NY Sex: M	Citation Issued: Y
Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Accident Action: MAKING LEFT TURN			
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE			
County: Westchester Muni: Cortlandt(T) Ref Marker: 6 87033003 Street: E MAIN ST 25 Meters East of Ramp Thu 16:00 PM Persons Killed: 0	Persons Injured: 2 Police Agency: NYSP CORTLANDT	Extent of Injuries: CC	Case: 2016-36336295
Accident Class: INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE	Manner of Collision: OTHER	Traffic Control: NO PASSING ZONE	Num of Veh: 3
Road Surface Condition: DRY	Road Char.: STRAIGHT AND LEVEL	Weather: CLEAR	
Loc. of Ped/Bicycle: NOT APPLICABLE	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DAYLIGHT	
Veh : 3 CAR/VAN/PICKUP Num of Occupants: 1	Registered Weight: 3468 Driver's Age: 75	State of Registration: NY Sex: M	Citation Issued: N
Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Accident Action: STOPPED IN TRAFFIC			
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
Veh : 2 CAR/VAN/PICKUP Num of Occupants: 1	Registered Weight: 5005 Driver's Age: 68	State of Registration: NY Sex: M	Citation Issued: N
Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Accident Action: STOPPED IN TRAFFIC			

	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	
Veh.1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: GOING STRAIGHT AHEAD	Registered Weight: 2767 Driver's Age: 34 Public Property Damage: OTHER
	Apparent Factors: NOT APPLICABLE, REACTION TO OTHER UNINVOLVED VEHICLE	
	County: Westchester Muni: Cortlandt(T) Ref. Marker: Street: RAMP AT INTERSECTION WITH E Main St Tue 08:49 AM Persons Killed: 0 Persons Injured: 1 Accident Class: PROPERTY DAMAGE AND INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: HEAD ON Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	State of Registration: NY Citation Issued: N Sex: M School Bus Involved: OTHER
	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: NORTH-WEST Pre-Acc Action: MAKING LEFT TURN	Extent of Injuries: C Police Agency: NYSP CORTLANDT Traffic Control: STOP SIGN Weather: CLEAR Light Condition: DAYLIGHT
Veh.1	Apparent Factors: NOT APPLICABLE, TURNING IMPROPER	Action of Ped/Bicycle: NOT APPLICABLE
	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: SOUTH Pre-Acc Action: STOPPED IN TRAFFIC	State of Registration: NY Citation Issued: N Sex: F School Bus Involved: OTHER
	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	
	County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033003 Street: E MAIN ST AT INTERSECTION WITH Ramp Thu 20:57 PM Persons Killed: 0 Persons Injured: 1 Accident Class: PROPERTY DAMAGE AND INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: RIGHT ANGLE Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: C Police Agency: NYSP CORTLANDT Traffic Control: NONE Weather: CLEAR Light Condition: DARK-ROAD LIGHTED
	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: SOUTH Pre-Acc Action: MAKING LEFT TURN	Action of Ped/Bicycle: NOT APPLICABLE
Veh.2	Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY	State of Registration: NY Citation Issued: N Sex: F School Bus Involved: OTHER
	CAR/VAN/PICKUP Num of Occupants: 1	Registered Weight: 3427 Driver's Age: 56 Public Property Damage: OTHER
Veh.1		State of Registration: NY Citation Issued: N Sex: M

Direction of Travel: EAST		Public Property Damage: OTHER	School Bus Involved: OTHER
Pre-Acc Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE			
County: Westchester Muni: Cortlandt(T) Ref. Marker: 987H87012007 Street: BEAR MOUNTAIN STATE PKWY AT INTERSECTION WITH [Route] 6 Persons Killed: 0 Persons Injured: 3 Extent of Injuries: CCC Police Agency: PD WESTCHESTER COUNTY DPS Case: 2016-36393144 Num of Veh: 2			
9/20/2016 Tue 15:26 PM Accident Class: PROPERTY DAMAGE AND INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: RIGHT ANGLE Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE		Traffic Control: STOP SIGN Weather: CLOUDY Light Condition: DAYLIGHT	
CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: MAKING RIGHT TURN		Action of Ped/Bicycle: NOT APPLICABLE	
Veh :1 Registered Weight: 3248 Driver's Age: 49 Public Property Damage: OTHER		State of Registration: NY Sex: M Citation Issued: N	School Bus Involved: OTHER
CAR/VAN/PICKUP Num of Occupants: 2 Direction of Travel: EAST Pre-Acc Action: GOING STRAIGHT AHEAD		State of Registration: NY Sex: M Citation Issued: Y	School Bus Involved: OTHER
Veh :2 Registered Weight: 3332 Driver's Age: 38 Public Property Damage: OTHER		State of Registration: NY Sex: M Citation Issued: Y	School Bus Involved: OTHER
CAR/VAN/PICKUP Num of Occupants: 0 Persons Killed: 0 Extent of Injuries: PERSONS KILLED Police Agency: NYSP CORTLANDT Case: 2016-36407219 Num of Veh: 2		Traffic Control: STOP SIGN Weather: CLEAR Light Condition: DAYLIGHT	
9/26/2016 Mon 16:10 PM Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: HEAD ON Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE		Action of Ped/Bicycle: NOT APPLICABLE	
OTHER Num of Occupants: 0 Direction of Travel: SOUTH Pre-Acc Action: MAKING RIGHT TURN		State of Registration: -3 Driver's Age: Sex: Citation Issued: School Bus Involved: OTHER	
Veh :1 Registered Weight: 0 Public Property Damage: OTHER			
CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: STOPPED IN TRAFFIC		State of Registration: NY Sex: M Citation Issued: N	School Bus Involved: OTHER
Veh :2 Registered Weight: 3862 Driver's Age: 52 Public Property Damage: OTHER			

County: Westchester Muni: Cortlandt Ref. Marker: 6 87033003 Street: E MAIN ST  
 AT INTERSECTION WITH Ramp Sat 15:52 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2016-36436556  
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: NYSP CORTLANDT Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN  
 Manner of Collision: RIGHT ANGLE Weather: RAIN  
 Road Surface Condition: WET Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Num of Occupants: 1 Registered Weight: State of Registration: OH  
 Direction of Travel: EAST Driver's Age: 62 Sex: M Citation Issued: N  
 Pre-Acc Action: GOING STRAIGHT AHEAD Public Property Damage: OTHER School Bus Involved: OTHER  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Num of Occupants: 4 Registered Weight: State of Registration: OH  
 Direction of Travel: NORTH Driver's Age: 24 Sex: M Citation Issued: N  
 Pre-Acc Action: MAKING LEFT TURN Public Property Damage: OTHER School Bus Involved: OTHER  
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

County: Westchester Muni: Cortlandt Ref. Marker: 6 87033002 Street: E MAIN ST  
 AT INTERSECTION WITH Ramp Fri 12:10 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2016-36436718  
 Accident Class: PROPERTY DAMAGE Police Agency: NYSP CORTLANDT Num of Veh: 3  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: OTHER Weather: RAIN  
 Road Surface Condition: WET Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :3 OTHER Num of Occupants: 0 Registered Weight: State of Registration: NY  
 Direction of Travel: EAST Driver's Age: Sex: Citation Issued: N  
 Pre-Acc Action: STOPPED IN TRAFFIC Public Property Damage: OTHER School Bus Involved: OTHER  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Num of Occupants: 3 Registered Weight: 3270 State of Registration: NY  
 Direction of Travel: EAST Driver's Age: 77 Sex: M Citation Issued: N  
 Pre-Acc Action: STOPPED IN TRAFFIC Public Property Damage: OTHER School Bus Involved: OTHER  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Num of Occupants: 1 Registered Weight: 3345 State of Registration: NY  
 Direction of Travel: EAST Driver's Age: 73 Sex: F Citation Issued: Y  
 Pre-Acc Action: OTHER Public Property Damage: OTHER School Bus Involved: OTHER

Pre-Acc Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY

County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033003 Street: E MAIN ST  
 36 Meters West of Ramp Wed 12:42 PM Persons Killed: 0  
 Accident Class: PROPERTY DAMAGE AND INJURY  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE  
 Manner of Collision: REAR END  
 Road Surface Condition: DRY  
 Loc. of Ped/Bicycle: NOT APPLICABLE

Veh :1 Extent of Injuries: C Police Agency: NYSP CORTLANDT Case: 2016-36443663  
 Persons Injured: 1 Traffic Control: NO PASSING ZONE Num of Veh: 2  
 Light Condition: DAYLIGHT

CAR/VAN/PICKUP Registered Weight: State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 26 Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY

Veh :2 Registered Weight: 4377 State of Registration: NY  
 Driver's Age: 32 Citation Issued: N  
 Public Property Damage: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033002 Street: E MAIN ST  
 AT INTERSECTION WITH Ramp Thu 12:30 PM Persons Injured: 0 Extent of Injuries:  
 9/15/2016 Persons Killed: 0 Police Agency: NYSP CORTLANDT Case: 2016-36475849  
 Accident Class: NON-REPORTABLE Traffic Control: NO PASSING ZONE Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Weather: CLEAR  
 Manner of Collision: OVERTAKING Road Condition: DRY Light Condition: DAYLIGHT  
 Road Surface Condition: DRY Action of Ped/Bicycle: NOT APPLICABLE  
 Loc. of Ped/Bicycle: NOT APPLICABLE

Veh :1 Registered Weight: State of Registration: NY  
 Driver's Age: 61 Citation Issued: N  
 Public Property Damage: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE, UNSAFE LANE CHANGE

Veh :2 Registered Weight: State of Registration: NY  
 Driver's Age: 76 Citation Issued: N  
 Public Property Damage: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester	Muni: Cortlandt(T)	Ref. Marker: 6 87033001	Street: E MAIN ST	Persons Injured: 0	Extent of Injuries:	Case: 2016-36501963
AT INTERSECTION WITH Pike Piz	Thu 16:50 PM	Persons Killed: 0	Police Agency: NYSP CORTLANDT	Traffic Control: TRAFFIC SIGNAL	Num of Veh: 2	
Accident Class: PROPERTY DAMAGE	Type Of Accident: COLLISION WITH MOTOR VEHICLE	Manner of Collision: REAR END	Road Surface Condition: DRY	Loc of Ped/Bicycle: NOT APPLICABLE	Weather: CLEAR	
Road Char.: STRAIGHT AND LEVEL	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DARK-ROAD LIGHTED				
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1	Direction of Travel: EAST	Pre-Acc Action: SLOWED OR STOPPING	Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE	
		Registered Weight: 3109	Driver's Age: 32	Public Property Damage: OTHER	State of Registration: NY	
		Sex: F			Citation Issued: N	
					School Bus Involved: OTHER	
Veh :2	CAR/VAN/PICKUP	Num of Occupants: 1	Direction of Travel: EAST	Pre-Acc Action: STOPPED IN TRAFFIC	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	
		Registered Weight: 3175	Driver's Age: 64	Public Property Damage: OTHER	State of Registration: NY	
		Sex: F			Citation Issued: N	
					School Bus Involved: OTHER	
County: Westchester	Muni: Cortlandt(T)	Ref. Marker: 6 87033002	Street: E MAIN ST	Persons Injured: 0	Extent of Injuries:	Case: 2016-36501964
14 Meters West of Hamp	Fri 12:53 PM	Persons Killed: 0	Police Agency: NYSP CORTLANDT	Traffic Control: NO PASSING ZONE	Num of Veh: 2	
Accident Class: NON-REPORTABLE	Type Of Accident: COLLISION WITH MOTOR VEHICLE	Manner of Collision: REAR END	Road Surface Condition: DRY	Loc of Ped/Bicycle: NOT APPLICABLE	Weather: CLEAR	
Road Char.: STRAIGHT AND LEVEL	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DAYLIGHT				
Veh :2	CAR/VAN/PICKUP	Num of Occupants: 1	Direction of Travel: WEST	Pre-Acc Action: SLOWED OR STOPPING	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	
		Registered Weight:	Driver's Age: 83	Public Property Damage: OTHER	State of Registration: NY	
		Sex: M			Citation Issued: N	
					School Bus Involved: OTHER	
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1	Direction of Travel: WEST	Pre-Acc Action: GOING STRAIGHT AHEAD	Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE	
		Registered Weight:	Driver's Age: 18	Public Property Damage: OTHER	State of Registration: NY	
		Sex: F			Citation Issued: N	
					School Bus Involved: OTHER	
County: Westchester	Muni: Cortlandt(T)	Ref. Marker: Sat 18:19 PM	Street: PARKWAY DR	Persons Injured: 0	Extent of Injuries:	Case: 2016-36512294
AT INTERSECTION WITH E Main St	Sat 18:19 PM	Persons Killed: 0	Police Agency: NYSP CORTLANDT			Num of Veh: 2
Accident Class: NON-REPORTABLE						

Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OTHER Road Surface Condition: DRY Loc of Ped/Bicycle: INVALID CODE	Road Char: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Traffic Control: TRAFFIC SIGNAL Weather: CLEAR Light Condition: DUSK
Veh :2  CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: Driver's Age: 35 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER
Veh :1  CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: CHANGING LANES Apparent Factors: UNSAFE LANE CHANGE, NOT APPLICABLE	Registered Weight: Driver's Age: 17 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: Y School Bus Involved: OTHER
County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033001 Street: E MAIN ST AT INTERSECTION WITH Pike Piz 11/23/2016 Wed 13:37 PM Persons Killed: 0 Accident Class: PROPERTY DAMAGE AND INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: HEAD ON Road Surface Condition: DRY Loc of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 2 Road Char: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: CC Police Agency: NYSP CORTLANDT Traffic Control: TRAFFIC SIGNAL Weather: CLEAR Light Condition: DAYLIGHT
Veh .2  CAR/VAN/PICKUP Num of Occupants: 2 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 3795 Driver's Age: 55 Public Property Damage: OTHER	Action of Ped/Bicycle: NOT APPLICABLE State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
Veh :1  CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: MAKING LEFT TURN Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY	Registered Weight: 3509 Driver's Age: 26 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033002 Street: E MAIN ST 35 Meters East of Ramp 12/22/2016 Thu 09:14 AM Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: REAR END Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Road Char: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: 0 Police Agency: NYSP CORTLANDT Traffic Control: TRAFFIC SIGNAL Weather: CLOUDY Light Condition: DAYLIGHT

Veh .1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: STARTING IN TRAFFIC Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY	Registered Weight: 3571 Driver's Age: 23 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
Veh .2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: STOPPED IN TRAFFIC Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 2907 Driver's Age: 25 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
Veh .1	County: Westchester Muni: Cortland(T) Ref Marker: 6 87033003 Street: E MAIN ST 32 Meters West of Ramp Thu 14:20 PM Persons Killed: 0 Persons Injured: 0 Police Agency: NYSP CORTLANDT Extent of Injuries: Case: 2017-36553069	Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OVERTAKING Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Traffic Control: NONE Weather: CLOUDY Light Condition: DAYLIGHT
Veh .2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: CHANGING LANES Apparent Factors: NOT APPLICABLE, UNSAFE LANE CHANGE	Registered Weight: 2747 Driver's Age: 69 Public Property Damage: OTHER	Action of Ped/Bicycle: NOT APPLICABLE State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
Veh .1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 3527 Driver's Age: 21 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
Veh .2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 3455 Driver's Age: 54 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER

			Pre-Acc Action: SLOWED OR STOPPING Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
Veh.:1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE	Registered Weight: 5707 Driver's Age: 44 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER	Extent of Injuries: Police Agency: NYSP CORTLANDT Traffic Control: NO PASSING ZONE Weather: CLEAR Light Condition: DARK-ROAD LIGHTED	Case: 2017-36641848 Num of Veh: 2	
3/13/2017	County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033002 Street: E MAIN ST 26 Meters West of Ramp Mon 20:30 PM Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: REAR END Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: NYSP CORTLANDT Road Char: STRAIGHT AND LEVEL	Action of Ped/Bicycle: NOT APPLICABLE			
Veh.:1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE	Registered Weight: 5579 Driver's Age: 24 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: Y School Bus Involved: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER	Case: 2017-36648763 Num of Veh: 2	
Veh.:2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: SLOWED OR STOPPING Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: Driver's Age: 33 Public Property Damage: OTHER	State of Registration: MA Sex: M Citation Issued: N School Bus Involved: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER	Case: 2017-36648763 Num of Veh: 2	
3/2/2017	County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033002 Street: E MAIN ST 26 Meters East of Ramp Thu 13:23 PM Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: REAR END Road Surface Condition: UNKNOWN Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: UNKNOWN Road Char: UNKNOWN Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: Police Agency: UNKNOWN Weather: UNKNOWN Light Condition: UNKNOWN	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER	Case: 2017-36648763 Num of Veh: 2	
Veh.:1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: UNKNOWN Pre-Acc Action: UNKNOWN Apparent Factors: NOT ENTERED, NOT ENTERED	Registered Weight: 2804 Driver's Age: 87 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER	Case: 2017-36648763 Num of Veh: 2	
Veh.:2	CAR/VAN/PICKUP Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE	Registered Weight:	State of Registration: NY	State of Registration: NY	Case: 2017-36648763 Num of Veh: 2	

Num of Occupants: 1	Driver's Age: 49	Sex: M	Citation Issued: N
Direction of Travel: UNKNOWN	Public Property Damage: OTHER		School Bus Involved: OTHER
Pre-Accd Action: UNKNOWN			
Apparent Factors: NOT ENTERED			
County: Westchester Muni: Cortlandt(T) Ref Marker: 6 87033003 Street: E MAIN ST			
AT INTERSECTION WITH Ramp Mon 21:23 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Police Agency: NYSP CORTLANDT Case: 2017-36673908 Num of Veh: 2			
Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: RIGHT ANGLE Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED			
Veh :1 CAR/VAN/PICKUP Registered Weight: 3122 Driver's Age: 29 Sex: M State of Registration: NY Citation Issued: N			
Num of Occupants: 1 Public Property Damage: OTHER School Bus Involved: OTHER			
Direction of Travel: NORTH Pre-Accd Action: MAKING LEFT TURN			
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE			
CAR/VAN/PICKUP Registered Weight: 2873 Driver's Age: 40 Sex: F State of Registration: NY Citation Issued: N			
Num of Occupants: 1 Public Property Damage: OTHER School Bus Involved: OTHER			
Direction of Travel: EAST Pre-Accd Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
County: Westchester Muni: Cortlandt(T) Ref Marker: 6 87033002 Street: E MAIN ST			
AT INTERSECTION WITH Ramp Thu 17:00 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Police Agency: NYSP CORTLANDT Case: 2017-36693202 Num of Veh: 4			
Accident Class: PROPERTY DAMAGE AND INJURY Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OTHER Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT			
Veh :2 CAR/VAN/PICKUP Registered Weight: 3493 Driver's Age: 47 Sex: F State of Registration: NY Citation Issued: N			
Num of Occupants: 1 Public Property Damage: OTHER School Bus Involved: OTHER			
Direction of Travel: WEST Pre-Accd Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
CAR/VAN/PICKUP Registered Weight: 2805 Driver's Age: 27 Sex: F State of Registration: NY Citation Issued: N			
Num of Occupants: 1 Public Property Damage: OTHER School Bus Involved: OTHER			
Direction of Travel: WEST Pre-Accd Action: GOING STRAIGHT AHEAD			

	Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE							
Veh :2	CAR/VAN/PICKUP	Registered Weight: 3028	State of Registration: NY	Sex: M	Citation Issued: N	Case: 2017-36739149	Num of Veh: 2	School Bus Involved: OTHER
	Num of Occupants: 2	Driver's Age: 28						
	Direction of Travel: WEST	Public Property Damage: OTHER						
	Pre-Acc Action: GOING STRAIGHT AHEAD							
	Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY							
Veh :1	CAR/VAN/PICKUP	Registered Weight: 3814	State of Registration: NY	Sex: M	Citation Issued: Y	Traffic Control: YIELD SIGN	Num of Veh: 2	School Bus Involved: OTHER
	Num of Occupants: 1	Driver's Age: 71				Weather: CLEAR		
	Direction of Travel: WEST	Public Property Damage: OTHER				Light Condition: DAYLIGHT		
	Pre-Acc Action: GOING STRAIGHT AHEAD							
	Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY							
County: Westchester	Muni: Cortland(T)	Ref. Marker: 987H87012007	Street: BEAR MOUNTAIN STATE PKWY	Extent of Injuries:				
5/10/2017	Wed 18:29 PM	Persons Killed: 0	Persons Injured: 0					
	Accident Class: PROPERTY DAMAGE							
	Type Of Accident: COLLISION WITH MOTOR VEHICLE							
	Manner of Collision: OVERTAKING							
	Road Surface Condition: DRY	Road Char: STRAIGHT AND LEVEL	Action of Ped/Bicycle: NOT APPLICABLE					
	Loc. of Ped/Bicycle: NOT APPLICABLE							
Veh :1	CAR/VAN/PICKUP	Registered Weight: 3831	State of Registration: NY	Sex: M	Citation Issued: N	Traffic Control: YIELD SIGN	Num of Veh: 2	School Bus Involved: OTHER
	Num of Occupants: 1	Driver's Age: 43				Weather: CLOUDY		
	Direction of Travel: SOUTH	Public Property Damage: OTHER				Light Condition: DAYLIGHT		
	Pre-Acc Action: MERGING							
	Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE							
Veh :2	CAR/VAN/PICKUP	Registered Weight: 4841	State of Registration: NY	Sex: M	Citation Issued: N	Traffic Control: NONE	Num of Veh: 2	School Bus Involved: OTHER
	Num of Occupants: 1	Driver's Age: 45				Weather: CLOUDY		
	Direction of Travel: SOUTH	Public Property Damage: OTHER				Light Condition: DAYLIGHT		
	Pre-Acc Action: GOING STRAIGHT AHEAD							
	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE							
County: Westchester	Muni: Cortland(T)	Ref. Marker: 987H87012007	Street: BEAR MOUNTAIN STATE PKWY	Extent of Injuries:				
6/23/2017	Fri 17:15 PM	Persons Killed: 0	Persons Injured: 0					
	Accident Class: PROPERTY DAMAGE							
	Type Of Accident: COLLISION WITH MOTOR VEHICLE							
	Manner of Collision: OVERTAKING							
	Road Surface Condition: DRY	Road Char: CURVE AND GRADE	Action of Ped/Bicycle: NOT APPLICABLE					
	Loc. of Ped/Bicycle: NOT APPLICABLE							
Veh :1	CAR/VAN/PICKUP	Registered Weight: 4311	State of Registration: NY	Sex: F	Citation Issued: N	Traffic Control: NONE	Num of Veh: 2	School Bus Involved: OTHER
	Num of Occupants: 1	Driver's Age: 54				Weather: CLOUDY		
	Direction of Travel: EAST	Public Property Damage: OTHER				Light Condition: DAYLIGHT		

Pre-Acc Action: MERGING  
Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY

Veh :2	CAR/VAN/PICKUP	Registered Weight: 5337	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 56	Sex: M
	Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER
	Pre-Acc Action: GOING STRAIGHT AHEAD		
	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE		
County: Westchester Muni: Cortlandt(T) Ref Marker: 98H87012007 Street: BEAR MOUNTAIN STATE PKWY AT INTERSECTION WITH Bear Mountain State Pkwy Sat 11:16 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2017-36800660 Police Agency: PD WESTCHESTER COUNTY DPS Traffic Control: NONE Num of Veh: 2			
Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OVERTAKING Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE			
Road Char.: CURVE AND GRADE Action of Ped/Bicycle: NOT APPLICABLE			
Veh :2	MOTORCYCLE	Registered Weight: 485	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 50	Sex: M
	Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER
	Pre-Acc Action: GOING STRAIGHT AHEAD		
	Apparent Factors: NOT APPLICABLE, REACTION TO OTHER UNINVOLVED VEHICL		
County: Westchester Muni: Cortlandt(T) Ref Marker: 6 87033002 Street: [Route] 6 Wed 16 10 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2017-36854238 Police Agency: PD WESTCHESTER COUNTY DPS Traffic Control: TRAFFIC SIGNAL Num of Veh: 2			
Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: REAR END Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE			
Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE			
Veh :1	CAR/VAN/PICKUP	Registered Weight: 3742	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 53	Sex: F
	Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER
	Pre-Acc Action: GOING STRAIGHT AHEAD		
	Apparent Factors: NOT APPLICABLE, NOT APPLICABLE		
County: Westchester Muni: Cortlandt(T) Ref Marker: 6 87033002 Street: [Route] 6 Wed 16 10 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2017-36854238 Police Agency: PD WESTCHESTER COUNTY DPS Traffic Control: TRAFFIC SIGNAL Num of Veh: 2			
Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: REAR END Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE			
Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE			
Veh :1	CAR/VAN/PICKUP	Registered Weight: 3280	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 27	Sex: M
	Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER
	Pre-Acc Action: GOING STRAIGHT AHEAD		
	Apparent Factors: DRIVER INATTENTION, NOT APPLICABLE		
Veh :2	CAR/VAN/PICKUP	Registered Weight: 4788	State of Registration: NY
	Num of Occupants: 4	Driver's Age: 36	Sex: F
			Citation Issued: N

	Direction of Travel: WEST Pre-Acc Action: STOPPED IN TRAFFIC Apparent Factors: NOT APPLICABLE	Public Property Damage: OTHER School Bus Involved: OTHER
County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033003 Street: E MAIN ST 8/23/2017 AT INTERSECTION WITH Ramp	Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OVERTAKING Road Surface Condition: DRY Loc of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: NYSP CORTLANDT Traffic Control: NO PASSING ZONE Weather: CLEAR Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE
Veh : 1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 5605 Driver's Age: 54 Public Property Damage: OTHER
	Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: CHANGING LANES Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, UNSAFE LANE CHANGE	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER
Veh : 2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: CHANGING LANES Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, UNSAFE LANE CHANGE	Registered Weight: 4500 Driver's Age: 24 Public Property Damage: OTHER
County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033003 Street: [Route] 6 26 Meters West of Ramp 9/9/2017	Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OVERTAKING Road Surface Condition: DRY Loc of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: PD WESTCHESTER COUNTY DPS Traffic Control: NONE Weather: CLEAR Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE
Veh : 2	TRUCK Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: SLOWED OR STOPPING Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 44799 Driver's Age: 48 Public Property Damage: OTHER
Veh : 1	CAR/VAN/PICKUP Num of Occupants: 3 Direction of Travel: WEST Pre-Acc Action: CHANGING LANES Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE	Registered Weight: 3252 Driver's Age: 18 Public Property Damage: OTHER School Bus Involved: OTHER

County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033001 Street: E MAIN ST  
 23 Meters West of Pike Piz Fri 20:15 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries:  
 Accident Class: NON-REPORTABLE Police Agency: NYSP CORTLANDT Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
 Manner of Collision: OVERTAKING Weather: CLEAR  
 Road Surface Condition: DRY Light Condition: DARK-ROAD LIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE  
**Veh .2**  
 CAR/VAN/PICKUP Registered Weight:  
 Num of Occupants: 1 Driver's Age: 24 State of Registration: NY  
 Direction of Travel: EAST Public Property Damage: OTHER Sex: F Citation Issued: N  
 Pre-Acc Action: GOING STRAIGHT AHEAD School Bus Involved: OTHER  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE  
**Veh :1**  
 CAR/VAN/PICKUP Registered Weight:  
 Num of Occupants: 1 Driver's Age: 46 State of Registration: NY  
 Direction of Travel: EAST Public Property Damage: OTHER Sex: M Citation Issued: Y  
 Pre-Acc Action: CHANGING LANES School Bus Involved: OTHER  
 Apparent Factors: ALCOHOL INVOLVEMENT, UNSAFE LANE CHANGE  

County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033002 Street: E MAIN ST  
 61 Meters East of Ramp Tue 06:08 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries:  
 Accident Class: NON-REPORTABLE Police Agency: NYSP CORTLANDT Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: REAR END Weather: CLEAR  
 Road Surface Condition: DRY Light Condition: DAWN  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE  
**Veh .2**  
 TRUCK Registered Weight:  
 Num of Occupants: 1 Driver's Age: 42 State of Registration: NY  
 Direction of Travel: WEST Public Property Damage: OTHER Sex: M Citation Issued: N  
 Pre-Acc Action: STOPPED IN TRAFFIC School Bus Involved: OTHER  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE  
**Veh :1**  
 CAR/VAN/PICKUP Registered Weight:  
 Num of Occupants: 1 Driver's Age: 58 State of Registration: NY  
 Direction of Travel: WEST Public Property Damage: OTHER Sex: F Citation Issued: N  
 Pre-Acc Action: GOING STRAIGHT AHEAD School Bus Involved: OTHER  
 Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY  

County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033002 Street: E MAIN ST  
 AT INTERSECTION WITH Ramp Tue 08:55 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries:  
**10/24/2017**



			Action of Ped/Bicycle: NOT APPLICABLE
Veh .2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD  Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 4077 Driver's Age: 55 Public Property Damage: OTHER  Action of Ped/Bicycle: NOT APPLICABLE	State of Registration: NY Citation Issued: N Sex: M School Bus Involved: OTHER
Veh :1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: CHANGING LANES  Apparent Factors: UNSAFE LANE CHANGE, NOT APPLICABLE	Registered Weight: Driver's Age: 35 Public Property Damage: OTHER  Action of Ped/Bicycle: NOT APPLICABLE	State of Registration: NY Citation Issued: Y Sex: M School Bus Involved: OTHER
Veh :1	County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033003 Street: E MAIN ST AT INTERSECTION WITH Ramp Tue 18:45 PM 12/5/2017 Persons Killed: 0 Persons Injured: 0 Police Agency: NYSP CORTLANDT Type Of Accident: PROPERTY DAMAGE Manner of Collision: REAR END Road Surface Condition: WET Loc of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: Traffic Control: NO PASSING ZONE Weather: RAIN Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  Action of Ped/Bicycle: NOT APPLICABLE	Case: 2017-37021756 Num of Veh: 2
Veh :2	CAR/VAN/PICKUP Num of Occupants: 2 Direction of Travel: WEST Pre-Acc Action: SLOWED OR STOPPING  Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 4450 Driver's Age: 47 Public Property Damage: OTHER  Action of Ped/Bicycle: NOT APPLICABLE	State of Registration: NY Citation Issued: N Sex: F School Bus Involved: OTHER
Veh :1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD  Apparent Factors: PAVEMENT SLIPPERY, FOLLOWING TOO CLOSELY	Registered Weight: 3400 Driver's Age: 33 Public Property Damage: OTHER  Action of Ped/Bicycle: NOT APPLICABLE	State of Registration: NY Citation Issued: N Sex: F School Bus Involved: OTHER
Veh :2	County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033002 Street: E MAIN ST AT INTERSECTION WITH Ramp Wed 12:41 PM 12/27/2017 Persons Killed: 0 Persons Injured: 0 Police Agency: NYSP CORTLANDT Type Of Accident: PROPERTY DAMAGE Manner of Collision: COLLISION WITH MOTOR VEHICLE Road Surface Condition: DRY Loc of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: Traffic Control: TRAFFIC SIGNAL Weather: CLEAR Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  Action of Ped/Bicycle: NOT APPLICABLE	Case: 2017-37056705 Num of Veh: 2
Veh :2	CAR/VAN/PICKUP Num of Occupants: 2	Registered Weight: 3675 Driver's Age: 21	State of Registration: NY Citation Issued: N Sex: F

Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER
Pre-Acc Action: GOING STRAIGHT AHEAD		
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE		
Veh : 1		
CAR/VAN/PICKUP	Registered Weight: 3329	State of Registration: NY
Num of Occupants: 1	Driver's Age: 73	Citation Issued: N
Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER
Pre-Acc Action: SLOWED OR STOPPING		
Apparent Factors: UNSAFE LANE CHANGE, NOT APPLICABLE		
County: Westchester Muni: Cortland(T) Ref Marker: 6 87033002 Street: E MAIN ST	Persons Killed: 0	Extent of Injuries:
AT INTERSECTION WITH Ramp Thu 01:43 AM	Persons Injured: 0	Police Agency: NYSP CORTLANDT
Accident Class: PROPERTY DAMAGE		Case: 2018-37080624
Type Of Accident: COLLISION WITH MOTOR VEHICLE		Num of Veh: 2
Manner of Collision: RIGHT ANGLE		Traffic Control: NONE
Road Surface Condition: SNOW/ICE	Road Char: STRAIGHT AND LEVEL	Weather: CLOUDY
Loc. of Ped/Bicycle: NOT APPLICABLE	Action of Ped/Bicycle: NOT APPLICABLE	Light Condition: DARK-ROAD UNLIGHTED
CAR/VAN/PICKUP	Registered Weight: 3257	State of Registration: NY
Num of Occupants: 1	Driver's Age: 53	Citation Issued: Y
Direction of Travel: SOUTH	Public Property Damage: OTHER	School Bus Involved: OTHER
Pre-Acc Action: PARKED		
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE		
Veh : 2		
CAR/VAN/PICKUP	Registered Weight: 3823	State of Registration: NY
Num of Occupants: 1	Driver's Age: 53	Citation Issued: Y
Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER
Pre-Acc Action: BACKING		
Apparent Factors: BACKING UNSAFELY, NOT ENTERED		
County: Westchester Muni: Cortland(T) Ref Marker: 987H87012007 Street: BEAR MOUNTAIN STATE PKWY	Persons Killed: 0	Extent of Injuries:
Wed 10:00 AM	Persons Injured: 0	Police Agency: PD WESTCHESTER COUNTY DPS
Accident Class: PROPERTY DAMAGE		Case: 2018-37133846
Type Of Accident: COLLISION WITH SIGN POST		Num of Veh: 1
Manner of Collision: OTHER	Road Char: CURVE AND GRADE	Traffic Control: NONE
Road Surface Condition: SNOW/ICE	Action of Ped/Bicycle: NOT APPLICABLE	Weather: SNOW
Loc. of Ped/Bicycle: NOT APPLICABLE		Light Condition: DAYLIGHT
CAR/VAN/PICKUP	Registered Weight: 2450	State of Registration: NY
Num of Occupants: 1	Driver's Age: 19	Citation Issued: N
Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER
Pre-Acc Action: MAKING RIGHT TURN		
Apparent Factors: PAVEMENT SLIPPERY, NOT APPLICABLE		

County: Westchester Muni: Cortland(T) Ref Marker: 987H87012007 Street: BEAR MOUNTAIN STATE PKWY  
 2/14/2018 Wed 18:45 PM Persons Killed: 0 Persons Injured: 0 Extent of injuries:  
 Accident Class: PROPERTY DAMAGE Police Agency: PD WESTCHESTER COUNTY DPS  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN  
 Manner of Collision: OVERTAKING Weather: CLOUDY  
 Road Surface Condition: DRY Light Condition: DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE Num of Veh: 2

Veh 2  
 CAR/VAN/PICKUP Registered Weight: 3417 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 29 Sex: F Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE

Veh :1  
 CAR/VAN/PICKUP Registered Weight: 3231 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 71 Sex: F Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Acc Action: MAKING RIGHT TURN  
 Apparent Factors: DRIVER INATTENTION, NOT APPLICABLE

County: Westchester Muni: Cortland(T) Ref Marker: 6 87033002 Street: E MAIN ST  
 43 Meiers East of Ramp Mon 11:53 AM Persons Killed: 0 Persons Injured: 0 Extent of injuries:  
 2/19/2018 Persons Injured: 0 Police Agency: NYSP CORTLAND Traffic Control: TRAFFIC SIGNAL  
 Accident Class: PROPERTY DAMAGE Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Weather: CLEAR  
 Manner of Collision: REAR END Light Condition: DAYLIGHT  
 Road Surface Condition: DRY Action of Ped/Bicycle: NOT APPLICABLE  
 Loc. of Ped/Bicycle: NOT APPLICABLE

Veh 2  
 CAR/VAN/PICKUP Registered Weight: 4120 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 52 Sex: M Citation Issued: N  
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Acc Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE

Veh :1  
 CAR/VAN/PICKUP Registered Weight: 2519 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 36 Sex: F Citation Issued: Y  
 Direction of Travel: WEST Public Property Damage: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD  
 Apparent Factors: PRESCRIPTION MEDICATION, FOLLOWING TOO CLOSELY

County: Westchester Muni: Cortland(T) Ref Marker: 6 87033002 Street: E MAIN ST  
 32 Meters West of Ramp Sun 14:20 PM Persons Killed: 0 Persons Injured: 0 Extent of injuries:  
 5/6/2018 Persons Injured: 0 Police Agency: NYSP CORTLANDI Traffic Control: TRAFFIC SIGNAL  
 Accident Class: NON-REPORTABLE Type Of Accident: COLLISION WITH MOTOR VEHICLE Num of Veh: 2

	Manner of Collision: REAR END Road Surface Condition: DRY Loc of Ped/Bicycle: NOT APPLICABLE	Road Char: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Weather: CLEAR Light Condition: DAYLIGHT
Veh :1	CAR/VAN/PICKUP Num of Occupants: 4 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: DRIVER INATTENTION, FOLLOWING TOO CLOSELY	Registered Weight: Driver's Age: 43 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER
Veh :2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: SLOWED OR STOPPING	Registered Weight: Driver's Age: 53 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER
	County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033003 Street: E MAIN ST AT INTERSECTION WITH Ramp 5/24/2018 Thu 18:25 PM Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OVERTAKING Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: NYSP CORTLANDT Road Char: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: Police Agency: NYSP CORTLANDT Weather: CLEAR Light Condition: DAYLIGHT
Veh :2	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: Driver's Age: 52 Public Property Damage: OTHER	State of Registration: NJ Sex: M Citation Issued: N School Bus Involved: OTHER
Veh :1	CAR/VAN/PICKUP Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: CHANGING LANES	Registered Weight: 4168 Driver's Age: 37 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER
Veh :1	County: Westchester Muni: Cortland(T) Ref. Marker: 987H87012007 Street: BEAR MOUNTAIN STATE PKWY Mon 15:34 PM 5/28/2018 Persons Killed: 0 Accident Class: NON-REPORTABLE Type Of Accident: COLLISION WITH MEDIAN/BARRIER Manner of Collision: OTHER Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: PD WESTCHESTER COUNTY DPS Road Char: STRAIGHT/ GRADE Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: Police Agency: PD WESTCHESTER COUNTY DPS Weather: CLOUDY Light Condition: DAYLIGHT
Veh :1	CAR/VAN/PICKUP	Registered Weight:	State of Registration: NY

Num of Occupants: 3	Driver's Age: 45	Sex: F	Citation Issued: N
Direction of Travel: WEST	Public Property Damage: OTHER		School Bus Involved: OTHER
Pre-Acc Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, TIRE FAILURE/INADEQUATE			
County: Westchester Muni: Cortlandt Ref Marker: 6 87033002 Street: E MAIN ST			
26 Meters East of Ramp			
6/29/2018	Fri 11:13 AM	Persons Killed: 0	Persons Injured: 0
Accident Class: PROPERTY DAMAGE	Type Of Accident: COLLISION WITH MOTOR VEHICLE	Police Agency: NYSP CORTLANDT	Extent of Injuries:
Manner of Collision: REAR END	Road Char: STRAIGHT AND LEVEL	Traffic Control: TRAFFIC SIGNAL	Num of Veh: 2
Road Surface Condition: DRY	Action of Ped/Bicycle: NOT APPLICABLE	Weather: CLEAR	Light Condition: DAYLIGHT
Loc of Ped/Bicycle: NOT APPLICABLE			
Veh: 1			
CAR/VAN/PICKUP	Registered Weight: 3419	State of Registration: PA	
Num of Occupants: 1	Driver's Age: 27	Sex: M	Citation Issued: N
Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Acc Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY			
CAR/VAN/PICKUP	Registered Weight: 3419	State of Registration: NY	
Num of Occupants: 1	Driver's Age: 64	Sex: F	Citation Issued: N
Direction of Travel: WEST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Acc Action: STOPPED IN TRAFFIC			
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
County: Westchester Muni: Cortlandt Ref Marker: 6 87033003 Street: E MAIN ST			
AT INTERSECTION WITH Ramp			
8/14/2018	Tue 15:51 PM	Persons Killed: 0	Persons Injured: 0
Accident Class: PROPERTY DAMAGE	Type Of Accident: COLLISION WITH MOTOR VEHICLE	Police Agency: NYSP CORTLANDT	Extent of Injuries:
Manner of Collision: RIGHT ANGLE	Road Char: STRAIGHT AND LEVEL	Traffic Control: NONE	Num of Veh: 2
Road Surface Condition: DRY	Action of Ped/Bicycle: NOT APPLICABLE	Weather: CLEAR	Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE			
Veh: 2			
CAR/VAN/PICKUP	Registered Weight: 2709	State of Registration: NY	
Num of Occupants: 1	Driver's Age: 27	Sex: M	Citation Issued: N
Direction of Travel: NORTH	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Acc Action: GOING STRAIGHT AHEAD			
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE			
CAR/VAN/PICKUP	Registered Weight: 2707	State of Registration: NY	
Num of Occupants: 1	Driver's Age: 36	Sex: F	Citation Issued: N
Direction of Travel: EAST	Public Property Damage: OTHER	School Bus Involved: OTHER	
Pre-Acc Action: GOING STRAIGHT AHEAD			

Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY

County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033002 Street: E MAIN ST  
 Mon 13:54 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries:  
 Accident Class: NON-REPORTABLE Police Agency: PD WESTCHESTER COUNTY DPS Case: 2018-37486038  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: HIGHWAY WORK AREA  
 Manner of Collision: OVERTAKING Weather: CLOUDY  
 Road Surface Condition: DRY Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh : 2 CAR/VAN/PICKUP Registered Weight:

Num of Occupants: 1 Driver's Age: 69

Direction of Travel: WEST

Pre-Acc Action: MERGING

Apparent Factors: NOT APPLICABLE, REACTION TO OTHER UNINVOLVED VEHICL

Veh : 1 OTHER Registered Weight:

Num of Occupants: 1 Driver's Age: 36

Direction of Travel: WEST

Pre-Acc Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE, REACTION TO OTHER UNINVOLVED VEHICL

County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033003 Street: E MAIN ST

AT INTERSECTION WITH Ramp

Tue 17:43 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries:  
 Accident Class: PROPERTY DAMAGE Police Agency: NYSP CORTLANDT Case: 2018-37488622  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
 Manner of Collision: REAR END Weather: CLEAR  
 Road Surface Condition: DRY Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh : 1 CAR/VAN/PICKUP Registered Weight: 5276

Num of Occupants: 1 Driver's Age: 30

Direction of Travel: NORTH-EAST

Pre-Acc Action: GOING STRAIGHT AHEAD

Apparent Factors: FOLLOWING TOO CLOSELY, UNSAFE SPEED

Veh : 2 CAR/VAN/PICKUP Registered Weight: 4572

Num of Occupants: 5 Driver's Age: 48

Direction of Travel: NORTH-EAST

Pre-Acc Action: STOPPED IN TRAFFIC

Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Cortland(T) Ref. Marker: 6 87033002 Street: E MAIN ST

9 Meters East of Parkway Dr

Tue 09:10 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries:

Case: 2018-37490421

		Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: REAR END Road Surface Condition: WET Loc. of Ped/Bicycle: NOT APPLICABLE	Police Agency: PD WESTCHESTER COUNTY DPS Road Char.: STRAIGHT AT HILLCREST Action of Ped/Bicycle: NOT APPLICABLE	Traffic Control: NONE Weather: CLOUDY Light Condition: DAYLIGHT	Num of Veh: 2
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: NOT APPLICABLE, DRIVER INATTENTION	Registered Weight: 2337 Driver's Age: 72 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER	
Veh :2	CAR/VAN/PICKUP	Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: STOPPED IN TRAFFIC Apparent Factors: NOT APPLICABLE, NOT APPLICABLE	Registered Weight: 5535 Driver's Age: 55 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER	
		County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033002 Street: E MAIN ST 10/19/2018 Fri 17:53 PM Persons Killed: 1 Accident Class: FATAL Type Of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: PD WESTCHESTER COUNTY DPS Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: K Traffic Control: NONE Weather: CLEAR Light Condition: DUSK	Case: 2018-37549719 Num of Veh: 2
Veh :1	CAR/VAN/PICKUP	Num of Occupants: 1 Direction of Travel: WEST Pre-Acc Action: MAKING LEFT TURN Apparent Factors: NOT APPLICABLE, DRIVER INATTENTION	Registered Weight: 4270 Driver's Age: 47 Public Property Damage: OTHER	State of Registration: NY Sex: M Citation Issued: N School Bus Involved: OTHER	
Veh :2	MOTORCYCLE	Num of Occupants: 1 Direction of Travel: EAST Pre-Acc Action: GOING STRAIGHT AHEAD Apparent Factors: UNKNOWN, UNKNOWN	Registered Weight: Driver's Age: 37 Public Property Damage: OTHER	State of Registration: NY Sex: F Citation Issued: N School Bus Involved: OTHER	
		County: Westchester Muni: Cortlandt(T) Ref. Marker: 6 87033002 Street: E MAIN ST 73 Meters East of Ramp 11/27/2018 Tue 19:20 PM Persons Killed: 0 Accident Class: PROPERTY DAMAGE Type Of Accident: COLLISION WITH MAJOR VEHICLE Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Road Surface Condition: DRY Loc. of Ped/Bicycle: NOT APPLICABLE	Persons Injured: 0 Police Agency: NYSP COR'ILANDT Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE	Extent of Injuries: Police Agency: NYSP COR'ILANDT Traffic Control: NO PASSING ZONE Weather: CLOUDY Light Condition: DARK-ROAD UNLIGHTED	Case: 2018-37616737 Num of Veh: 2

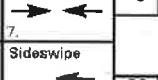
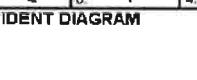
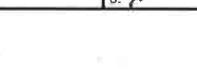
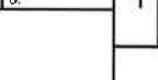
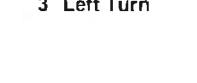
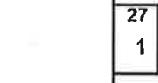
Veh :2      CAR/VAN/PICKUP      Registered Weight: 3786      State of Registration: NY  
 Num of Occupants: 2      Driver's Age: 17      Sex: M      Citation Issued: N  
 Direction of Travel: WEST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE

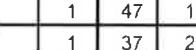
Veh :1      CAR/VAN/PICKUP      Registered Weight: 52      State of Registration: MD  
 Num of Occupants: 1      Driver's Age: 52      Sex: F      Citation Issued: Y  
 Direction of Travel: EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Acc Action: MAKING LEFT TURN  
 Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY

County: Westchester      Mun: Cortlandt(T)      Ref: Marker: 6 87033003      Street: E MAIN ST  
 AT INTERSECTION WITH Ramp      Sat 04-14 AM      Persons Killed: 0      Persons Injured: 0      Extent of Injuries:  
 Accident Class: NON-REPORTABLE      Police Agency: NYSP CORTLANDT      Case: 2018-37665393  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE      Num of Veh: 2  
 Manner of Collision: RIGHT ANGLE      Road Char.: STRAIGHT AND LEVEL      Traffic Control: STOP SIGN  
 Road Surface Condition: WET      Light Condition: FOOG/SMOG/SMOKE  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight: 41      State of Registration: NY  
 Num of Occupants: 2      Driver's Age: 41      Sex: F      Citation Issued: N  
 Direction of Travel: NORTH      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Acc Action: MAKING LEFT TURN  
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

Veh :2      CAR/VAN/PICKUP      Registered Weight: 1      State of Registration: NY  
 Num of Occupants: 1      Driver's Age: 39      Sex: F      Citation Issued: N  
 Direction of Travel: EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Acc Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Page of Pages		New York State Department of Motor Vehicles <b>POLICE ACCIDENT REPORT</b>												DOT Case: 37549719							
Local Codes W5WS488SXSB2 103492-18		MV-104A (7/01) DMV COPY																			
<b>1</b>	Accident Date Month Day Year 10 / 19 / 2018		Day of Week Fri		Military Time 17:53		No. of Vehicles 2		No. Injured 0		No. Killed 1		Not Investigated at Scene ----- Accident Reconstructed <input checked="" type="checkbox"/>		Left Scene <input checked="" type="checkbox"/>		Police Photos <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
<b>VEHICLE 1</b>												<input checked="" type="checkbox"/> <b>VEHICLE 2</b>		<input type="checkbox"/> <b>BICYCLIST</b>		<input type="checkbox"/> <b>PEDESTRIAN</b>		<input type="checkbox"/> <b>OTHER PEDESTRIAN</b>			
<b>2</b>	VEHICLE 1 - Driver License ID Number [REDACTED]						State of Lic. NY		VEHICLE 2 - Driver License ID Number [REDACTED]								State of Lic. NY				
Driver Name--exactly as printed on license [REDACTED]												Driver Name--exactly as printed on license [REDACTED]									
Address (Include Number & Street) [REDACTED]						Apt. No.		Address (Include Number & Street) [REDACTED]						Apt. No.							
City or Town [REDACTED]						State NY		City or Town [REDACTED]						State NY							
<b>3</b>	Date of Birth [REDACTED]		Sex <input checked="" type="checkbox"/> 1	Unlicensed <input type="checkbox"/>	No. of Occupants 1	Public Property Damaged <input type="checkbox"/>		Date of Birth [REDACTED]		Sex <input type="checkbox"/> 2	Unlicensed <input type="checkbox"/>	No. of Occupants 1	Public Property Damaged <input type="checkbox"/>								
<b>1</b>	Name--exactly as printed on registration [REDACTED]						Sex M	Date of Birth [REDACTED]	Name--exactly as printed on registration [REDACTED]						Sex F	Date of Birth [REDACTED]					
Address (Include Number & Street) [REDACTED]						Apt. No. [REDACTED]	Haz. Mat. Code [REDACTED]	Released <input type="checkbox"/>	Address (Include Number & Street) [REDACTED]						Apt. No. [REDACTED]	Haz. Mat. Code [REDACTED]	Released <input type="checkbox"/>				
<b>4</b>	City or Town [REDACTED]						State NY	Zip Code [REDACTED]	City or Town [REDACTED]						State NY	Zip Code [REDACTED]					
Plate Number [REDACTED]		State of Reg. NY	Vehicle Year & Make LEXS	2006	Vehicle Type SUBN	Ins. Code 743	Plate Number [REDACTED]		State of Reg. UN	Vehicle Year & Make KAWK	2012	Vehicle Type MCY	Ins. Code 000								
Ticket/Accident Number(s) [REDACTED]												Ticket/Accident Number(s) [REDACTED]									
<b>5</b>	Violation Section(s) [REDACTED]						Violation Section(s) [REDACTED]						Check if involved vehicle is: <input type="checkbox"/> more than 95 inches wide; <input type="checkbox"/> more than 34 feet long; <input type="checkbox"/> operated with an overweight permit; <input type="checkbox"/> operated with an overdimension permit.								
<b>6</b>	Check if involved vehicle is: <input type="checkbox"/> more than 95 inches wide; <input type="checkbox"/> more than 34 feet long; <input type="checkbox"/> operated with an overweight permit; <input type="checkbox"/> operated with an overdimension permit.						Check the diagram below that describes the accident or draw your own diagram in the space provided (9). Number the vehicles.														
<b>1</b>	Check if involved vehicle is: <input type="checkbox"/> more than 95 inches wide; <input type="checkbox"/> more than 34 feet long; <input type="checkbox"/> operated with an overweight permit; <input type="checkbox"/> operated with an overdimension permit.						Check the diagram below that describes the accident or draw your own diagram in the space provided (9). Number the vehicles.														
VEHICLE 1 DAMAGE CODES												VEHICLE 2 DAMAGE CODES									
<b>V</b>	Box 1 - Point of Impact 1 2						Box 1 - Point of Impact 1 2						Rear End 1. 								
<b>E</b>	Box 2 - Most Damage 5 5						Box 2 - Most Damage 2 17						Left Turn 3. 								
<b>H</b>	Enter up to three more Damage Codes 3 4 5						Enter up to three more Damage Codes 3 4 5						Right Angle 4. 								
<b>I</b>	Vehicle By E&M TOWING Towed: To WCPD HQ						Vehicle By E&M Towed: WCPD HQ						Right Turn 5. 								
<b>C</b>	Overtaking 2. 						Right Turn 6. 						Head On 7. 								
<b>L</b>	ACCIDENT DIAGRAM						Right Turn 8. 						Sideswipe 9. 								
3 Left Turn												Cost of repairs to any one vehicle will be more than \$1000. <input type="checkbox"/> Unknown/Unable to Determine <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
VEHICLE DAMAGE CODING: 1 - 13. SEE DIAGRAM ON RIGHT. 14. UNDERCARRIAGE 17. DEMOLISHED 15. TRAILER 18. NO DAMAGE 16. OVERTURNED 19. OTHER																					
Reference Marker Coordinates (if available) Latitude/Northing: _____ Longitude/Easting: _____																					
Place Where Accident Occurred: County WEST City <input type="checkbox"/> Village <input checked="" type="checkbox"/> Town of CORTLANDT, TOWN OF _____ Road on which accident occurred E MAIN STREET at 1) intersecting street BEAR MTN PKWY W/B ENTRANCE RAM (Route Number or Street Name) or 2) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W of _____ (Route Number or Street Name) (Milepost, Nearest intersecting Route Number or Street Name)																					
Accident Description/Officer's Notes Vehicle 1 was traveling northbound on E Main Street and was attempting to turn left to merge onto the Bear Mountain Parkway when he struck Vehicle 2. Driver of vehicle 2 was treated on scene by EMS personnel and transferred to Hudson Valley Hospital where she died from her injuries. Driver of vehicle 1 refused any further medical attention on scene. Reference AI Case #28-18. - WITNESS 1 [REDACTED] - WITNESS 2 [REDACTED] WITNESS 3 [REDACTED] [REDACTED] WITNESS 4 [REDACTED] [REDACTED]																					

	8	9	10	11	12	13	14	15	16	17	BY	TO	18	Names of all involved	Date of Death Only
A L I N V O L V E D	01	1	4	1	47	1	-	-	-						N/A
B	02	1	-	-	1	37	2	X	X	1	69b2	5908			10/19/2018
C															
D															
E															
F															
G															
Officer's Rank, Name and Signature PO L BROWN					Badge/ID No.		NCIC No.	Precinct/Post Troop/Zone	Station/Beat/ Sector	Reviewing Officer FELIX, JESSICA			Date/Time Reviewed	10 / 25 / 2018 10.10	

## COLLISION DIAGRAM

MUNICIPALITY: TOWN OF CORTLANDT COUNTY: WESTCHESTER  
 INTERSECTION: U.S. ROUTE 6 & JACOBS HILL ROAD/PARKWAY DRIVE  
 PERIOD: 3 YEARS 3 FROM 1/1/2016 TO 1/30/2019

LOCATION #: 1  
 REF MARKER: 687033001-3004  
 BY: MASER DATE: 7/15/2019



NOTE: LINE DIAGRAM NOT TO SCALE

NUMBER OF ACCIDENTS	SYMBOLS	MANNER OF COLLISION
NON-REPORTABLE 3	→ MOVING VEHICLE	→→ REAR END
PROPERTY DAMAGE 2	-M→ MOTORCYCLE	↔ HEAD ON
INJURY 0	◀◀◀→ BACKING VEHICLE	→ OVERTAKE
FATALITY 0	●→ STOPPED VEHICLE	-R→ PEDESTRAIN
UNKNOWN 0	○ PERSONAL INJURY	-B→ BICYCLE
PD & I 3	□ FIXED OBJECT	-A→ ANIMAL
TOTAL ACCIDENTS <u>8</u>	● FATAL INJURY	~ OUT OF CONTROL
		→ SKIDDING
		○ OVERTURN
		→→ LEFT TURN
		→→ RIGHT TURN
		→→ RIGHT ANGLE
		→→ SIDE SWIPE

## COLLISION DIAGRAM

MUNICIPALITY: TOWN OF CORTLANDT COUNTY: WESTCHESTER LOCATION #: 2  
 INTERSECTION: U.S. ROUTE 6 & BEAR MOUNTAIN PKWY EB RAMP/SITE REF MARKER: 687033001-3004  
 PERIOD: 3 YEARS 3 FROM 1/1/2016 TO 1/30/2019 BY: MASER DATE: 7/15/2019

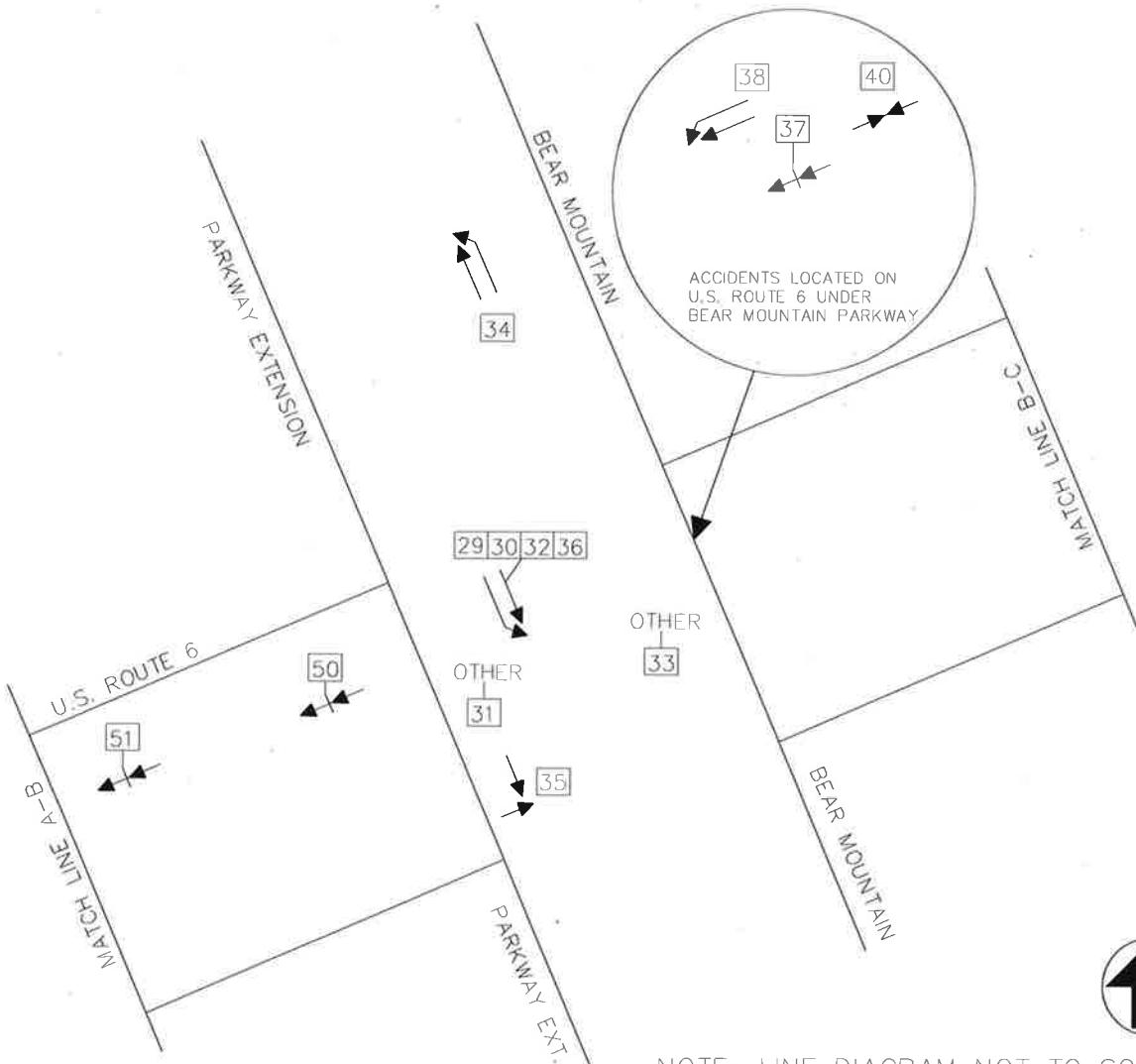


NOTE: LINE DIAGRAM NOT TO SCALE

NUMBER OF ACCIDENTS	SYMBOLS	MANNER OF COLLISION
NON-REPORTABLE	→	MOVING VEHICLE
PROPERTY DAMAGE	—M→	MOTORCYCLE
INJURY	◀◀◀→	BACKING VEHICLE
FATALITY	●→	STOPPED VEHICLE
UNKNOWN	○	PERSONAL INJURY
PD & I		FIXED OBJECT
TOTAL ACCIDENTS	13	FATAL INJURY
	■	PARKED VEHICLE
	-R→	PEDESTRAIN
	-B→	BICYCLE
	~~~→	OUT OF CONTROL
	-A→	ANIMAL
	→	SKIDDING
	○→	OVERTURN
	→←	HEAD ON
	→	LEFT TURN
	→	RIGHT TURN
	→↓	RIGHT ANGLE
	→←	SIDE SWIPE

## COLLISION DIAGRAM

MUNICIPALITY: TOWN OF CORTLANDT COUNTY: WESTCHESTER LOCATION #: 3  
 INTERSECTION: U.S. ROUTE 6 & BEAR MNT. PKWY EXT./UNDERPASS REF MARKER: 687033001-3004  
 PERIOD: 3 YEARS 3 FROM 1/1/2016 TO 1/30/2019 BY: MASER DATE: 7/15/2019

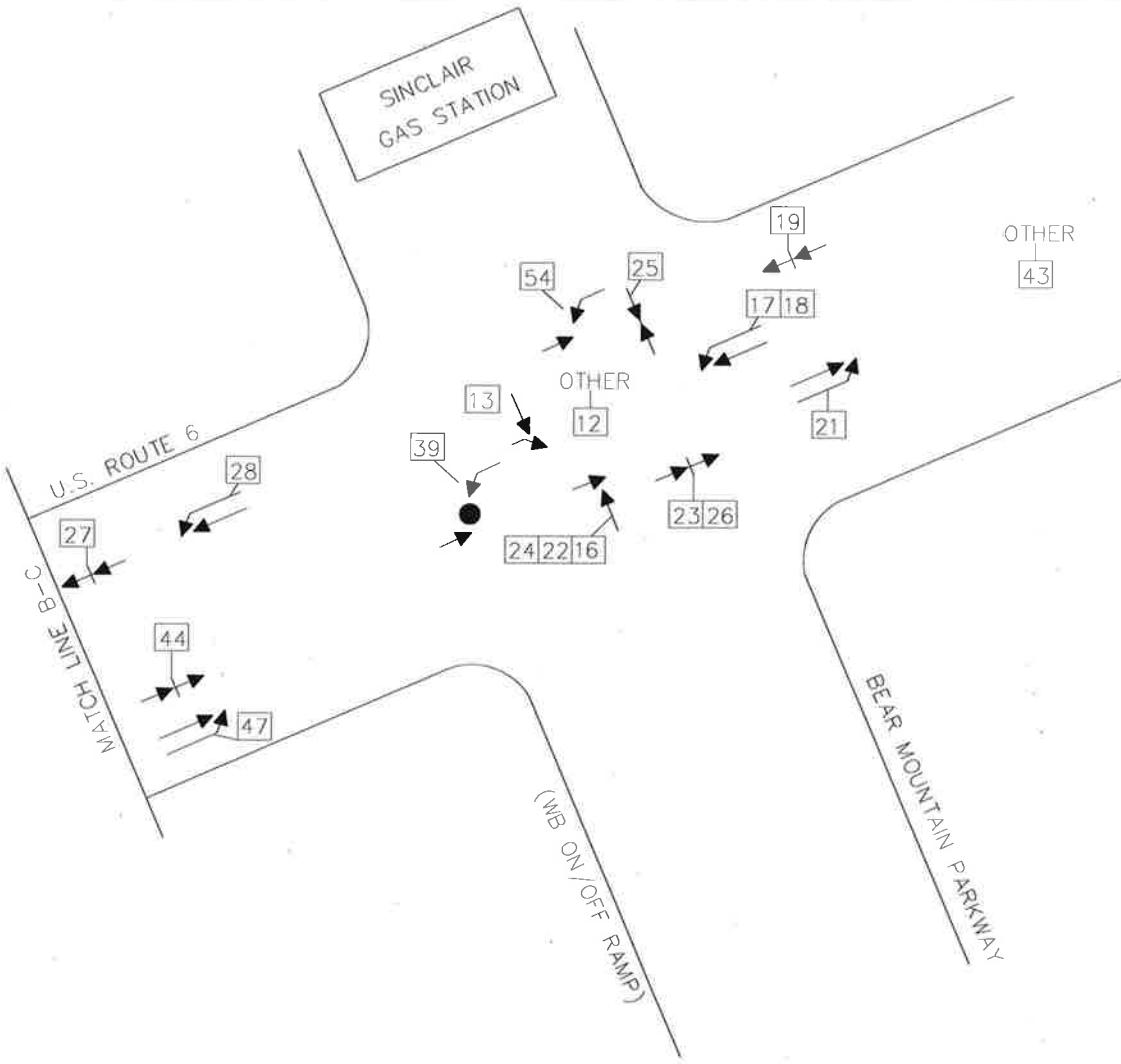


NOTE: LINE DIAGRAM NOT TO SCALE

NUMBER OF ACCIDENTS		SYMBOLS		MANNER OF COLLISION	
NON-REPORTABLE	4	→	MOVING VEHICLE	→	REAR END
PROPERTY DAMAGE	8	-M→	MOTORCYCLE	-R→	HEAD ON
INJURY	0	◀▶▶▶	BACKING VEHICLE	→	OVERTAKE
FATALITY	0	●→	STOPPED VEHICLE	-B→	PEDESTRAIN
UNKNOWN	1	○	PERSONAL INJURY	-A→	BICYCLE
PD & I	2				ANIMAL
TOTAL ACCIDENTS	15				FATAL INJURY
		□	FIXED OBJECT	~~~→	OUT OF CONTROL
				~~~~→	RIGHT TURN
				→	SKIDDING
				○→	RIGHT ANGLE
				○→	OVERTURN
				→	SIDE SWIPE

## COLLISION DIAGRAM

MUNICIPALITY: TOWN OF CORTLANDT COUNTY: WESTCHESTER LOCATION #: 4  
 INTERSECTION: U.S. ROUTE 6 & BEAR MTN PKWY WB RAMP/SINCLAIR REF MARKER: 687033001-3004  
 PERIOD: 3 YEARS 3 FROM 1/1/2016 TO 1/30/2019 BY: MASER DATE: 7/15/2019



NOTE: LINE DIAGRAM NOT TO SCALE

NUMBER OF ACCIDENTS	SYMBOLS	MANNER OF COLLISION
NON-REPORTABLE 2	→ MOVING VEHICLE	↔ REAR END
PROPERTY DAMAGE 11	—M→ MOTORCYCLE	↔ HEAD ON
INJURY 1	◀◀◀→ BACKING VEHICLE	→ OVERTAKE
FATALITY 0	●→ STOPPED VEHICLE	→ PEDESTRAIN
UNKNOWN 0	○ PERSONAL INJURY	→ BICYCLE
PD & I 3		→ ANIMAL
TOTAL ACCIDENTS 17	□ FIXED OBJECT	● FATAL INJURY
		~~~~→ OUT OF CONTROL
		→ SKIDDING
		→ OVERTURN
		→ LEFT TURN
		→ RIGHT TURN
		→ RIGHT ANGLE
		→ SIDE SWIPE



Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

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## ***GASLAND CORTLANDT***

### **APPENDIX F**

#### **ITE PASS BY TRIP DATA**

**Table E.36 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period  
Land Use Code 944—Gasoline/Service Station**

SIZE (1,000 SQ. FT. GFA)	VEHICLE FUELING POSITIONS	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
							PRIMARY	DIVERTED	TOTAL		
—	—	Chicago suburbs, IL	1987	48	3:00–7:00 p.m.	21	—	—	79	—	Kenig, O'Hara, Humes, Flock
—	—	Chicago suburbs, IL	1987	34	3:00–6:00 p.m.	25	—	—	75	—	Kenig, O'Hara, Humes, Flock
—	—	Chicago suburbs, IL	1987	42	3:00–6:00 p.m.	20	—	—	80	—	Kenig, O'Hara, Humes, Flock
2.3	6	Gaithersburg, MD	1992	55	4:00–8:00 p.m.	40	11	49	60	2,760	RBA
2.1	8	Bethesda, MD	1992	30	4:00–6:00 p.m.	53	20	27	47	1,060	RBA
1.7	6	Wheaton, MD	1992	18	4:00–6:00 p.m.	81	6	33	39	2,510	RBA
2.0	8	Gaithersburg, MD	1992	47	4:00–6:00 p.m.	82	23	15	38	2,635	RBA
1.2	6	Damascus, MD	1992	26	4:00–6:00 p.m.	58	11	31	42	1,020	RBA
0.3	12	Wheaton, MD	1992	52	4:00–6:00 p.m.	38	10	52	62	3,835	RBA

Average Pass-By Trip Percentage: 42

"—" means no data were provided

**Table E.37 Pass-By and Non-Pass-By Trips Weekday, AM Peak Period  
Land Use Code 945—Gasoline/Service Station with Convenience Market**

SIZE (1,000 SQ. FT. GFA)	VEHICLE FUELING POSITIONS	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
							PRIMARY	DIVERTED	TOTAL		
0.8	8	Louisville area, KY	1993	61	7:00–9:00 a.m.	60	15	25	40	4,000	Barton- Aschman Assoc.
0.6	8	Louisville, KY	1993	48	7:00–9:00 a.m.	68	13	19	32	1,307	Barton- Aschman Assoc.
0.7	10	Louisville, KY	1993	47	7:00–9:00 a.m.	67	11	22	33	1,105	Barton- Aschman Assoc.
0.7	8	Louisville area, KY	1993	—	7:00–9:00 a.m.	56	22	22	44	1,211	Barton- Aschman Assoc.
0.7	10	Louisville area, KY	1993	—	7:00–9:00 a.m.	46	42	12	54	1,211	Barton- Aschman Assoc.
0.3	—	Louisville area, KY	1993	75	7:00–9:00 a.m.	72	15	13	28	—	Barton- Aschman Assoc.
0.8	8	Silver Spring, MD	1992	38	7:00–9:00 a.m.	47	14	39	53	3,095	RBA
0.4	8	Derwood, MD	1992	46	7:00–9:00 a.m.	75	0	25	25	3,770	RBA
2.2	8	Kensington, MD	1992	31	7:00–9:00 a.m.	47	34	19	53	1,785	RBA
1	8	Silver Spring, MD	1992	35	7:00–9:00 a.m.	78	9	13	22	7,080	RBA

Average Pass-By Trip Percentage: 62

"—" means no data were provided

**Table E.38 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period  
Land Use Code 945—Gasoline/Service Station with Convenience Market**

SIZE (1,000 SQ. FT. GFA)	VEHICLE FUELING POSITIONS	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
							PRIMARY	DIVERTED	TOTAL		
0.8	6	Louisville area, KY	1993	83	4:00–6:00 p.m.	52	6	40	46	4,966	Barton-Aschman Assoc.
0.8	8	Louisville, KY	1993	80	4:00–6:00 p.m.	53	20	27	47	1,491	Barton-Aschman Assoc.
0.7	10	Louisville, KY	1993	—	4:00–6:00 p.m.	57	19	24	43	1,812	Barton-Aschman Assoc.
0.7	8	Louisville area, KY	1993	—	4:00–6:00 p.m.	72	7	21	28	2,057	Barton-Aschman Assoc.
0.7	10	Louisville area, KY	1993	—	4:00–6:00 p.m.	55	16	20	45	2,857	Barton-Aschman Assoc.
0.8	8	Silver Spring, MD	1992	38	4:00–6:00 p.m.	67	14	18	33	3,095	RBA
0.4	8	Derwood, MD	1992	46	4:00–6:00 p.m.	46	11	43	54	3,770	RBA
2.1	8	Kensington, MD	1992	31	4:00–6:00 p.m.	52	13	35	48	1,785	RBA
1	8	Silver Spring, MD	1992	35	4:00–6:00 p.m.	54	3	43	46	7,080	RBA

Average Pass-By Trip Percentage: 56

“—” means no data were provided



Traffic Impact Study  
Gasland Cortlandt  
MC Project No.: 19003182A  
Appendix

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***GASLAND CORTLANDT***

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**APPENDIX G**

**NYSDOT CORRESPONDENCE**



**Department of  
Transportation**

NYSDOT - REGION 8

## **MEETING SIGN-IN SHEET**

**Meeting Name:**

19-015

Date:

1/29/14

~~Chrysanthemum~~ ~~Confluent~~

## Philip Grealy

---

**From:** Chris Kehoe <ChrisK@townofcortlandt.com>  
**Sent:** Sunday, June 02, 2019 8:36 AM  
**To:** 'Chris Lapine'; Gasland Petroleum (gasland.zeidan@gmail.com); Philip Grealy  
**Subject:** FW: SEQR 19-015 Gasland Cortlandt LAD Response

Chris Kehoe, AICP  
Deputy Director, Planning Division  
Town of Cortlandt  
1 Heady Street  
Cortlandt Manor, NY 10567  
914-734-1081

**From:** Zimmer, Lee (DOT) [mailto:[Lee.Zimmer@dot.ny.gov](mailto:Lee.Zimmer@dot.ny.gov)]  
**Sent:** Friday, May 31, 2019 4:12 PM  
**To:** Chris Kehoe; Michael Preziosi  
**Cc:** McCullough, Mary (DOT); Pacheco, Ivelisse (DOT); Darelus, Anne D (DOT); Schumaci, Frank (DOT); Knisell, Barbara (DOT)  
**Subject:** SEQR 19-015 Gasland Cortlandt LAD Response

Chris:

The New York State Department of Transportation (NYSDOT) is in receipt of the preliminary plan submission package, along with Lead Agency Designation Request from the T/O Cortlandt, dated May 14<sup>th</sup> 2019. The NYSDOT consents to the Town Planning Board assuming the role of Lead Agency for review of the referenced proposal.

"The proposed permit work is in the vicinity of a NYSDOT traffic signal, highway light, or other device with loop detection and/or buried conduit. The permittee shall locate all such underground facilities and note such on the construction plans. Damage to underground facilities are the responsibility of the permittee."

In an effort to enhance the Regional capabilities of managing traffic flow, providing real-time traffic data, minimizing delay and reducing congestion, the Region will be installing communication capabilities to all Region 8 traffic signals.

Effective immediately, the scope of work on all Capital Projects that include signal modification (at Pre-PSE Stage or earlier), shall be expanded to include the connection of the traffic signal to the Advanced Traffic Management System (ATMS) network by either a cable modem (preferred) or by a cellular modem (acceptable). Also all signalized work under a Highway Work Permit will follow this guidance.

It is envisioned that critical, congested corridors will have to be addressed as a system where work is proposed. For more information or specific details, the Regional Signal Section should be contacted at (845) 437-3396.

It is anticipated that a Highway Work Permit will be required as part of the proposed action.

The applicant should also be encouraged to review the permit process and all required HWP forms on the NYSDOT website (<https://www.dot.ny.gov/index>). In particular, please submit the PERM 33-COM as part of the submission.

**Please submit subsequent plans and documents for this project as well as those for any future development proposals in DIGITAL (.pdf) FORMAT –CD, DVD or Thumb drive.**

Sidewalk must comply with current ADA requirements. The values shown on the table "Critical Elements for the Design, Layout and Acceptance of Pedestrian Facilities" shall be used to ensure that pedestrian facilities in the public Right-of-Way are ADA compliant. Please refer to Engineering Directive ED15-004. The applicant will need to provide inspection services as indicated.

- **Engineering Directive ED15-004 - Design, Construction and Inspection of Pedestrian Facilities in the Public Right of Way**

The values shown on the table "Critical Elements for the Design, Layout and Acceptance of Pedestrian Facilities" shall be used to ensure that pedestrian facilities in the public right of way are ADA compliant. Please refer to engineering directive ED15-004. When submitting proposed permit projects for NYSDOT review, the applicant's engineer will need to include a letter or statement within the transmittal letter that the submitted design is compliant with ED15-004 and all other applicable codes, standards, and specifications. The applicant will also need to provide inspection services as indicated. In particular, the applicant's engineer will perform the required pre-pour concrete form inspection, completed construction inspection, and submit a signed, sealed document confirming compliance with ED15-004 and all other applicable codes, standards, and specifications. In instances where nonstandard features cannot be avoided a justification form will need to be completed under the process promulgated under the Highway Design Manual Chapter 2 (Refer to Exhibit 2-15A).

The Permit Applicant will be required to provide Consultant Inspection services by a qualified Professional Engineering firm experienced in capital highway work to provide quality assurance for all work performed in the State right-of-way. Proposed Consultant Inspection staffing, resumes and construction schedule shall be submitted for NYSDOT review and acceptance prior to permit issuance. Please refer to the attached *Construction Inspection Requirements for Highway Work Permits* for guidance regarding the required inspection work.

A Traffic Impact Study shall be prepared and submitted to NYSDOT for further review and comments. The applicant used adjacent street traffic instead of peak hour generator for the trip generation number. The Department would like to remind the applicant that ITE specifies the greater number should be used when comparing two alternative methods. In addition to this the pass by traffic (56%) number needs to be justified and compared to the background traffic. Depending upon the size of the proposed improvement or impact to the NYSDOT Right-of-Way, additional engineering details may be required. These details may include a Traffic Impact/Accident Study, SYNCHRO analysis for all affected highways/intersections, Site Plan (SP), Accident Counter-measures/Mitigation, Highway Improvement Plan (HIP), and/or other submissions as directed by the Permit Engineer.

Lead Agency approval under SEQR is required in advance of permitting.

Provide a sight distance matrix including design speed, posted speed, each type of turning movement, required sight distance for each type of turning movement, available sight distance, variance (if any), support for variance. Labeled and dimensioned sight distance triangles need to be shown on plans.

This project is subject to the requirements of the State's Drivers First initiative. Delay to the traveling public must be minimized.

If there is anything else please let me know.

**Lee A. Zimmer P.E.**

Traffic Signals & Highway Work Permits

**New York State Department of Transportation, Hudson Valley**

4 Burnett Boulevard, Poughkeepsie, NY 12603

(845) 437-3320 | [lee.zimmer@dot.ny.gov](mailto:lee.zimmer@dot.ny.gov) | [www.dot.ny.gov](http://www.dot.ny.gov)



**Department of  
Transportation**



# Department of Transportation

ANDREW M. CUOMO  
Governor

PAUL A. KARAS  
Acting Commissioner

March 14, 2019

Nicholas Tortorella  
Maser Consulting, P.A.  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595

RE: Freedom of Information Law Request FR8-19-006319  
The Traffic Signal Plans and Signal Timing Plans for the following signals in Cortlandt, New York: 1. W-585 : U.S. Route 6 & Jacobs Hill Rd/Parkway Dr 2. W-492 : U.S. Route 6 & Bear Mtn Pkwy SB On/Off Ramps

VIA: E-Mail (No Hard Copy to Follow)

Dear Tortorella:

This correspondence will acknowledge receipt of your March 12, 2019 Freedom of Information Law (FOIL) request at the New York State Department of Transportation (NYSDOT) Records Access Office on this date.

I am researching your request and will notify you within the next twenty business days regarding the availability of the records you are seeking.

Please indicate the FOIL request number when corresponding on this subject.

Sincerely,

Hai Ian  
Records Access Officer



Engineers  
Planners  
Surveyors  
Landscape Architects  
Environmental Scientists

400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
T: 914.347.7500  
F: 914.347.7266  
[www.maserconsulting.com](http://www.maserconsulting.com)

March 4, 2019

**VIA E-MAIL**

Ms. Aimee Morris  
Records Access Office  
New York State Department of Transportation  
Eleanor Roosevelt State Office Building  
4 Burnett Boulevard  
Poughkeepsie, NY 12603

Re: Accident Request  
Town of Cortlandt, Westchester County, NY  
MC Project No. 19003182A

Dear Ms. Morris

I would like to request the NYSDOT Accident Severity Summary, Summary Report By Segment And/Or Intersections, Summary Report By Accident Category, Accident Verbal Description Report (VDR) and Event Excel Table if available as well as mv104 Reports for all reportable accidents from 2015 through 2018 for the following links as shown on the attached maps.

- U.S. Route 6 from 250 feet southwest of its intersection with Jacobs Hill Road/Parkway Drive to 250 feet northeast of its intersection with the Bear Mountain Parkway SB On/Off Ramp.

If you have any questions on the above, please feel free to reach out to discuss at (914) 347-7500 x4813.

Very truly yours,

MASER CONSULTING P.A.



Nicholas Tortorella, I.E.

Google

©2018 Google

Bear Mountain State Pkwy

MA 5

Parkway Dr

6

Jacobs Hill Rd



# Department of Transportation

ANDREW M. CUOMO  
Governor

PAUL A. KARAS  
Acting Commissioner

March 5, 2019

Nicholas Tortorella  
Maser Consulting, P. A.  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595

RE: Freedom of Information Law Request FMO-19-015843  
ACCIDENT REPORTS  
Route 6

VIA: E-Mail (No Hard Copy to Follow)

Dear Mr. Tortorella:

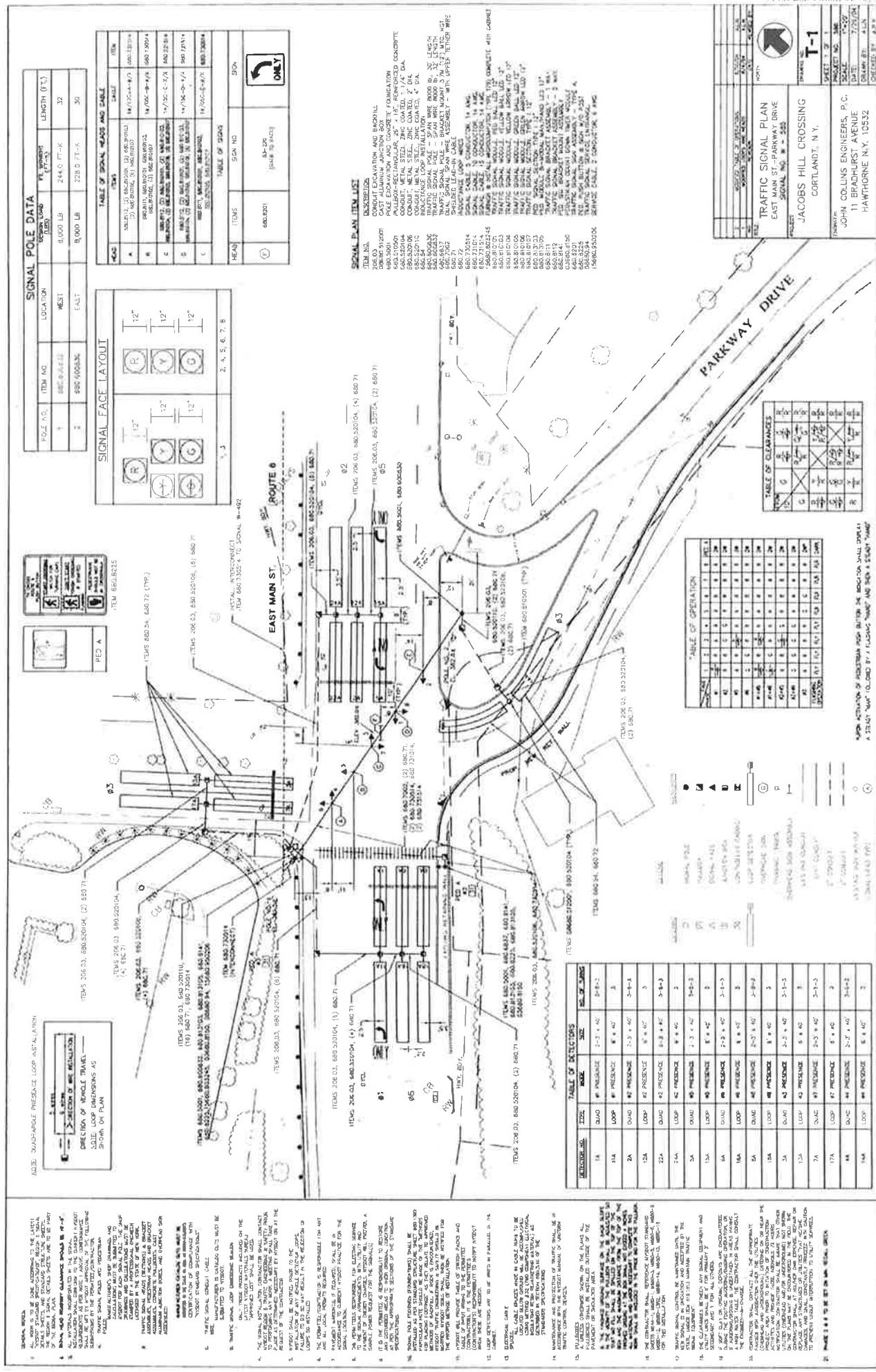
This correspondence will acknowledge receipt of your March 4, 2019 Freedom of Information Law (FOIL) request at the New York State Department of Transportation (NYSDOT) Records Access Office on this date.

I am researching your request and will notify you within the next twenty business days regarding the availability of the records you are seeking.

Please indicate the FOIL request number when corresponding on this subject.

Sincerely,

Jerry Morse  
Records Access Officer



**STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION  
TRAFFIC ENGINEERING & SAFETY DIVISION  
TRAFFIC CONTROL SPECIFICATIONS**

W - 492

SIGNAL NO(S)

WESTCHESTER  
COUNTY

*O P F i C E*

PAGE 1 OF 20 PAGES

INTERSECTION ROUTE 6 AT BEAR MT. STATE PARKWAY RAMP CITY VILLAGE TOWN OFCORTLAND

Department Order filed

as Section

2055.30

Subdivision

(m)

Prior specifications hereby superseded  None 

Purpose : INSTALL TRAFFIC SIGNAL UNDER CONTRACT D254934.

These specifications will be effective upon the  Installation  Modification of the necessary traffic control device(s) required by and conforming to the State Manual of Uniform Traffic Control Devices

## I. This Signal shall

A. Operate in accordance with the Table of Operations and / or Change intervals as shown on page(s) 2 as a :

- Pretimed Signal
- Semi-traffic actuated signal
- Full-traffic actuated signal
- Pedestrian actuated signal
- Other

B.  Display vehicular indications

 Display pedestrian indications Be equipped with vehicle detectors Be equipped with Pedestrian pushbuttonsas shown in the  schematic scaled drawing on page 3

C. Be equipped with  pre-emption which are described as follows

 interconnection and / or coordination**FILE SHOP CABINET****FINAL COPY**cc: ( 2 )  Main Office( 1 )  Region 8 Traffic Engineer( 1 )  E. CLARK( 3 )  D. SYWK

7/11/96 WO Felt, Patrol RTE  
Date Signature Title

Installation Date

7-5-95

Modification Date

7/11/96

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION  
 TRAFFIC AND SAFETY DIVISION  
TRAFFIC CONTROL SIGNAL SPECIFICATIONS (CONTINUED)

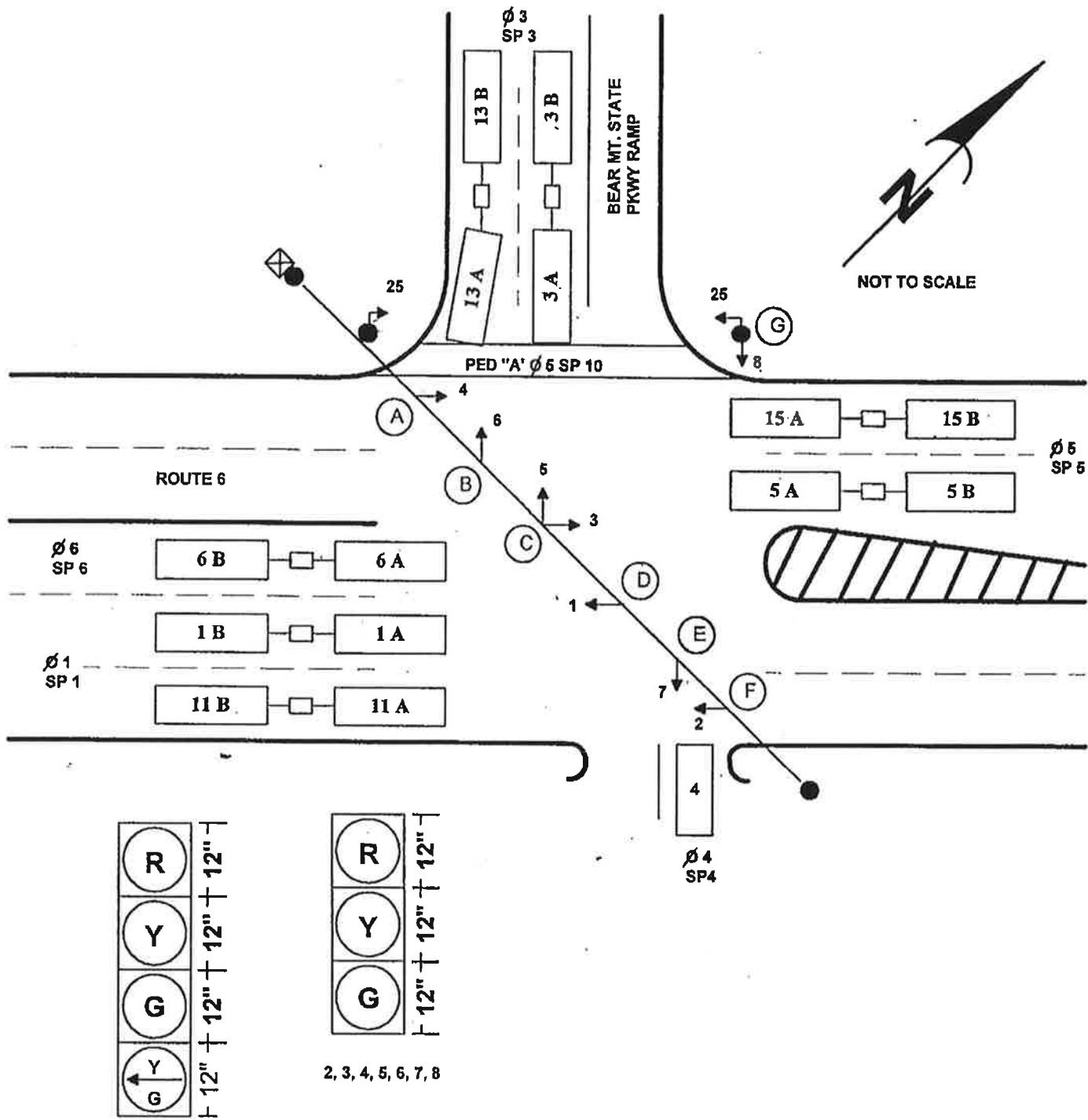
STUDY:  
 CONTRACT: D254934  
 PIN: 8390.44.321  
 FILE: 55.30-6

**492**  
 SIGNAL NO(S)

**WESTCHESTER**  
 COUNTY

**JUL 11 1996**  
 DATE

PAGE **3** OF **\_\_\_\_\_** PAGES



MODEL 179 SIGNAL OPERATION  
PROGRAMMABLE FEATURES  
SIGNAL OPERATION SPECIFICATION

TAPS \_\_\_\_\_  
STUDY # \_\_\_\_\_  
FILE # \_\_\_\_\_  
PAGE 18 OF 20

SIGNAL # 992COUNTY # WESTDATE JUL 11 1996

TABLE OF SWITCH PACKS

SWITCH PACK	FUNCTION	INDICATIONS	FACE	TERMINAL WIRING BOARD		FACE	TERMINAL WIRING BOARD	
				TERMINAL	WIRE COLOR CODE		TERMINAL	WIRE COLOR CC
1	Φ1	RED YELLOW GREEN Ground Wire	1	SP 1 R SP 1 Y SP 1 G Gmd Bus	1A 10C - D - R 1A 10C - D - O 1A 10C - D - G 1A 10C - D - W	2	SP 1 R SP 1 Y SP 1 G Gmd Bus	1A 15C - F - R 1A 15C - F - O 1A 15C - F - G 1A 15C - F - W
2				SP 2 R SP 2 Y SP 2 G Gmd Bus			SP 2 R SP 2 Y SP 2 G Gmd Bus	
3	Φ3	RED YELLOW GREEN Ground Wire	5	SP 3 R SP 3 Y SP 3 G Gmd Bus	1A 10C - C - R 1A 11DC - C - O 1A 11DC - C - G 1A 110G - C - W	6	SP 3 R SP 3 Y SP 3 G Gmd Bus	1A 15C - B - R 1A 15C - B - O 1A 15C - B - G 1A 15C - B - W
4	Φ4	RED YELLOW GREEN Ground Wire	7	SP 4 R SP 4 Y SP 4 G Gmd Bus	1A 15C - E - R 1A 15C - E - O 1A 15C - E - G 1A 15C - E - W	8	SP 4 R SP 4 Y SP 4 G Gmd Bus	1A 15C - G - R 1A 15C - G - O 1A 15C - G - G 1A 15C - G - W
5	Φ5	RED YELLOW GREEN Ground Wire	3	SP 5 R SP 5 Y SP 5 G Gmd Bus	1A 10C - C - R/B 1A 110C - C - O/B 1A 110C - C - G/B 1A 110C - C - W/B	A	SP 5 R SP 5 Y SP 5 G Gmd Bus	1A 15C - A - R 1A 15C - A - C 1A 15C - A - G 1A 15C - A - V
6	Φ6	— ← Ground Wire	1	SP 6 R SP 6 Y SP 6 G Gmd Bus	— 1A 110C - D - O/B 1A 110C - D - G/B 1A 110C - D - W/B		SP 6 R SP 6 Y SP 6 G Gmd Bus	
7				SP 7 R SP 7 Y SP 7 G Gmd Bus			SP 7 R SP 7 Y SP 7 G Gmd Bus	
8				SP 8 R SP 8 Y SP 8 G Gmd Bus			SP 8 R SP 8 Y SP 8 G Gmd Bus	
9				SP 9 R SP 9 Y SP 9 G Gmd Bus			SP 9 R SP 9 Y SP 9 G Gmd Bus	
10	PED A Φ5	D W — W Ground Wire	25	SP 10 R SP 10 Y SP 10 G Gmd Bus	1A 15C - IP - R — 1A 15C - IP - G 1A 15C - IP - W		SP 10 R SP 10 Y SP 10 G Gmd Bus	
11				SP 11 R SP 11 Y SP 11 G Gmd Bus			SP 11 R SP 11 Y SP 11 G Gmd Bus	
12				SP 12 R SP 12 Y SP 12 G Gmd Bus			SP 12 R SP 12 Y SP 12 G Gmd Bus	
13				SP 13 R SP 13 Y SP 13 G Gmd Bus			SP 13 R SP 13 Y SP 13 G Gmd Bus	
14				SP 14 R SP 14 Y SP 14 G Gmd Bus			SP 14 R SP 14 Y SP 14 G Gmd Bus	

MODEL 179 SIGNAL OPERATION  
PROGRAMMABLE FEATURES  
SIGNAL OPERATION SPECIFICATION

TAPS V 1.0  
STUDY #  
FILE #  
PAGE 30 OF 30

SIGNAL # 492COUNTY # WESTDATE JUL 11 1996

TABLE OF INPUT WIRING

TERM. NUMBER	FUNCTION	DET. NO.	DET. TYPE	DET. AN OVER	REMARKS
1A, 1B	Ø1	1A, 1B	NORMAL		PRESENCE
2A, 2B					
3A, 3B	Ø3	3A, 3B	NORMAL		PRESENCE
4A, 4B	Ø4	A	NORMAL		PRESENCE
5A, 5B	Ø5	5A, 5B	NORMAL		PRESENCE
6A, 6B	Ø6	6A, 6B	NORMAL		PRESENCE
7A, 7B					
8A, 8B					
9A, 9B					
10A, 10B					
11A, 11B	Ø1	11A, 11B	NORMAL		PRESENCE
12A, 12B					
13A, 13B	Ø3	13A, 13B	NORMAL		PRESENCE
14A, 14B					
15A, 15B	Ø5	15A, 15B	NORMAL		PRESENCE
16A, 16B					
17A, 17B					
18A, 18B					
19A, 19B					
20A, 20B					
21A, 21B					
22A, 22B					
23A, 23B					
24A, 24B					
25A, 25B	RED A Ø5	25	RED BUTTON		
26A, 26B					
27A, 27B					
28A, 28B					

Phase Times [1.1.1]											Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]												
	1	2	3	4	5	6	7	8	Pat/Cyc	Off	Split Seq	Pat/Cyc	Off	Split Seq	Pat/Cyc	Off	Split Seq	Pat/Cyc	Off	Split Seq			
Min Green	10	5	5	5	10	5	1	0	0	1	13	0	0	13	1	25	0	0	1	37	0	0	
Gap, Ext	2	2	2	2	2	2	0	0	2	1	14	0	0	14	1	26	0	0	1	38	0	0	
Max 1	35	25	10	35	10	3	0	0	3	1	15	0	0	15	1	27	0	0	1	39	0	0	
Max 2						4	0	0	4	1	16	0	0	16	1	28	0	0	1	40	0	0	
Yel Clearance	5	5	5	5	5	5	0	0	5	1	17	0	0	17	1	29	0	0	1	41	0	0	
Red Clearance	1.6	1	1	1	1	6	0	0	6	1	18	0	0	18	1	30	0	0	1	42	0	0	
Walk		8				7	0	0	7	1	19	0	0	19	1	31	0	0	1	43	0	0	
Ped Clearance	18					8	0	0	8	1	20	0	0	20	1	32	0	0	1	44	0	0	
Red Revert						9	0	0	9	1	21	0	0	21	1	33	0	0	1	45	0	0	
Add Initial						10	0	0	10	1	22	0	0	22	1	34	0	0	1	46	0	0	
Max Initial						11	0	0	11	1	23	0	0	23	1	35	0	0	1	47	0	0	
Time B4 Reduct						12	0	0	12	1	24	0	0	24	1	36	0	0	1	48	0	0	
Cars B4 Reduc						Split	1	2	3	4	5	6	7	8	Split	1	2	3	4	5	6	7	
Time To Reduce						1	Coor	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0
Reduce By						2	Coor	0	0	0	0	0	0	0	14	Coor	0	0	0	0	0	0	0
Min Gap						3	Coor	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0
DyMaxLim						4	Coor	0	0	0	0	0	0	0	16	Coor	0	0	0	0	0	0	0
Max Step						5	Coor	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0
Options [1.1.2]	1	2	3	4	5	6	7	8															
Enable	1	1	1	1	1																		
Min Recall	1																						
Max Recall																							
Ped Recall																							
Soft Recall																							
Lock Calls																							
Auto Flash Entry																							
Auto Flash Exit																							
Dual Entry	1	1	1	1	1	1	1	1	8	Coor	0	0	0	0	0	20	Coor	0	0	0	0	0	0
Enable Simul Gap1	1	1	1	1	1	1	1	1	9	Coor	0	0	0	0	0	21	Coor	0	0	0	0	0	0
Guarantee Pas																							
Rest In Walk																							
Condition Service																							
Non-Actuated 1																							
Non-Actuated 2																							
Add Init Calc																							
Options+ [1.1.3]	1	2	3	4	5	6	7	8	12	Coor	0	0	0	0	0	24	Coor	0	0	0	0	0	0
Reservice																							
PedCir Thru Ye																							
Skip Red No Call																							
Red Rest																							
Max II																							
Conflicting Phase																							
Conflicting Phase																							
Omit Yellow																							
Ped Delay																							
GrnPd Delay																							

Pages:

1

8

Phase Times/OPTIONS;

Patterns/Splits;

Ring Startup;

Coord/Flash Mode;

Mode/Pattern

1A&amp;1E

16 Phase Times/OPTIONS;

Patterns/Splits;

Ring Startup;

Coord/Flash Mode;

Mode/Pattern

1

Overlaps;

Channel Settings;

Coord Alt Table+ (values not associated with 1Free/Off/Standby)

Detection

Auxswitch

STOPTM

Preemption and Alternate Phase Time and Phase Options

4

Annual Schedule

5

Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)

6

Communications; Security; I/O Setup

2

Start All Red

3

TS2 Det Fault

Auto Ped CleaFF

SDL C Ret

0

1

Red Revert

3

Red

Revert

0



### Overlap 1-16 Program Params & Param+ [1.5.2.1] [1.5.2.2]

### Coord Transition, CoorPhs [2.5]

Overlap	Conflict	Li	OFF	Overlap	Lock Inth	OFF	Parent Ph	Clearair	ON	Exte Inclded	P	ON	Short Long Dwell No Shortway E-Yield				Offset	ReH	Fca	Min Veh	Pmt	Min Ped	Per				
													Normal	Grn	2	12	22										
1	Modifier	Ø					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	3	12	22							EndGRN		
A	Conflict	Ø					Red	1.5	Conflict	Olap			Normal	Red	1.5	4	12	22							EndGRN		
B	Conflict	Olap					LG		Conflict	Ped			Normal	LG	5	12	22								EndGRN		
C	Conflict	Ped					Normal		Included	Ø			Normal	Normal	6	12	22								EndGRN		
2	Modifier	Ø					Grn	9	Modifier	Ø			Normal	Grn	7	12	22								EndGRN		
D	Conflict	Ø					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	3	12	22							EndGRN		
E	Conflict	Olap					Red	1.5	J	Conflict	Olap		Normal	Red	1.5	9	12	22							EndGRN		
F	Conflict	Ped					LG		Conflict	Ped			Normal	LG	10	12	22								EndGRN		
G	Modifier	Ø					Normal		Included	Ø			Normal	Normal	11	12	22								EndGRN		
H	Conflict	Ø					Grn	11	Modifier	Ø			Normal	Grn	12	12	22								EndGRN		
I	Conflict	Olap					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	13	12	22							EndGRN		
J	Conflict	Ped					Red	1.5	K	Conflict	Olap		Normal	Red	1.5	14	12	22							EndGRN		
K	Conflict	Ped					LG		Conflict	Ped			Normal	LG	15	12	22								EndGRN		
L	Modifier	Ø					Normal		Included	Ø			Normal	Normal	16	12	22								EndGRN		
M	Conflict	Ø					Grn	12	Modifier	Ø			Normal	Grn	17	12	22								EndGRN		
N	Conflict	Olap					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	18	12	22							EndGRN		
O	Conflict	Ped					Red	1.5	L	Conflict	Olap		Normal	Red	1.5	16	12	22							EndGRN		
P	Conflict	Ped					LG		Conflict	Ped			Normal	LG	20	12	22								EndGRN		
Q	Modifier	Ø					Normal		Included	Ø			Normal	Normal	21	12	22								EndGRN		
R	Conflict	Ø					Grn	13	Modifier	Ø			Normal	Grn	22	12	22								EndGRN		
S	Conflict	Olap					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	23	12	22							EndGRN		
T	Conflict	Ped					Red	1.5	M	Conflict	Olap		Normal	Red	1.5	24	12	22							EndGRN		
U	Conflict	Ped					LG		Conflict	Ped			Normal	LG	25	0	0								BegGRN		
V	Modifier	Ø					Normal		Included	Ø			Normal	Normal	26	0	0								BegGRN		
W	Conflict	Ø					Grn	14	Modifier	Ø			Normal	Grn	27	0	0								BegGRN		
X	Conflict	Olap					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	28	0	0							BegGRN		
Y	Conflict	Ped					Red	1.5	N	Conflict	Olap		Normal	Red	1.5	29	0	0							BegGRN		
Z	Conflict	Ped					LG		Conflict	Ped			Normal	LG	30	0	0								BegGRN		
AA	Modifier	Ø					Normal		Included	Ø			Normal	Normal	31	0	0								BegGRN		
AB	Conflict	Ø					Grn	15	Modifier	Ø			Normal	Grn	32	0	0								BegGRN		
AC	Conflict	Olap					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	33	0	0							BegGRN		
AD	Conflict	Ped					Red	1.5	O	Conflict	Olap		Normal	Red	1.5	34	0	0							BegGRN		
AE	Conflict	Ped					LG		Conflict	Ped			Normal	LG	35	0	0								BegGRN		
AF	Modifier	Ø					Normal		Included	Ø			Normal	Normal	36	0	0								BegGRN		
AG	Conflict	Ø					Grn	16	Modifier	Ø			Normal	Grn	37	0	0								BegGRN		
AH	Conflict	Olap					Yel	3.5	Conflict	Ø			Normal	Yel	3.5	38	0	0							BegGRN		
AI	Conflict	Ped					Red	1.5	P	Conflict	Olap		Normal	Red	1.5	39	0	0							BegGRN		
AJ	Conflict	Ped					LG		Conflict	Ped			Normal	LG	40	0	0								BegGRN		
AK	Channel Settings [1.8.1]														41	0	0									BegGRN	
AL	Phase/Olap #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
AM	Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	PEV	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH		
AN	Channel Flash	REQ	REQ	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	
AO	Alt Hz																										
AP	Channel+ Settings [1.8.4]																										
AQ	Channel+ Olap [1.8.1]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
AR	Flash Red+																										
AS	Flash Yellow+																										
AT	Flash Green+																										
AU	Flash Inh Red+																										
AV	Channel Params [1.8.3]	C	IC	IO	Mode	USER	Single	BLU	KBD	TRNGUE	Invert Rail Input	Off															
AW	RTF 6 @ BEAR MTN PKWY (ID 7492) (Standard File)																										



**Premption Times [3.1], Options+ [3.6] Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]**

Pre #	Enable	Type	Output	Delay	MinDur	Dwell	Pre #	Track Phases	Track Overlaps
1	ON	RAIL	DWELL		1				
2	ON	RAIL	DWELL		2				
3	ON	EMERG DWELL			3				
4	ON	EMERG DWELL			4				
5	ON	EMERG DWELL			5				
6	ON	EMERG DWELL			6				

**Pre# MaxPres MinGrn PreDwellCoPdCir**

Pre #	MaxPres	MinGrn	PreDwell	CoPdCir
1			ON	
2			ON	
3			ON	
4			ON	
5			ON	
6			ON	

**Pre# Track G Min Dwell Ext Dwell PedCir**

Pre #	Red	Pattern	Skip	OFF	OFF	OFF	OFF	OFF	OFF
1									
2									
3									
4									
5									
6									

**Preemption 1, Options+ [3.6]**

Exit Phases [3.2]	Pre #	Lock	Override	Override	Fish	Dwe Link
1	1	ON	ON	ON	ON	OFF
2	2	ON	ON	ON	ON	ON
3	3	ON	ON	ON	ON	OFF
4	4	ON	ON	ON	ON	OFF
5	5	ON	ON	ON	ON	OFF
6	6	ON	ON	ON	ON	OFF

**Low Priority Preempts**

Pre #	Type	Min	Max	Pre #	Exit Phase
7	OFF	0	0	1	ON
8	OFF	0	0	2	ON
9	OFF	0	0	3	ON
10	OFF	0	0	4	ON

**Unit Parameters [1.2.1]**

Stop Timer Over Preempt	OFF
Preempt or Ext Output	PRE
Max Seek Track Time	0
Max Seek Dwell Time	0
Channel Parameters [1.8.3]	NONE
D Conn Mappings	
Pre Invert Rail Input	

**Alt# 1 Times Table [1.1.6.1]**

Column#....	->1	2	3	4	5	6	7	8
Assign G								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

**Alt# 2 Times Table [1.1.6.1]**

Column#....	->1	2	3	4	5	6	7	8
Assign G								
Min Grn								
Gap, Ext								
Max								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

**Alt# 3 Times Table [1.1.6.1]**

Column#....	->1	2	3	4	5	6	7	8
Assign G								
Min Grn								
Gap, Ext								
Max								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

**Alt# 1 Options Table [1.1.6.2]**

Column #	->1	2	3	4	5	6	7	8
Assign G								
Lock Calls	1	1	1	1	1	1	1	1
Soft Recall								
Dual Entry								
Enabl SimGap1	1	1	1	1	1	1	1	1
Gaur Passage								
Rest In Walk								
Cond Service								
Reserve								
Non-Act 1								
Red Rest								
Max2								
Ped Delay								
Conflicting G1								

Annual Schedule [408]pnth of Year												Date	Day of Week	Day	Line To																																					
1	J	F	M	A	M	J	J	A	S	O	N	D	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Plan	1						
2	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
3	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
4	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
5	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
6	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
7	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
8	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
9	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
10	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
11	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
12	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
13	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
14	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
15	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
16	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
17	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
18	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
19	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
20	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
21	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
22	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
23	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
24	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		



C1-USER IO Map [1.8.9.1 In]		C1-USER IO Map [1.8.9.2 Out]		C1-USER IO Map [1.8.9.2 Out]		IO Logic [1.8.7]	
11-1	1	Veh Call 1	0-1	1	Ch1 Red	07-1	115 Not Used
11-2	189	Unused	0-2	49	Ch1 Green	07-2	115 Not Used
11-3	3	Veh Call 3	01-3	2	Ch2 Red	07-3	115 Not Used
11-4	4	Veh Call 4	01-4	26	Ch2 Yellow	07-4	115 Not Used
11-5	5	Veh Call 5	01-5	50	Ch2 Green	07-5	115 Not Used
11-6	6	Veh Call 6	01-6	3	Ch3 Red	07-6	115 Not Used
11-7	189	Unused	01-7	27	Ch3 Yellow	07-7	115 Not Used
11-8	189	Unused	01-8	51	Ch3 Green	07-8	115 Not Used
12-1	189	Unused	02-1	4	Ch4 Red	<b>C11S-USER IO Map [1.8.9.1 In]</b>	
12-2	189	Unused	02-2	52	Ch4 Green	14-1	189 Unused
12-3	11	Veh Call 11	02-3	5	Ch5 Red	14-2	189 Unused
12-4	189	Unused	02-4	28	Ch5 Yellow	14-3	189 Unused
12-5	13	Veh Call 13	02-5	53	Ch5 Green	14-4	189 Unused
12-6	189	Unused	02-6	6	Ch6 Red	17-1	189 Unused
12-7	15	Veh Call 15	02-7	30	Ch6 Yellow	17-2	189 Unused
12-8	169	Unused	02-8	54	Ch6 Green	17-3	189 Unused
13-1	189	Unused	03-1	7	Ch7 Red	17-4	189 Unused
13-2	189	Unused	03-2	55	Ch7 Green	17-5	189 Unused
13-3	189	Unused	03-3	8	Ch8 Red	17-6	189 Unused
13-4	189	Unused	03-4	32	Ch8 Yellow	17-7	189 Unused
13-5	189	Unused	03-5	56	Ch8 Green	17-8	189 Unused
13-6	189	Unused	03-6	9	Ch9 Red	18-1	189 Unused
13-7	189	Unused	03-7	33	Ch9 Yellow	18-2	189 Unused
13-8	189	Unused	03-8	57	Ch9 Green	18-3	189 Unused
14-1			04-1	10	Ch10 Red	18-4	189 Unused
14-2			04-2	58	Ch10 Green	18-5	189 Unused
14-3			04-3	11	Ch11 Red	18-6	189 Unused
14-4			04-4	35	Ch11 Yellow	18-7	189 Unused
14-5	189	Unused	04-5	59	Ch11 Green	18-8	189 Unused
14-6	189	Unused	04-6	12	Ch12 Red	08-1	115 Not Used
14-7	229	33xCMUStop	04-7	36	Ch12 Yellow	08-2	115 Not Used
14-8	228	33xFlashSns	04-8	60	Ch12 Green	08-3	115 Not Used
15-1	123	Ped Call 1	05-1	28	Ch4 Yellow	08-4	115 Not Used
15-2	189	Unused	05-2	34	Ch4 Yellow	08-5	115 Not Used
15-3	189	Unused	05-3	25	Ch1 Yellow	08-6	115 Not Used
15-4	189	Unused	05-4	31	Ch7 Yellow	08-7	115 Not Used
15-5	189	Unused	05-5	115	Not Used	08-8	115 Not Used
15-6	189	Unused	05-6	115	Not Used	05-7	115 Not Used
15-7	189	Unused	05-8	114	Watchdog	05-9	115 Not Used
15-8	189	Unused	06-1	115	Not Used	06-2	115 Not Used
16-2	189	Unused	06-3	13	Ch13 Red	06-4	189 Unused
16-3	189	Unused	06-5	37	Ch13 Yellow	06-6	189 Unused
16-5	189	Unused	06-8	61	Ch13 Green	06-9	189 Unused
16-6	189	Unused	06-6	14	Ch14 Red	06-7	38 Ch14 Yellow
16-7	189	Unused	06-8	62	Ch14 Green	06-9	189 Unused
16-8	189	Unused					

#	Event / Alarm	Event / Alarm	Call Phases[1.1.5]	Redirect Phases[1.1.5]	Inhibit Phases[1.1.5]
			Ø Phases Called By Ø	Front To Front To Front To Front To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
1	Power Up Alarm.	1 1	1	1	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
2	Stop Timing	1 1	1	2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3	TS1 Cabinet Door	1 2	2	3	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
4	Coordination Failure	1 1	3	4	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
5	External Alarm # 1	1 1	4	5	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
6	External Alarm # 2	1 1	5	6	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
7	External Alarm # 3	1 1	6	7	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
8	External Alarm # 4	1 1	7	8	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
9	Closed Loop Disabled	1	8	9	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
10	External Alarm # 5	1 1	9	10	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
11	External Alarm # 6	1 1	10	11	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
12	Manual Control Enable	1 1	11	12	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
13	Coord Free Input	1 1	12	13	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
14	Local Flash Input	1 1	13	14	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
15	MMU Flash	1 1	14	15	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
16	CMU Flash	1 1	15	16	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17	Cycle Fault	1			
18	Cycle Failure	1			
19	Coordination Fault	1			
20	Controller Fault	1 1			
21	Detector SDLC Failure	1			
22	MMU SDLC Failure	2			
23	Critical SDLC Failure	3			
24	Reserved	4			
25	EEPROM CRC Fault	5			
26	Detector Diagnostic F	6			
27	BIU Detector Failure	7			
28	Queue detector alarm	8			
29	Ped Detector Fault	1			
30	Coord Diagnostic Fault	1			
41	TempAlert Probe Ch. A	2			
42	TempAlert Probe Ch. B	3			
47	Coord Active	4			
48	Preempt Active	5			
49	Preempt 1 Input	6			
50	Preempt 2 Input	7			
51	Preempt 3 Input	8			
52	Preempt 4 Input	1			
53	Preempt 5 Input	1			
54	Preempt 6 Input	1			
55	Preempt 7 Input	2			
56	Preempt 8 Input	3			
57	Preempt 9 Input	4			
58	Preempt 10 Input	1			
61	In Transition	1			
81	FIO Status Alarm	1			

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION  
TRAFFIC ENGINEERING & SAFETY DIVISION  
TRAFFIC CONTROL SPECIFICATIONS

Study :  
Contract :  
PIN:

File :

PAGE 1 OF 20 PAGES

W -585  
SIGNAL NO(S)

westchester  
COUNTY

OFFICE

INTERSECTION Rte. 6 @ Jacobs Plaza/Parkway Drive

CITY  VILLAGE  TOWN OF Cortlandt

Department Order filed \_\_\_\_\_ as Section \_\_\_\_\_ Subdivision \_\_\_\_\_

Prior specifications hereby superseded  None

Purpose: Installation of New Traffic Signal

These specifications will be effective upon the  Installation  Modification of the necessary traffic control device(s) required by and conforming to the State Manual of Uniform Traffic Control Devices

I. This Signal shall

A. Operate in accordance with the Table of Operations and / or Change intervals as shown on page(s) 2 as a :

- Pretimed Signal  
 Semi-traffic actuated signal  
 Full-traffic actuated signal  
 Pedestrian actuated signal  
 Other

B.  Display vehicular indications

Display pedestrian indications

Be equipped with vehicle detectors

Be equipped with Pedestrian pushbuttons

as shown in the  schematic  scaled drawing on page 2.

Be equipped with  pre-emption which are described as follows  interconnection and / or coordination

cc: ( )  Main Office  
(1)  Region 8 Traffic Engineer  
(2)  Ray Novak  
( )

Date	Signature	RTE
Installation Date	<u>01/31/66</u>	Title
Modification Date		

Phase Times [1.1.1]								Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]																				
	1	2	3	4	5	6	7	8	Pat#	Cyc	Off	Split	Seg	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
Min Green	5	10	.5		5	10			1	90	8	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1	
Gap_Ext	3	2	2		2	2			2	70	8	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1
Max 1	25	40	28		25	40			3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1			
Max 2									4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1			
Yel Clearance	4	4	4		4	4			5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1			
Red Clearance	1	1	1		1	1			6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1			
Walk									7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1			
Ped Clearance									8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1			
Red Revert									9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1			
Add Initial									10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1			
Max Initial									11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1			
Time B4 Reduct									12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1			
Cars B4 Reduct									Split	1	2	3	4	5	6	7	8	Split	1	2	3	4	5	6	7	8		
Time To Reduce									1	Coor	15	45	30	15	45	30	13	Coor										
Reduce By									2	Coor	MAX			MAX		MAX												
Min Gap									2	Coor	15	35	20	15	35	20	14	Coor										
DyMaxLim									2	Coor	MAX			MAX		MAX												
Max Step									3	Coor																		
<b>Options [1.1.2]</b>									On	On	On	On	On	On	On	On	On	On	On	On	On	On	On	On	On	On		
Enable									4	Coor																		
Min Recall									5	Coor																		
Max Recall									6	Coor																		
Ped Recall									7	Coor																		
Soft Recall									8	Coor																		
Lock Calls									9	Coor																		
Auto Flash Entry									10	Coor																		
Auto Flash Exit									11	Coor																		
Dual Entry									12	Coor																		
Enable Simul Gap									13	Coor																		
Guarantee Passage									14	Coor																		
Rest In Walk									15	Coor																		
Condition Service									16	Coor																		
Non-Actuated 1									17	Coor																		
Non-Actuated 2									18	Coor																		
Add Init Calc									19	Coor																		
<b>Options + [1.1.3]</b>	1	2	3	4	5	6	7	8	20	Coor																		
Reservece									21	Coor																		
PedCntr Thru Yel									22	Coor																		
Skip Red No Call									23	Coor																		
Red Rest									24	Coor																		
Max II																												
Call Phase																												
Conflicting Phase																												
Omit Yellow																												
Ped Delay																												
Gm/Ped Delay																												

Page# **8**

**1** 8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param  
**1A&1B** 16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param  
**2** Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)  
**3** Detection; Sample Time and Unit Parameters related to detection  
**4** Preemption and Alternate Phase Time and Phase Options  
**5** Annual Schedule  
**6** Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)  
**7** Communications; Security; I/O Setup  
**8** Misc - Events/Alarms; Call/Inhibit/Redirect; PIQAP Auto Flash; CIC; Misc Unit Param

**ID: 7585 ROUTE 6 @ JACOBS HILL PLAZA**

**Page 1** **031819**

**Overlap 1-16 Program Params & Parm# [1.5.2.1][1.5.2.2]**

	Overlap Conflict Lock	OFF	Overlap Lock inhibit	OFF	Parent Phn Clearance	ON	Extra included Ph	OFF	
<b>1</b>	Included Ø				NORMAL	Included Ø			INCREMENTAL
	Modifier Ø				Gm	9	Modifier Ø		Gm
	Conflict Ø				Yel	3.5	Conflict Ø		Yel
<b>A</b>	Conflict Olap				Red	1.5	Conflict Olap		3.5
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>2</b>	Modifier Ø				Gm	10	Modifier Ø		4
	Conflict Ø				Yel	3.5	Conflict Ø		12
<b>B</b>	Conflict Olap				Red	1.5	Conflict Olap		1.5
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>3</b>	Modifier Ø				Gm	11	Modifier Ø		6
	Conflict Ø				Yel	3.5	Conflict Ø		12
<b>C</b>	Conflict Olap				Red	1.5	Conflict Olap		9
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>4</b>	Modifier Ø				Gm	12	Modifier Ø		7
	Conflict Ø				Yel	3.5	Conflict Ø		12
<b>D</b>	Conflict Olap				Red	1.5	Conflict Olap		9
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>5</b>	Modifier Ø				Gm	13	Modifier Ø		LG
	Conflict Ø				Yel	3.5	Conflict Ø		Yel
<b>E</b>	Conflict Olap				Red	1.5	Conflict Olap		3.5
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>6</b>	Modifier Ø				Gm	14	Modifier Ø		LG
	Conflict Ø				Yel	3.5	Conflict Ø		Yel
<b>F</b>	Conflict Olap				Red	1.5	Conflict Olap		3.5
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>7</b>	Modifier Ø				Gm	15	Modifier Ø		LG
	Conflict Ø				Yel	3.5	Conflict Ø		Yel
<b>G</b>	Conflict Olap				Red	1.5	Conflict Olap		3.5
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>8</b>	Modifier Ø				Gm	16	Modifier Ø		LG
	Conflict Ø				Yel	3.5	Conflict Ø		Yel
<b>H</b>	Conflict Olap				Red	1.5	Conflict Olap		3.5
	Conflict Ped				LG		Conflict Ped		12
	Included Ø				NORMAL	Included Ø			22
<b>Channel Settings [1.8.1]</b>									
Channel =>	1	2	3	4	5	6	7	8	9
Phase / Olap #	<b>1</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>17</b>	<b>18</b>
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Channel Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED
Alt Hz									
<b>Channel+ Settings [1.8.4]</b>									
Channel =>	1	2	3	4	5	6	7	8	9
Flash Red+									
Flash Yellow+									
Flash Green+									
Flash Inh Red+									
Olap Ovrd									

**Coord Transition, CooRPhs [2.5]**

	Path#	Short Dwell	Long Dwell	No Shortway Ø	E-Yld	Offset	Reflid	Float	Min Veh Perm	Min Ped Perm
<b>1</b>	1	12	22						EndGRN	
	2	12	22						EndGRN	
<b>A</b>	3	12	22						EndGRN	
	4	12	22						EndGRN	
	5	12	22						EndGRN	
<b>2</b>	6	12	22						EndGRN	
	7	12	22						EndGRN	
<b>3</b>	8	12	22						EndGRN	
	9	12	22						EndGRN	
<b>4</b>	10	12	22						EndGRN	
	11	12	22						EndGRN	
<b>5</b>	12	22							EndGRN	
	13	22							EndGRN	
<b>6</b>	14	22							EndGRN	
	15	22							EndGRN	
<b>7</b>	16	22							EndGRN	
	17	22							EndGRN	
<b>8</b>	18	22							EndGRN	
	19	22							EndGRN	
<b>9</b>	20	22							EndGRN	
	21	22							EndGRN	
<b>10</b>	22								EndGRN	
	23								EndGRN	
<b>11</b>	24								EndGRN	
	25								EndGRN	
<b>12</b>	26								EndGRN	
	27								EndGRN	
<b>13</b>	28								EndGRN	
	29								EndGRN	
<b>14</b>	30								EndGRN	
	31								EndGRN	
<b>15</b>	32								EndGRN	
	33								EndGRN	
<b>16</b>	34								EndGRN	
	35								EndGRN	
<b>17</b>	36								EndGRN	
	37								EndGRN	
<b>18</b>	38								EndGRN	
	39								EndGRN	
<b>19</b>	40								EndGRN	
	41								EndGRN	

 Channel Params[1.8.3]  
 C1 IO Mode USER

 BU Map SINGLE  
 Invert Rail Input OFF



## Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDur
1	ON	RAIL	DWELL		
2	ON	RAIL	DWELL		
3	ON	EMERG	DWELL		
4	ON	EMERG	DWELL		
5	ON	EMERG	DWELL		
6	ON	EMERG	DWELL		

## Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #	MaxPres	MinGm	PedCir	Co+Pre
1			ON	
2			ON	
3	45		7	ON
4	45		7	ON
5			ON	
6			ON	

Pre #	Track	Gm	Min Dwell	Ext Dwell	PedCir+Yel
1		2			
2		2			
3		15	3	4	
4		15	3	4	
5		2			
6		2			

Pre #	Red	Pattern	Skip
1		OFF	
2		OFF	
3	4	OFF	
4	4	OFF	
5		OFF	
6		OFF	

## Track Clear Phases [3.2], Track Overlaps+ [3.5]

Pre #	Track	Phases	Overlap
1		Phases	
2		Overlaps	
3		Peds	
4		Phases	
5		Overlaps	
6		Peds	

## Preemption Options+ [3.6]

Pre #	Lock	Override	Fish
1	ON	ON	
2	ON	ON	
3	ON	ON	
4	ON	ON	
5	ON	ON	
6	ON	ON	

## Exit Phases [3.2]

Pre #	Exit Phase
1	
2	
3	
4	
5	
6	

Pre #	Lock	Override	Fish	Higher	Dwell Link
1	ON	ON		ON	OFF
2	ON	ON		ON	OFF
3	ON	ON		ON	OFF
4	ON	ON		ON	OFF
5	ON	ON		ON	OFF
6	ON	ON		ON	OFF

## Unit Parameters [1.2.1]

Stop Timer Over Preempt	OFF
Prompt or Exit Output	PRE
Max Seek Track Time	
Max Seek Dwell Time	
Channel Parameters [1.8.3]	
D Conn Mappings	NONE
Pre Invert Rail Input	OFF

**Alt# 1 Times Table [1.1.6.1.2]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

Column#.....>	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

**Alt# 2 Times Table [1.1.6.1.2]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

Column#.....>	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

**Alt# 3 Times Table [1.1.6.1.3]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Cir								
Red Cir								
Walk								
Ped Cir								

**Alt# 1 Veh Parameters [5.5.1.1]**

Column#.....>	1	2	3	4	5	6	7	8
Column#.....>	1	2	3	4	5	6	7	8
Assign Det#								
Call								
Switch								
Delay								
Extend								
Queue								
No Activity								
Max Presence								
Erratic Count								
Fail Time								

**Alt# 1 Veh Options [5.5.1.2]**

Column#.....>	1	2	3	4	5	6	7	8
Column#.....>	1	2	3	4	5	6	7	8
Assign Det#								
Call								
ExtEnd								
Queue								
Added Initial								
Red Lock								
Yellow Lock								
Occupancy								
Volume								

**Alt# 1 Veh Parameters+ [5.5.1.3]**

Column#.....>	1	2	3	4	5	6	7	8
Column#.....>	1	2	3	4	5	6	7	8
Assign Det#								
Occ-on-green								
Occ-on-yellow								
Occ-on-red								
Delay Phase 1								
Delay Phase 2								
Detector Mode	NORM							
Source								

**Alt# 1 Ped Parameters+ [5.5.1.4]**

Column#.....>	1	2	3	4	5	6	7	8
Column#.....>	1	2	3	4	5	6	7	8
Assign Det#								
Call								
No Activity								
Max Presence								
Erratic Count								

**Alt# 1 Ped Options Table [1.1.6.2.1]**

Column #	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	On							
Soft Recall								
Dual Entity								
Enabl SimCap	On							
Guard Passage								
Rest In Walk								
Cond Service								
Reserve								
Non-Act								
Red Rest								
Max2								
Ped Delay								
Conflicting Ø1								

**Alt# 2 Options Table [1.1.6.2.2]**

Column #	>	1	2	3	4	5	6	7	8
Assign Ø									
Lock Calls	On								
Soft Recall									
Dual Entity									
Enabl SimGap	On								
Guar Passage									
Rest In Walk									
Cond Service									
Reservice									
Non-Act1									
Red Rest									
Max2									
Ped Delay									
Conflicting Ø1									

**Alt# 3 Options Table [1.1.6.2.3]**

Column #	>	1	2	3	4	5	6	7	8
Assign Ø									
Lock Calls	On								
Soft Recall									
Dual Entity									
Enabl SimGap	On								
Guar Passage									
Rest In Walk									
Cond Service									
Reservice									
Non-Act1									
Red Rest									
Max2									
Ped Delay									
Conflicting Ø1									

**Alt# 2 Veh Parameters [5.5.2.1]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Det# Call								
Switch								
Delay								
Extend								
Queue								
No Activity								
Max Presence								
Erratic Count								
Fail Time								

**Alt# 2 Veh Options [5.5.2.2]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Det# Call								
Extend								
Queue								
Added Initial								
Red Lock								
Yellow Lock								
Occupancy								
Volume								

**Alt# 2 Veh Parameters [5.5.2.3]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Det# Call								
Occ-on-green								
Occ-on-yellow								
Occ-on-red								
Delay Phase 1								
Delay Phase 2								
Detector Mode	NORM							
Source								

**Alt# 2 Ped Parameters [5.5.2.4]**

Column#.....>	1	2	3	4	5	6	7	8
Assign Det# Call								
No Activity								
Max Presence								
Erratic Count								

Column #	>	1	2	3	4	5	6	7	8
Assign Ø									
Lock Calls	On								
Soft Recall									
Dual Entity									
Enabl SimGap	On								
Guar Passage									
Rest In Walk									
Cond Service									
Reservice									
Non-Act1									
Red Rest									
Max2									
Ped Delay									
Conflicting Ø1									

Annual Schedule [4.3] Month of Year	DayLink												Plan To
	J	F	M	A	M	J	J	A	S	O	N	D	
1	On	On	On	On	On	On	On	On	On	On	On	On	On
2	On	On	On	On	On	On	On	On	On	On	On	On	On
3	On	On	On	On	On	On	On	On	On	On	On	On	On
4	J	F	M	A	M	J	J	A	S	O	N	D	1
5	J	F	M	A	M	J	J	A	S	O	N	D	1
6	J	F	M	A	M	J	J	A	S	O	N	D	1
7	J	F	M	A	M	J	J	A	S	O	N	D	1
8	J	F	M	A	M	J	J	A	S	O	N	D	1
9	J	F	M	A	M	J	J	A	S	O	N	D	1
10	J	F	M	A	M	J	J	A	S	O	N	D	1
11	J	F	M	A	M	J	J	A	S	O	N	D	1
12	J	F	M	A	M	J	J	A	S	O	N	D	1
13	J	F	M	A	M	J	J	A	S	O	N	D	1
14	J	F	M	A	M	J	J	A	S	O	N	D	1
15	J	F	M	A	M	J	J	A	S	O	N	D	1
16	J	F	M	A	M	J	J	A	S	O	N	D	1
17	J	F	M	A	M	J	J	A	S	O	N	D	1
18	J	F	M	A	M	J	J	A	S	O	N	D	1
19	J	F	M	A	M	J	J	A	S	O	N	D	1
20	J	F	M	A	M	J	J	A	S	O	N	D	1
21	J	F	M	A	M	J	J	A	S	O	N	D	1
22	J	F	M	A	M	J	J	A	S	O	N	D	1
23	J	F	M	A	M	J	J	A	S	O	N	D	1
24	J	F	M	A	M	J	J	A	S	O	N	D	1

## Day Plans [4.4]

Day Plan 1			Day Plan 2			Day Plan 3		
Hour	Min	Act	Hour	Min	Act	Hour	Min	Act
1	6	0	2	9		1	7	0
2	7	30	1	10		2	10	0
3	9	0	2	11		3	18	0
4	14	0	1	12		4	22	0
5	19	0	2	13		5	13	
5	22	0	99	14		5	13	
7	0	0	99	15		7	15	
8	3	16	0	0	8	16	0	8

## Day Plan 4

Day Plan 4			Day Plan 5			Day Plan 6		
Hour	Min	Act	Hour	Min	Act	Hour	Min	Act
1	0	0	9	0	0	1	0	0
2	0	0	10	0	0	2	0	0
3	0	0	11	0	0	3	0	0
4	0	0	12	0	0	4	0	0
5	0	0	13	0	0	5	0	0
6	0	0	14	0	0	6	0	0
7	0	0	15	0	0	7	0	0
8	0	0	16	0	0	8	0	0
9	0	0	16	0	0	9	0	0
10	0	0	9	0	0	10	0	0
11	0	0	10	0	0	11	0	0
12	0	0	10	0	0	12	0	0
13	0	0	11	0	0	13	0	0
14	0	0	12	0	0	14	0	0
15	0	0	13	0	0	15	0	0
16	0	0	14	0	0	16	0	0
17	0	0	15	0	0	17	0	0
18	0	0	16	0	0	18	0	0
19	0	0	16	0	0	19	0	0
20	0	0	9	0	0	20	0	0
21	0	0	10	0	0	21	0	0
22	0	0	11	0	0	22	0	0
23	0	0	12	0	0	23	0	0
24	0	0	13	0	0	24	0	0
25	0	0	14	0	0	25	0	0
26	0	0	15	0	0	26	0	0
27	0	0	16	0	0	27	0	0
28	0	0	16	0	0	28	0	0
29	0	0	9	0	0	29	0	0
30	0	0	10	0	0	30	0	0
31	0	0	11	0	0	31	0	0
32	0	0	12	0	0	32	0	0
33	0	0	13	0	0	33	0	0
34	0	0	14	0	0	34	0	0
35	0	0	15	0	0	35	0	0
36	0	0	16	0	0	36	0	0
37	0	0	16	0	0	37	0	0
38	0	0	9	0	0	38	0	0
39	0	0	10	0	0	39	0	0
40	0	0	11	0	0	40	0	0
41	0	0	12	0	0	41	0	0
42	0	0	13	0	0	42	0	0
43	0	0	14	0	0	43	0	0
44	0	0	15	0	0	44	0	0
45	0	0	16	0	0	45	0	0
46	0	0	9	0	0	46	0	0
47	0	0	10	0	0	47	0	0
48	0	0	11	0	0	48	0	0

## Day Plans [4.5]

Day Plan 7			Day Plan 8			Day Plan 9		
Hour	Min	Act	Hour	Min	Act	Hour	Min	Act
1	0	0	9	0	0	1	0	0
2	0	0	10	0	0	2	0	0
3	0	0	11	0	0	3	0	0
4	0	0	12	0	0	4	0	0
5	0	0	13	0	0	5	0	0
6	0	0	14	0	0	6	0	0
7	0	0	15	0	0	7	0	0
8	0	0	16	0	0	8	0	0
9	0	0	9	0	0	9	0	0
10	0	0	10	0	0	10	0	0
11	0	0	11	0	0	11	0	0
12	0	0	12	0	0	12	0	0
13	0	0	13	0	0	13	0	0
14	0	0	14	0	0	14	0	0
15	0	0	15	0	0	15	0	0
16	0	0	16	0	0	16	0	0
17	0	0	9	0	0	17	0	0
18	0	0	10	0	0	18	0	0
19	0	0	11	0	0	19	0	0
20	0	0	12	0	0	20	0	0
21	0	0	13	0	0	21	0	0
22	0	0	14	0	0	22	0	0
23	0	0	15	0	0	23	0	0
24	0	0	16	0	0	24	0	0
25	0	0	9	0	0	25	0	0
26	0	0	10	0	0	26	0	0
27	0	0	11	0	0	27	0	0
28	0	0	12	0	0	28	0	0
29	0	0	13	0	0	29	0	0
30	0	0	14	0	0	30	0	0
31	0	0	15	0	0	31	0	0
32	0	0	16	0	0	32	0	0
33	0	0	9	0	0	33	0	0
34	0	0	10	0	0	34	0	0
35	0	0	11	0	0	35	0	0
36	0	0	12	0	0	36	0	0
37	0	0	13	0	0	37	0	0
38	0	0	14	0	0	38	0	0
39	0	0	15	0	0	39	0	0
40	0	0	16	0	0	40	0	0
41	0	0	9	0	0	41	0	0
42	0	0	10	0	0	42	0	0
43	0	0	11	0	0	43	0	0
44	0	0	12	0	0	44	0	0
45	0	0	13	0	0	45	0	0
46	0	0	14	0	0	46	0	0
47	0	0	15	0	0	47	0	0
48	0	0	16	0	0	48	0	0

ID: 7585 ROUTE 6 @ JACOBS HILL

031619

Page 8

C1-USER IO Map [1.8.9.1 In]		C1-USER IO Map [1.8.9.2 Out]		IO Logic [1.8.7]		Com Parameters [6.1]	
11-1	1	Veh Call 1	O7-1	115	Not Used	1	Fcn Timer
11-2	2	Veh Call 2	O7-2	115	Not Used	1	0
11-3	3	Veh Call 3	O7-3	115	Not Used	1	0
11-4	4	Veh Call 4	O7-4	115	Not Used	1	0
11-5	5	Veh Call 5	O7-5	115	Not Used	1	0
11-6	6	Veh Call 6	O7-6	115	Not Used	1	0
11-7	7	Veh Call 7	O7-7	115	Not Used	1	0
11-8	8	Veh Call 8	O7-8	115	Not Used	1	0
12-1	189	Unused	O7-9	115	Not Used	1	0
12-2	189	Unused	O7-10	115	Not Used	1	0
12-3	11	Veh Call 11	O7-11	115	Not Used	1	0
12-4	12	Veh Call 12	O7-12	115	Unused	14-3	189
12-5	13	Veh Call 13	O7-13	115	Unused	14-4	189
12-6	14	Veh Call 14	O7-14	115	Unused	17-1	189
12-7	15	Veh Call 15	O7-15	115	Unused	17-2	189
12-8	16	Veh Call 16	O7-16	115	Unused	17-3	189
13-1	17	Veh Call 17	O7-17	115	Unused	17-4	189
13-2	18	Veh Call 18	O7-18	115	Unused	17-5	189
13-3	189	Unused	O7-19	115	Unused	17-6	189
13-4	189	Unused	O7-20	115	Unused	17-7	189
13-5	189	Unused	O7-21	115	Unused	17-8	189
13-6	22	Veh Call 22	O7-22	115	Unused	18-1	189
13-7	189	Unused	O7-23	115	Unused	18-2	189
13-8	24	Veh Call 24	O7-24	115	Unused	18-3	189
14-1	10	Ch10 Red	O4-1	10	Ch10 Red	18-4	189
14-2	58	Ch10 Green	O4-2	58	Ch10 Green	18-5	189
14-3	11	Ch11 Red	O4-3	11	Ch11 Red	18-6	189
14-4	35	Ch11 Yellow	O4-4	35	Ch11 Yellow	18-7	189
14-5	189	Unused	O4-5	59	Ch11 Green	18-8	189
14-6	189	Unused	O4-6	12	Ch12 Red	Q8-1	115
14-7	229	33xCMUStop	O4-7	36	Ch12 Yellow	Q8-2	115
14-8	228	33xFlashSns	O4-8	60	Ch12 Green	Q8-3	115
15-1	129	Fee Call 1	O5-1	28	Ch4 Yellow	Q8-4	115
15-2	189	Unused	O5-2	34	Ch10 Yellow	Q8-5	115
15-3	189	Unused	O5-3	25	Ch1 Yellow	Q8-6	115
15-4	189	Unused	O5-4	31	Ch7 Yellow	Q8-7	115
15-5	189	Unused	O5-5	115	Not Used	O8-8	115
15-6	189	Unused	O5-6	115	Not Used	Mask	0
15-7	189	Unused	O5-7	115	Not Used	Bind	0
15-8	189	Unused	O5-8	114	Watchdog	GrWay	0
16-1	189	Unused	O6-1	189	Not Used	Port	0
16-2	189	Unused	O6-2	115	Not Used		
16-3	189	Unused	O6-3	13	Ch13 Red		
16-4	189	Unused	O6-4	37	Ch13 Yellow		
16-5	189	Unused	O6-5	61	Ch13 Green		
16-6	189	Unused	O6-6	14	Ch14 Red		
16-7	189	Unused	O6-7	38	Ch14 Yellow		
16-8	189	Unused	O6-8	62	Ch14 Green		

#	Event / Alarm	Ev/Alr	Call Phases[1.1.5]	Redirect Phases[1.1.5]	Inhibit Phases[1.1.5]
1	Power Up Alarm	On On	∅ Phases Called By Ø	1 From To From To From To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
2	Stop Timing	On On		1	1
3	TS1 Cabinet Door	On On		2	2
4	Coordination Failure	On On		3	3
5	External Alarm # 1	On On		4	4
6	External Alarm # 2	On On		5	5
7	External Alarm # 3	On On		6	6
8	External Alarm # 4	On On		7	7
9	Closed Loop Disabled	On On		8	8
10	External Alarm # 5	On On		9	9
11	External Alarm # 6	On On		10	10
12	Manual Control Enable	On On		11	11
13	Coord Free Input	On On		12	12
14	Local Flash Input	On On		13	13
15	MMU Flash	On On		14	14
16	CMU Flash	On On		15	15
17	Cycle Fault	On On		16	16
18	Cycle Failure	On On	Alt Call & Redirect # 1 [1.1.6.3]	From To From To From To	Alt Inhibit Phases # 1 [1.1.6.3]
19	Coordination Fault	On On	∅ Phases Called By Ø	1	1
20	Controller Fault	On On		2	2
21	Detector SDIC Failure	On On		3	3
22	MMU SDIC Failure	On On		4	4
23	Critical SDIC Failure	On On		5	5
24	Reserved	On On		6	6
25	EEPROM CRC Fault	On On		7	7
26	Detector Diagnostic Failure	On On		8	8
27	BIL Detector Failure	On On	Alt Call & Redirect # 2 [1.1.6.3]	From To From To From To	Alt Inhibit Phases # 2 [1.1.6.3]
28	Queue detector alarm	On On	∅ Phases Called By Ø	1	1
29	Ped Detector Fault	On On		2	2
30	Coord Diagnostic Fault	On On		3	3
41	TempAlert Probe Ch. A	On On		4	4
42	TempAlert Probe Ch. B	On On		5	5
47	Coord Active	On On		6	6
48	Preempt Active	On On		7	7
49	Preempt 1 Input	On On		8	8
50	Preempt 2 Input	On On			
51	Preempt 3 Input	On On			
52	Preempt 4 Input	On On	Coord, CIC Plans [2.3]	From To From To From To	Unit Parameters [1.2.1]
53	Preempt 5 Input	On On	CIC CoØ Grow 1 2 3 4 5 6 7 8	Allow Skip Yellow OFF	Max Cycle Time
54	Preempt 6 Input	On On	1 OFF	TOD Dim Enable OFF	Cycle Fault Action
55	Preempt 7 Input	On On	2 OFF	Tone Disable OFF	ALARM
56	Preempt 8 Input	On On	3 OFF	Diamond Mode 4Ph	
57	Preempt 9 Input	On On	4 OFF	Backup Time (s) 900	
58	Preempt 10 Input	On On	Auto Flash Phase/Olap Settings [1.4.2]	Disable Init Ped OFF	
61	In Transition	Yel Ø Yel (gaps)	Cycle Fault Action ALARM	Enable Run Timer ON	ID: 7585 ROUTE 6 @ JACOBS HILL PLAZA
81	FIO Status Alarm				03/18/19 Page 10

TE 262-12 (7/91)

MODEL 179 SIGNAL OPERATION  
PROGRAMMABLE FEATURES  
SIGNAL OPERATION SPECIFICATION

TAPS \_\_\_\_\_  
STUDY # \_\_\_\_\_  
FILE # \_\_\_\_\_  
PAGE \_\_\_\_\_ OF \_\_\_\_\_

SIGNAL # W-585COUNTY # Westchester DATE 11/05

SWITCH PACK	FUNCTION	INDICATIONS	FACE	TERMINAL WIRING BOARD		FACE	TERMINAL WIRING BOARD	
				TERMINAL	WIRE COLOR CODE		TERMINAL	WIRE COLOR CODE
1	$\emptyset 1$	  Ground Wire	1	SP 1 R	-----		SP 1 R	
				SP 1 Y	14 / 15C - D - BL / W		SP 1 Y	
				SP 1 G	- G / W		SP 1 G	
				Grnd Bus	- B / W		Grnd Bus	
2	$\emptyset 2$	Red Yellow Green Ground Wire	3	SP 2 R	14 / 15C - C - R	4	SP 2 R	14 / 10C - A - R
				SP 2 Y	- O		SP 2 Y	- O
				SP 2 G	- G		SP 2 G	- G
				Grnd Bus	- W		Grnd Bus	- W
3	$\emptyset 3$	Red Yellow Green Ground Wire	5	SP 3 R	14 / 5C - B - R	6	SP 3 R	14 / 10C - A - R / B
				SP 3 Y	- O		SP 3 Y	- O / B
				SP 3 G	- G		SP 3 G	- G / B
				Grnd Bus	- W		Grnd Bus	- W / B
4		  Ground Wire		SP 4 R			SP 4 R	
				SP 4 Y			SP 4 Y	
				SP 4 G			SP 4 G	
				Grnd Bus			Grnd Bus	
5	$\emptyset 5$	  Ground Wire	3	SP 5 R	-----		SP 6 R	
				SP 5 Y	14 / 15C - C - O / B		SP 6 Y	
				SP 5 G	- G / B		SP 6 G	
				Grnd Bus	- W / B		Grnd Bus	
6	$\emptyset 6$	Red Yellow Green Ground Wire	1	SP 6 R	14 / 15C - D - R	2	SP 5 R	14 / 5C - E - R
				SP 6 Y	- O		SP 5 Y	- O
				SP 6 G	- G		SP 5 G	- G
				Ground Wire	- W		Grnd Bus	- W
7		  Ground Wire		SP 7 R			SP 7 R	
				SP 7 Y			SP 7 Y	
				SP 7 G			SP 7 G	
				Grnd Bus			Grnd Bus	
8		Red Yellow Green Ground Wire		SP 8 R			SP 8 R	
				SP 8 Y			SP 8 Y	
				SP 8 G			SP 8 G	
				Grnd Bus			Grnd Bus	
9	PED A $\emptyset 3$	DON'T WALK   Ground Wire	9,10	SP 9 R	14 / 5C - 1P - R		SP 9 R	
				SP 9 Y	-----		SP 9 Y	
				SP 9 G	14 / 5C - 1P - G		SP 9 G	
				Grnd Bus	14 / 5C - 1P - W		Grnd Bus	
10		  Ground Wire		SP 10 R			SP 10 R	
				SP 10 Y			SP 10 Y	
				SP 10 G			SP 10 G	
				Grnd Bus			Grnd Bus	
11		  Ground Wire		SP 11 R			SP 11 R	
				SP 11 Y			SP 11 Y	
				SP 11 G			SP 11 G	
				Grnd Bus			Grnd Bus	
12		  Ground Wire		SP 12 R			SP 12 R	
				SP 12 Y			SP 12 Y	
				SP 12 G			SP 12 G	
				Grnd Bus			Grnd Bus	
13	$\emptyset 3$	Red Yellow Green Ground Wire	7	SP 13 R	14 / 15C - C - R / B	8	SP 13 R	14 / 15C - D - R / B
				SP 13 Y	- O / B		SP 13 Y	- O / B
				SP 13 G	- G / B		SP 13 G	- G / B
				Grnd Bus	- W / B		Grnd Bus	- W / B
14		  Ground Wire		SP 14 R			SP 14 R	
				SP 14 Y			SP 14 Y	
				SP 14 G			SP 14 G	
				Grnd Bus			Grnd Bus	

MODEL 179 SIGNAL OPERATION  
PROGRAMMABLE FEATURES  
SIGNAL OPERATION SPECIFICATION

TAPS \_\_\_\_\_  
STUDY # \_\_\_\_\_  
FILE # \_\_\_\_\_  
PAGE \_\_\_\_\_ OF \_\_\_\_\_

SIGNAL # W-585 COUNTY Westchester DATE 11/05

TABLE OF INPUT WIRING

TERM. NUMBER	FUNCTION	DET. NO.	DET. YPE	DET. AN OVER	REMARKS
1A, 1B	Ø1	1A	QUAD		PRESENCE
2A, 2B	Ø2	2A	QUAD		PRESENCE
3A, 3B	Ø3	3A	QUAD		PRESENCE
4A, 4B	Ø3	4A	QUAD		PRESENCE
5A, 5B	Ø5		QUAD		Presence
6A, 6B	Ø6	6A	QUAD		PRESENCE
7A, 7B	Ø3	7A	QUAD		PRESENCE
8A, 8B	Ø6	8A	QUAD		PRESENCE
9A, 9B					
10A, 10B					
11A, 11B	Ø1	11A	NORMAL		PRESENCE
12A, 12B	Ø2	12A	NORMAL		PRESENCE
13A, 13B	Ø3	13A	NORMAL		PRESENCE
14A, 14B	Ø3	14A	NORMAL		PRESENCE
15A, 15B	Ø5		Normal		Presence
16A, 16B	Ø6	16A	NORMAL		PRESENCE
17A, 17B	Ø3	17A	NORMAL		PRESENCE
18A, 18B	Ø6	18A	NORMAL		PRESENCE
19A, 19B					
20A, 20B					
21A, 21B					
22A, 22B	Ø2	22A	QUAD		PRESENCE
23A, 23B	Ø3 PEDA	23A	RED-DETECTOR		RED-DETECTOR
24A, 24B	Ø2	24A	NORMAL		PRESENCE
25A, 25B	Ø3 PEDA	25	RED DETECTOR		PLD
26A, 26B					
27A, 27B					
28A, 28B					

