McFarland Johnson
Innovative Solutions / Sustainable Results

49 Court Street • Suite 240 • Binghamton, NY 13901
Phone: 607-723-9421 • Fax: 607-723-4979
www.mjinc.com

Grand Boulevard Mini-Roundabout Study

Prepared By:
McFarland-Johnson, Inc.
49 Court Street
Binghamton, NY 13902

February 2020

TABLE OF CONTENTS

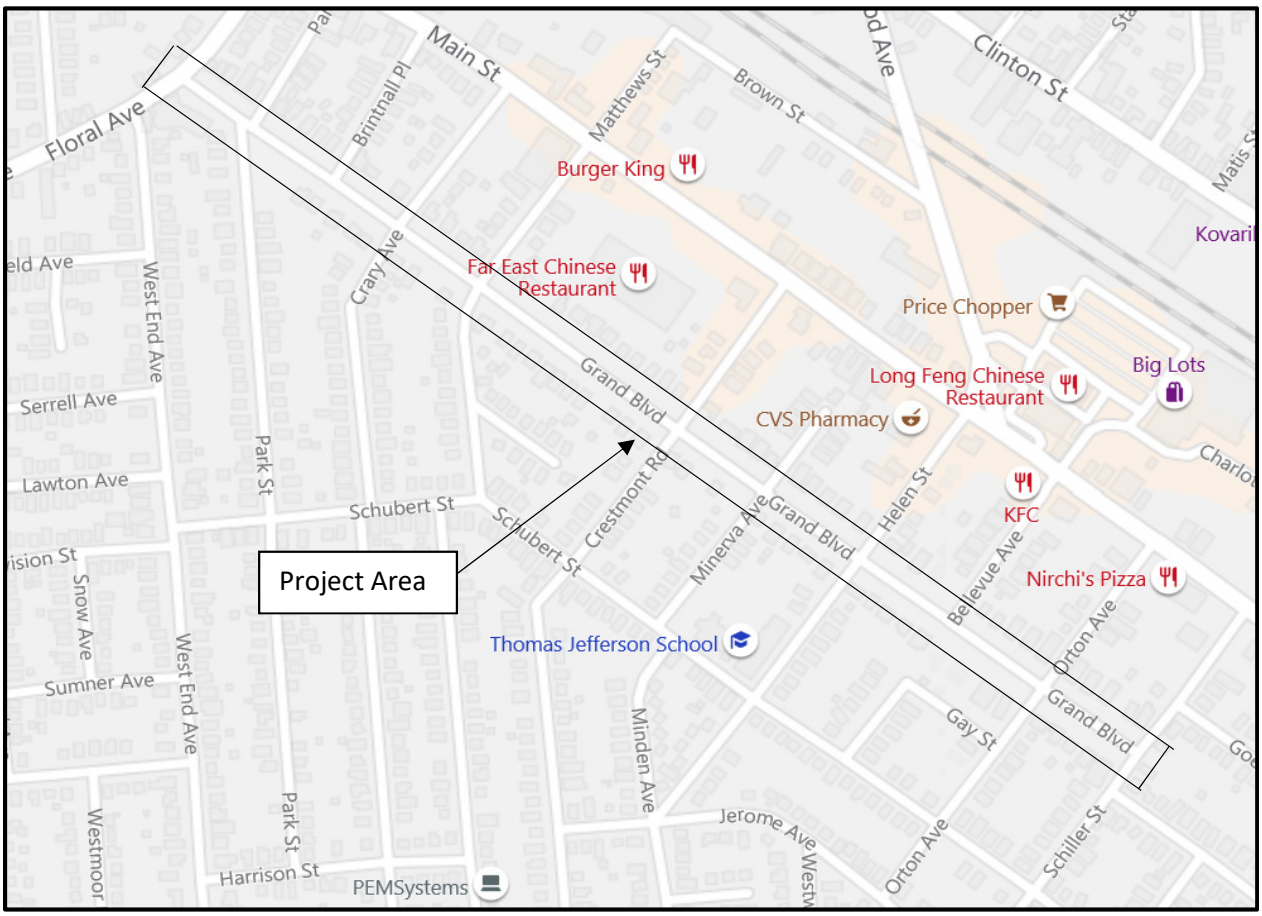
1. Overview

McFarland Johnson (MJ) was contracted by the Binghamton Metropolitan Transportation Study (BMTS) to complete an evaluation of the feasibility and conceptual designs of mini-roundabout intersections along Grand Boulevard in the City of Binghamton. Grand Boulevard is a local city street that is approximately 0.7 miles long and runs between Floral Avenue, a major collector, on its west end and Schiller Street on its east end. See Figure 1, Location Map. The following streets intersect Grand Boulevard from west to east:

Cross Street Name	Traffic Control
Floral Avenue	T-Intersection
Park Street	2-way Stop Controlled
Brintnall Place	T-Intersection
Crary Avenue	2-way Stop Controlled
Matthews Street	2-way Stop Controlled
Crestmont Road	2-way Stop Controlled*
Minerva/Annette Avenues	2-way Stop Controlled
Helen Street	4-way Stop (Flashing Red)
Bellevue Avenue	T-Intersection
Orton Avenue	2-way Stop Controlled
Schiller Street	T-Intersection

*recently changed to 4-way Stop Controlled after study completed

Figure 1 – Location Map



The City of Binghamton has received numerous comments about the speeds along Grand Boulevard as well as the number of crashes at some of the intersections. The purpose of this study is to determine if there is an opportunity to incorporate mini-roundabouts at some of the intersections as a means of reducing the number and/or severity of the crashes at these intersections and to serve as a traffic calming measure to reduce speeds along Grand Boulevard. MJ utilized *FHWA Technical Summary FHWA-SA-10-007 Mini-Roundabouts* and *NCHRP Report 672 Roundabouts: An Informational Guide, Second Edition* as a guide in the evaluation of the feasibility and conceptual design of the mini-roundabouts.

2. Existing Conditions

a. Roadway Information

Grand Blvd. is a 2-way curbed roadway with 16' travel lanes and an 8' parking lane on each side of the roadway. The horizontal alignment is straight along the entire length and the vertical alignment is fairly flat with little to no vertical curvature. There are curb bump outs at most of the intersections that reduces the roadway width to the 16' travel lane width in each direction and provides shorter pedestrian crossing distances at the intersections. There are sidewalks along both sides for the entire length of the roadway with a snow storage area that is approximately 15' wide that contains utility poles and trees on the east side and trees on the west side. There are residential driveways that intersect Grand Blvd. throughout the corridor.

The cross streets along Grand Blvd. are all 2-way curbed roadways that are between 26' and 30' wide. All of the cross streets are perpendicular to Grand Blvd. with the exception of the Park St. north approach which is skewed at an approximately 45° angle. In addition, Crary Ave. and Matthews St. have sharp horizontal curves just south of Grand Blvd. that aligns these roads perpendicular to Grand Blvd. at their intersections. There are sidewalks on both sides of all the cross streets that have snow storage areas that are approximately 3'-5' wide that contain utility poles, trees and signs. There are residential driveways that intersect all the cross streets, but none of these driveways are in close proximity to the intersections with Grand Blvd.

b. Traffic Volumes

Peak hour turning movement volumes for most of the intersections were provided by BMTS. The Design Hour Volumes for the AM and PM Peak hours were calculated from the turning movement volumes at each of these intersections. In addition, BMTS provided 24-hour traffic counts for Grand Blvd. that were taken just east of Matthews St. and for Crestmont Road just north of the intersection with Grand Blvd. These 24-hour counts were used along with the Design Hour Volumes to calculate a factor that was used to estimate an AADT for the cross streets and Grand Blvd. at each cross street. The table below shows the AM and PM design hour volumes along with the estimated AADT:

Traffic Volumes

Intersection	Configuration	Cross Street			Grand Blvd.		
		AM Peak	PM Peak	Estimated AADT	AM Peak	PM Peak	Estimated AADT
Floral Ave.	T-intersection	427	616	8024	336	389	5577
Park St.	2-way Stop	*	*	*	*	*	*
Britnall Pl.	T-intersection	*	*	*	*	*	*
Crary Ave.	2-way Stop	37	46	639	327	433	5847
Matthews St.	2-way Stop	31	45	585	260	351	4700
Crestmont Rd.	2-way Stop**	66	76	1093	351	379	5616
Annette/Minerva Ave.	2-way Stop	40	21	470	351	373	5570
Helen St.	4-way Stop	192	225	3208	326	319	4962
Bellevue Ave.	T-intersection	*	*	*	*	*	*
Orton Ave.	2-way Stop	*	*	*	*	*	*
Schiller St.	T-intersection	192	194	2970	262	267	4070

* Intersections that do not have traffic volumes shown are low volume intersections that did not have a significant accident history and therefore were not being considered for mini-roundabouts.

** Intersection changed to 4-way stop controlled after study was completed

See Appendix A for traffic data provided by BMTS.

c. Speeds

A radar spot speed study was performed on October 22, 2019 at 3 separate locations along Grand Blvd. to determine the 85th percentile travel speed along various sections of the corridor. See Appendix B for radar spot speed study data. The 3 locations where the speed study was performed include:

- Location 1 – 88 Grand Blvd. near Crary Avenue intersection
- Location 2 – 42 Grand Blvd. near Crestmont Road intersection
- Location 3 – 18 Grand Blvd. between Bellevue Avenue and Orton Avenue intersections

The results of the speed study are shown in the table below. The posted speed limit on Grand Blvd. is 30 mph.

Radar Spot Speed Data

Location	50th Percentile Speed	85th Percentile Speed	Maximum Speed
1	29 mph	33 mph	36 mph
2	31 mph	34 mph	40 mph
3	30 mph	35 mph	41 mph

In addition, to the above data, the 24-hour counts taken on Grand Blvd. that were taken just east of Matthews Street from September 17th-19th calculated speed data for the eastbound and westbound directions with the results shown in the table below:

24-Hour Count Speed Data

Location	50th Percentile Speed	85th Percentile Speed	Vehicles w/Speed >55 mph
Eastbound	34 mph	39 mph	9
Westbound	33 mph	38 mph	6

d. Crash Analysis

A simplified crash analysis was performed for each of the intersections within the study area. The Grand Blvd. intersections with Crestmont Rd. and Helen St. utilized 5-years of crash data while 3-years of crash data was utilized for the other intersections along Grand Blvd. A summary of the crash data for each intersection is provided in the table below with Forms TE 213 and TE 56 Crash Diagrams for each intersection included in Appendix C:

Crash Data

Intersection	# of Intersection Crashes	Right Angle	Injury	Property Damage Only	Pedestrian Accidents	Bicycle Accidents
Floral Ave.	1	0	1	0	0	1
Park St.	1	1	1	0	0	0
Britnall Pl.	1	0	1	0	0	1
Crary Ave.	3	3	1	2	0	0
Matthews St.	1	1	1	0	0	0
Crestmont Rd.	12	11	7	5	1	0
Annette/Minerva Ave.	0	0	0	0	0	0
Helen St.	5	4	1	4	0	0
Bellevue Ave.	1	1	0	1	0	0
Orton Ave.	1	1	0	1	0	0
Schiller St.	1	0	0	1	0	0

The predominant accident at the intersections is right-angle crashes, as approximately 81% of the crashes are of this type. In addition, nearly 50% of the crashes at the intersections resulted in at least 1 injury. The intersection crash rate for each roadway is shown in the table below along with the statewide average crash rates for similar intersections from January 1, 2015 to December 31, 2106, which are included in Appendix C.

Crash Rates

Intersection	Configuration	Overall Intersection Crash Rate (acc/MEV)	Statewide Average Crash Rate (acc/MEV)	Right-Angle Crash Rate (acc/MEV)	Statewide Average Right Angle Crashes (acc/MEV)
Floral Ave.	T-intersection	0.07	0.18	0.00	0.02
Park St.	2-way Stop	*	0.29	*	0.07
Britnall Pl.	T-intersection	*	0.18	*	0.02
Crary Ave.	2-way Stop	0.42	0.29	0.42	0.07
Matthews St.	2-way Stop	0.17	0.29	0.17	0.07

Crestmont Rd.	2-way Stop**	0.98	0.29	0.90	0.07
Annette/Minerva Ave.	2-way Stop	0.00	0.29	0.00	0.07
Helen St.	4-way Stop	0.34	0.16	0.27	0.03
Bellevue Ave.	T-intersection	*	0.18	*	0.02
Orton Ave.	2-way Stop	*	0.29	*	0.07
Schiller St.	T-intersection	0.13	0.18	0.00	0.02

* Intersections do not have traffic volumes to determine a crash rate.

** Intersection changed to 4-way stop controlled after study was completed

The overall intersection crash rate is approximately 3 times higher than the statewide average at Crestmont Rd., approximately 2 times higher than the statewide average at Helen St. and approximately 1.5 times higher at Crary Ave. The average crash rate for just the intersections along the Grand Blvd. corridor is 0.30 acc/MEV, so Crestmont has a crash rate that is 3 times higher than the corridor average, and Crary Ave. and Helen St. are slightly higher than the corridor average crash rate, while the other intersections are well below the corridor average.

In addition, Crary Ave, Crestmont Rd. and Helen St. have right-angle crash rates that are significantly higher than the statewide average right-angle crash rate. Matthews St. also has a right-angle crash rate that is higher than the statewide average, but that is due to the only intersection crash being a right-angle crash.

In reviewing the accident reports most of the right-angle crashes occurred when the driver on the cross street indicated they stopped at the stop sign and proceeded through the intersection where they struck or were struck by a vehicle on Grand Blvd. A review of the intersections reveals that there are numerous trees in the snow storage area along Grand Blvd. that could possibly be partially blocking the sight distance of a vehicle on the side streets stopped at the stop sign. Also, vehicles parked along Grand Blvd. near the intersections have the potential to block the sight distance of a vehicle stopped on the cross street. In addition, the back of sidewalks on Grand Blvd. are set back approximately 33’ from the travel lanes, therefore the stop signs and stop bars on the cross street are approximately 35 feet from the Grand Blvd. travel lanes resulting in an approximately 70’ crossing distance for a vehicle on the cross street to get through the intersection. This length of the crossing distance combined with the vehicle speeds on Grand Blvd. could be resulting in most of these right-angle crashes.

3. Roundabout Feasibility

Each of the intersections were reviewed for the feasibility of installing a mini-roundabout at the intersection utilizing the following criteria:

- T-intersections were eliminated because of the probability of needing to acquire right-of-way to construct a roundabout at these intersections. This eliminated Floral Ave., Brittnall Pl., Bellevue Ave. and Schiller St. from consideration for a mini-roundabout.
- Intersections where there were no traffic volumes included Park St. and Orton Ave., but the number of intersection crashes were low at these intersections and therefore they were not considered for a mini-roundabout.
- The Annette/Minerva Ave. intersection has low traffic volumes on the minor street and no intersection crashes, therefore it was not considered for a mini-roundabout.

With the elimination of the intersections noted above the remaining intersections that may be feasible for a roundabout include Crary Ave., Matthews St., Crestmont Rd., and Helen St. The AADT traffic volumes for these 4 intersections were compared to the UK Rule of Thumb criteria which are included in the FHWA Technical Advisory and are shown below:

Criteria 1 – At least 10% of the total intersection volume should be generated from the minor street
Criteria 2 – Minimum of 500 daily vehicles on the minor road

The intersection traffic volumes and how they compare to the UK Rules of Thumb are shown in the table below:

UK Rule of Thumb Criteria

Intersection	Cross Street AADT	Grand Blvd. AADT	Criteria 1	Criteria 2
Crary Ave.	639	5847	Y	Y
Matthews St.	585	4700	Y	Y
Crestmont Rd.	1093	5616	Y	Y
Helen St.	3208	4962	Y	Y

As shown in the table all 4 of the remaining intersections meet both UK Rule of Thumb criteria. The crash history was then looked at for these 4 intersections with the Crary Ave., Crestmont Rd., and Helen St. intersections having overall crash rates and right-angle crash rates that are greater than the statewide average for similar intersections, while the Matthews St. intersection had an overall crash rate that was below the statewide average for a similar intersection.

Based on all the above and the traffic volumes and crash history at these intersections it was determined that the Crary Ave., Crestmont Rd., and Helen St. intersections with Grand Blvd. would benefit the most from the installation of a mini-roundabout. These 3 intersections are spaced such that installing mini-roundabouts at each of them should reduce the vehicle speeds along Grand Blvd. In addition, mini-roundabouts at each of these intersections should eliminate the predominant right-angle crashes and injury crashes that the intersections are experiencing, although it should be noted that based on a NYSDOT statewide roundabout study the expected crash rate for a single-lane roundabout is 0.51-0.75 acc/MEV for state roads. This crash rate is higher than the current crash rates at Crary Ave. and Helen St. but lower than the overall crash rate at Crestmont Rd., so there may be an increase in crashes at Crary Ave. and Helen St. based on past experience, but these crashes would not be as severe not likely to cause injury, as most crashes at a roundabout are low speed, side-swipe type accidents as opposed to the right-angle crashes that are currently occurring.

4. Conceptual Roundabout Design

The 3 intersections noted above where mini-roundabouts are proposed are nearly identical to each other, therefore the mini-roundabout design is the nearly identical for all 3 intersections. Grand Blvd. has 11’ travel lanes and a 5’ bicycle lane on each of the approaches, Crary Ave. and Helen St. have 14’ travel lanes on the approaches and Crestmont Road has 15’ travel lanes. The following design principles were used in developing the mini-roundabout layout:

- Provide slow entry speeds and consistent speeds through the roundabout by using deflection;

- Provide smooth channelization that is intuitive to drivers;
- Provide adequate accommodation for the design vehicle;
- Design to meet the needs of pedestrians and bicyclists; and
- Provide appropriate sight distance and visibility.

An overall plan of Grand Blvd. showing the mini-roundabout locations and individual plans of each mini-roundabout along with proposed signing and pavement markings are provided in Appendix D.

a. Horizontal Design

The following key horizontal design areas for considerations are highlighted below: size, design vehicle, design speed, central island, entrance line placement, and splitter islands.

- Size - the mini-roundabouts were designed as large as possible so that it fits within the existing intersection curb lines. This results in an inscribed circle diameter of 72' and is within the range of 45'-90' specified in the NCHRP Report 672. The central island diameter is 40' which results in a circulatory roadway width of 16'.
- Design Vehicle – the location and size of a mini-roundabout central island (and the corresponding width of the circulatory roadway) is dictated by passenger car swept path requirements. Passenger cars can navigate through the intersection without being required to overrun the central island. Buses can make right turn and through movements with a slight infringement on the central island and tractor trailers will need to cross over the central island when making through movements and left turns. It should be noted that the traffic at these intersections is primarily passenger cars with very few buses or tractor trailers.
- Design Speed – the central island size and location provides for a design speed of 15 mph and provides the deflection that will encourage proper circulation and reduced speeds through the intersection.
- Central Island – the central island is fully traversable with mountable curb and concrete and is normally domed using a 5%-6% cross slope. The island will be designed in a similar manner as a truck apron is on larger roundabouts to allow larger vehicles to traverse the island to make their turns.
- Entrance Line Placement – the entrance line is integral to the geometric design of a mini-roundabout and incorrect placement can introduce undesirable driver behavior. These mini-roundabouts have the entrance line placement coincident with the inscribed circle diameter as the splitter islands and size of the central island provide the necessary deflection to align vehicles with the circulatory roadway and reduce the possibility of a vehicle making a left turn in front of the central island.
- Splitter Islands – splitter islands are included on each of the approaches to the mini-roundabout to align vehicles, to encourage deflection and proper circulation, and to provide pedestrian refuge. The proposed splitter islands are raised concrete islands with mountable curb due to larger vehicles potentially needing to track over the edge of the island while making turns. The splitter island is approximately 45' in length and is separated into 2 separate smaller islands to allow for pedestrian crossings on all 4 approaches.

b. Pedestrian Design Treatments

Pedestrian crossing locations are recommended to be located 20' to 25' upstream of the entrance line to accommodate one vehicle queue ahead of the crossing. Moving the pedestrian crossings away from where they currently exist will require the extension of the bulb-outs that currently exist along Grand Blvd. at each of the intersections which will eliminate 1 parking space in each direction and on each side of the intersection for a total of 4 parking spaces eliminated on the approach and departure to each intersection. The walkway through the splitter islands will be a "cut-through" instead of ramped at the island. This is less cumbersome for wheelchair users and allows the cut-through walkway to be aligned with the crosswalks, providing guidance for all pedestrians, but particularly for those who are visually-impaired. The cut-through walkway will be the same width as the crosswalk which is 10' wide.

New sidewalk that will connect to the proposed crosswalks will need to be constructed on all the approaches at each of the intersections.

c. Bicycle Design Treatments

Grand Blvd. or the cross streets do not currently have any provisions for bicyclists. As part of the mini-roundabout installation it is recommended to stripe bicycle lanes along the entire length of Grand Blvd. such that an 11' travel lane and 5' bicycle lane is provided on the approaches to the roundabout. This reduced lane width should further assist in reducing vehicle speeds along Grand Blvd. due to the narrower travel lane (16' currently vs. 11' future). Bicyclists are encouraged to navigate through a mini-roundabout as if they were a vehicle. The bicycle lanes on the approaches to the mini-roundabout will be terminated approximately 100' in advance of the entrance line with a 50' taper ending prior to the crosswalk at the roundabout entry.

d. Sight Distance and Visibility

The visibility of the mini-roundabout as vehicles approach the intersection and the sight distance for viewing vehicles already operating within the mini-roundabout are key components for providing safe roundabout operations. Roundabouts require two types of sight distance to be verified: (1) stopping sight distance and (2) intersection sight distance. The design should be checked to ensure that stopping sight distance can be provided at every point within the mini-roundabout and on each entering and exiting approach such that a driver can react to objects or other conflicting users (such as pedestrians and bicyclists) within the roadway.

Intersection sight distance must also be verified to ensure that sufficient distance is available for drivers to perceive and react to the presence of conflicting vehicles, pedestrians and bicyclists. Intersection sight distance is measured for vehicles entering the roundabout, with conflicting vehicles along the circulatory roadway and entering from the immediate upstream entry taken into account.

Although exact measurements of sight distance cannot be made at this time due to the lack of vertical information related to the roadways, based on a conceptual review Grand Blvd. and the cross streets are all relatively flat at the intersections and we do not foresee any sight

distance issues with any of the mini-roundabouts although this would need to be verified during detailed design.

e. Vertical Design

Mini-roundabouts should generally be designed to be outward draining to place the central island at the highest point of the intersection for maximum visibility. This technique of sloping outward is recommended primarily because it:

- Promotes safety by raising the height of the central island and improving its visibility;
- Promotes lower circulating speeds;
- Minimizes breaks in the cross slopes of the entrance and exit lanes; and
- Drains surface water to the outside of the roundabout.

This is consistent with most standard intersection grading, where the high-point is located near the center of the intersection and slopes towards the outer curbs. Therefore, in most retrofit situations, installation of a mini-roundabout would not necessarily require significant grade modifications to the intersections. As with the sight distance and visibility we do not have the vertical information to determine if that is the case with these intersections although based on an initial review of the intersections they all appear to be sloping toward the curb line this would need to be verified during detailed design.

f. Pavement Markings and Signs

At mini-roundabouts, pavement markings and signs work together to create a comprehensive system to guide and regulated road users. Pavement markings for mini-roundabouts are largely similar to those for other roundabouts. However, because the islands are mountable, additional pavement markings can be used to improve the visibility of key features, including the directions of circulation and splitter islands.

The principal difference in signing at mini-roundabouts compared to other roundabouts is that no signs can be located within the fully mountable central island. As a result, the Circular Intersection (W2-6) warning sign is typically used on each approach in advance of the YIELD sign. YIELD signs are typically placed as close as practical to the entrance line and can be supplemented with a Roundabout Circulation plaque (R6-5P).

Conceptual pavement markings and signing are shown on the drawings included in Appendix D.

g. Right-of-Way

All of the work required to install mini-roundabouts at each of these intersections can be completed within the existing right-of-way of Grand Blvd. and each of the side streets. Temporary easements may be required along the cross streets to construct the sidewalk curb ramps that will be required to connect the existing sidewalk to the crosswalk locations.

h. Costs

A construction cost estimate was prepared for a single mini-roundabout which includes installation of the central islands and splitter islands including curb and concrete, milling and overlaying the remaining asphalt pavement at the intersection, and installing pavement

markings and signing. The estimated construction cost for a single roundabout is approximately $250,000 which includes 20% in contingencies. A copy of the itemized cost estimate is included in Appendix E.

Appendix A

Traffic Data

Study Name	29-FLORAL AVE AT GRAND BLVD
Start Date	Tuesday, September 17, 2019 7:00 AM
End Date	Tuesday, September 17, 2019 5:30 PM
Site Code	

Report Summary

		Southbound						Westbound						Northbound						Eastbound								Crosswalk		
Time Period	**Class.**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**Total**		**s on Crc**	**destria**	**Total**
Peak 1	Lights	1	1	1	0	3	0	18	132	0	0	150	180	149	0	48	0	197	132	0	131	113	0	244	282	594	SB	1	7	8
Specified Period	%	100%	100%	100%	0%	100%	0%	100%	86%	0%	0%	87%	97%	98%	0%	100%	0%	99%	96%	0%	96%	96%	0%	96%	92%	94%		13%	88%	
7:00 AM - 9:30 AM	Buses	0	0	0	0	0	0	0	15	0	0	15	3	3	0	0	0	3	5	0	3	5	0	8	18	26	WB	0	1	1
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	9%	2%	2%	0%	0%	0%	2%	4%	0%	2%	4%	0%	3%	6%	4%		0%	100%	
7:30 AM - 8:30 AM	Trucks	0	0	0	0	0	0	0	7	0	0	7	3	0	0	0	0	0	0	0	3	0	0	3	7	10	NB	0	3	3
	%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	2%	2%		0%	100%	
	Total	**1**	**1**	**1**	**0**	**3**	**0**	**18**	**154**	**0**	**0**	**172**	**186**	**152**	**0**	**48**	**0**	**200**	**137**	**0**	**137**	**118**	**0**	**255**	**307**	**630**	EB	1	3	4
	PHF	0.25	0.25	0.25	0	0.38	0	0.75	0.88	0	0	0.88	0.83	0.83	0	0.75	0	0.81	0.93	0	0.78	0.89	0	0.9	0.87	0.91		25%	75%	
	Approach %					0%	0%					27%	30%					32%	22%					40%	49%			**2**	**14**	**16**
Peak 2	Lights	0	0	0	0	0	1	46	210	0	0	256	232	146	0	43	0	189	198	1	189	152	0	342	356	787	SB	0	14	14
Specified Period	%	0%	0%	0%	0%	0%	100%	98%	97%	0%	0%	97%	96%	100%	0%	100%	0%	100%	99%	100%	95%	99%	0%	97%	98%	98%		0%	100%	
3:00 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	6	0	0	6	7	0	0	0	0	0	0	0	7	0	0	7	6	13	WB	0	5	5
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	2%	2%	2%		0%	100%	
4:00 PM - 5:00 PM	Trucks	0	0	0	0	0	0	1	0	0	0	1	3	0	0	0	0	0	2	0	3	1	0	4	0	5	NB	0	8	8
	%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	1%	0%	1%		0%	100%	
	Total	**0**	**0**	**0**	**0**	**0**	**1**	**47**	**216**	**0**	**0**	**263**	**242**	**146**	**0**	**43**	**0**	**189**	**200**	**1**	**199**	**153**	**0**	**353**	**362**	**805**	EB	0	4	4
	PHF	0	0	0	0	0	0.25	0.78	0.92	0	0	0.91	0.88	0.79	0	0.77	0	0.86	0.86	0.25	0.84	0.89	0	0.88	0.87	0.91		0%	100%	
	Approach %					0%	0%					33%	30%					23%	25%					44%	45%			**0**	**31**	**31**

Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

Ashley Seyfried
Grand Blvd. and Crary Ave.
City of Binghamton

File Name : Grand Blvd. and Crary Ave. AM
Site Code : 00000000
Start Date : 12/5/2019
Page No : 1

Groups Printed- Unshifted - Heavy Vehicles - Bank 2

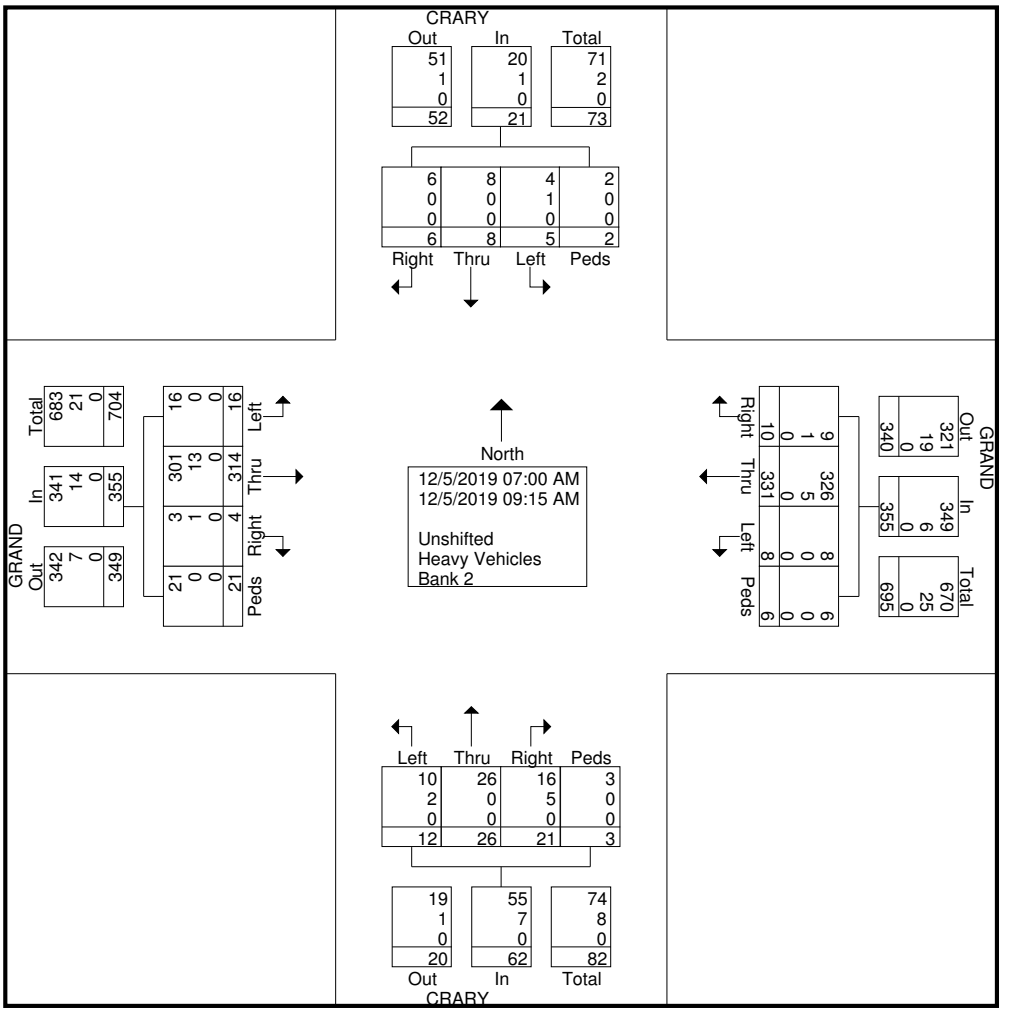
	CRARY Southbound					GRAND Westbound					CRARY Northbound					GRAND Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	16	0	1	17	0	3	1	1	5	1	23	1	5	30	52
07:15 AM	0	0	1	1	2	0	29	0	0	29	0	5	3	0	8	2	24	0	5	31	70
07:30 AM	1	1	0	1	3	3	37	2	1	43	3	0	3	0	6	0	30	0	6	36	88
07:45 AM	2	1	0	0	3	1	53	1	2	57	0	5	2	0	7	3	27	1	1	32	99
Total	3	2	1	2	8	4	135	3	4	146	3	13	9	1	26	6	104	2	17	129	309
08:00 AM	0	0	0	0	0	2	35	2	1	40	2	1	4	1	8	4	33	0	1	38	86
08:15 AM	1	0	1	0	2	0	38	2	1	41	5	2	1	0	8	0	37	2	1	40	91
08:30 AM	0	0	1	0	1	0	32	1	0	33	1	5	0	0	6	3	42	0	0	45	85
08:45 AM	0	1	1	0	2	2	32	0	0	34	1	1	4	0	6	1	43	0	0	44	86
Total	1	1	3	0	5	4	137	5	2	148	9	9	9	1	28	8	155	2	2	167	348
09:00 AM	0	2	1	0	3	0	35	0	0	35	0	1	3	1	5	1	30	0	1	32	75
09:15 AM	1	3	1	0	5	0	24	2	0	26	0	3	0	0	3	1	25	0	1	27	61
Grand Total	5	8	6	2	21	8	331	10	6	355	12	26	21	3	62	16	314	4	21	355	793
Apprch %	23.8	38.1	28.6	9.5		2.3	93.2	2.8	1.7		19.4	41.9	33.9	4.8		4.5	88.5	1.1	5.9		
Total %	0.6	1	0.8	0.3	2.6	1	41.7	1.3	0.8	44.8	1.5	3.3	2.6	0.4	7.8	2	39.6	0.5	2.6	44.8	
Unshifted	4	8	6	2	20	8	326	9	6	349	10	26	16	3	55	16	301	3	21	341	765
% Unshifted	80	100	100	100	95.2	100	98.5	90	100	98.3	83.3	100	76.2	100	88.7	100	95.9	75	100	96.1	96.5
Heavy Vehicles	1	0	0	0	1	0	5	1	0	6	2	0	5	0	7	0	13	1	0	14	28
% Heavy Vehicles	20	0	0	0	4.8	0	1.5	10	0	1.7	16.7	0	23.8	0	11.3	0	4.1	25	0	3.9	3.5
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

Ashley Seyfried
Grand Blvd. and Crary Ave.
City of Binghamton

File Name : Grand Blvd. and Crary Ave. AM
Site Code : 00000000
Start Date : 12/5/2019
Page No : 2



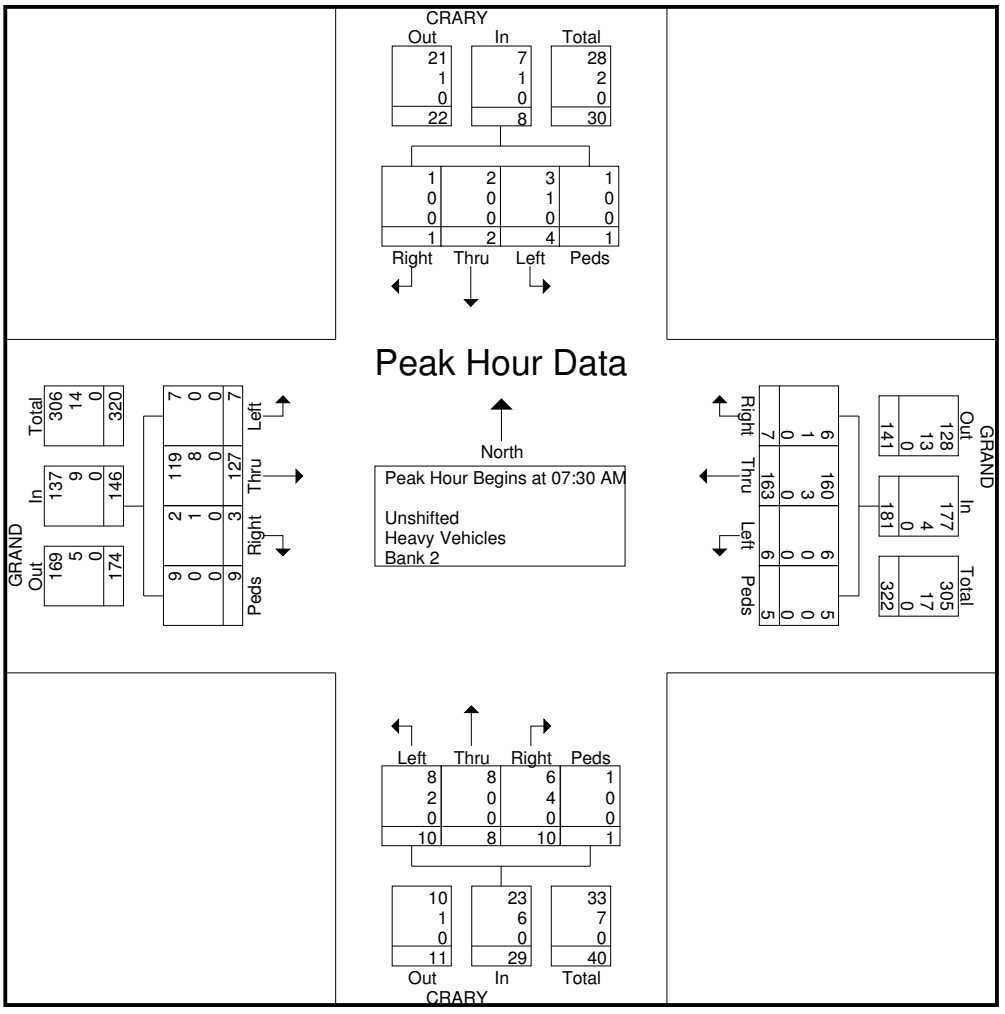
Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

Ashley Seyfried
Grand Blvd. and Crary Ave.
City of Binghamton

File Name : Grand Blvd. and Crary Ave. AM
Site Code : 00000000
Start Date : 12/5/2019
Page No : 3

	CRARY Southbound					GRAND Westbound					CRARY Northbound					GRAND Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	**1**	0	**1**	**3**	**3**	37	**2**	1	43	3	0	3	0	6	0	30	0	**6**	36	88
07:45 AM	**2**	1	0	0	3	1	**53**	1	**2**	**57**	0	**5**	2	0	7	3	27	1	1	32	**99**
08:00 AM	0	0	0	0	0	2	35	2	1	40	2	1	**4**	**1**	**8**	**4**	33	0	1	38	86
08:15 AM	1	0	**1**	0	2	0	38	2	1	41	**5**	2	1	0	8	0	**37**	**2**	1	**40**	91
Total Volume	4	2	1	1	8	6	163	7	5	181	10	8	10	1	29	7	127	3	9	146	364
% App. Total	50	25	12.5	12.5		3.3	90.1	3.9	2.8		34.5	27.6	34.5	3.4		4.8	87	2.1	6.2		
PHF	.500	.500	.250	.250	.667	.500	.769	.875	.625	.794	.500	.400	.625	.250	.906	.438	.858	.375	.375	.913	.919
Unshifted	3	2	1	1	7	6	160	6	5	177	8	8	6	1	23	7	119	2	9	137	344
% Unshifted																					
Heavy Vehicles	1	0	0	0	1	0	3	1	0	4	2	0	4	0	6	0	8	1	0	9	20
% Heavy Vehicles	25.0	0	0	0	12.5	0	1.8	14.3	0	2.2	20.0	0	40.0	0	20.7	0	6.3	33.3	0	6.2	5.5
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

Ashley Seyfried
Grand Boulevard and Crary Avenue
City of Binghamton

File Name : Grand Blvd. and Crary Ave. PM
Site Code : 00000000
Start Date : 12/5/2019
Page No : 1

Groups Printed- Unshifted - Heavy Vehicles -

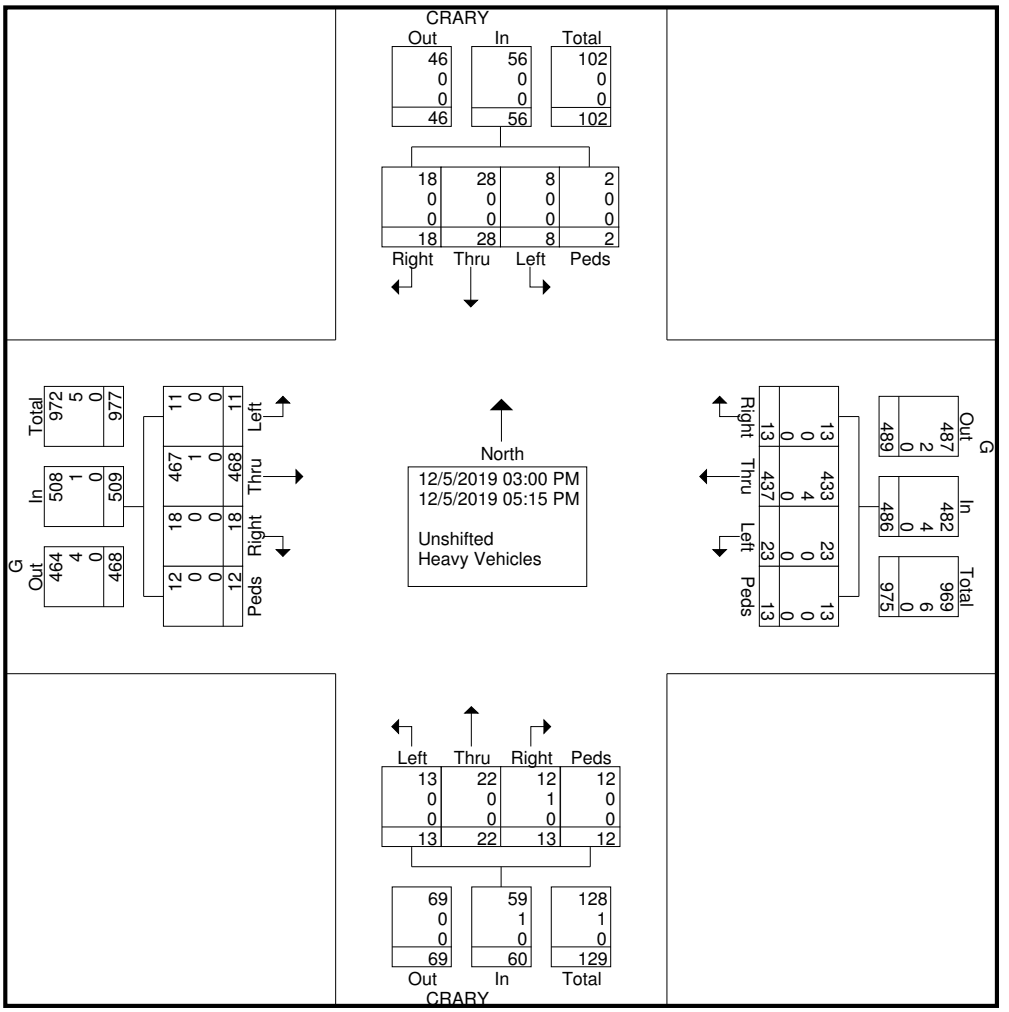
	CRARY Southbound					G Westbound					CRARY Northbound					G Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	0	2	1	0	3	4	35	2	0	41	1	2	2	1	6	3	40	1	0	44	94
03:15 PM	0	1	3	0	4	1	45	1	1	48	0	1	1	0	2	1	43	1	1	46	100
03:30 PM	2	0	1	0	3	3	56	2	0	61	3	1	1	1	6	0	33	3	1	37	107
03:45 PM	1	2	0	0	3	3	44	3	0	50	2	2	2	5	11	1	46	5	3	55	119
Total	3	5	5	0	13	11	180	8	1	200	6	6	6	7	25	5	162	10	5	182	420
04:00 PM	0	2	1	2	5	2	42	1	3	48	1	3	2	2	8	2	36	1	0	39	100
04:15 PM	1	5	4	0	10	2	50	0	3	55	1	0	2	0	3	1	46	2	2	51	119
04:30 PM	1	1	5	0	7	3	51	0	3	57	2	0	2	0	4	0	63	0	1	64	132
04:45 PM	2	4	1	0	7	2	38	3	0	43	2	3	1	1	7	1	56	1	0	58	115
Total	4	12	11	2	29	9	181	4	9	203	6	6	7	3	22	4	201	4	3	212	466
05:00 PM	1	6	1	0	8	1	42	0	1	44	0	0	0	0	0	1	56	2	2	61	113
05:15 PM	0	5	1	0	6	2	34	1	2	39	1	10	0	2	13	1	49	2	2	54	112
Grand Total	8	28	18	2	56	23	437	13	13	486	13	22	13	12	60	11	468	18	12	509	1111
Apprch %	14.3	50	32.1	3.6		4.7	89.9	2.7	2.7		21.7	36.7	21.7	20		2.2	91.9	3.5	2.4		
Total %	0.7	2.5	1.6	0.2	5	2.1	39.3	1.2	1.2	43.7	1.2	2	1.2	1.1	5.4	1	42.1	1.6	1.1	45.8	
Unshifted	8	28	18	2	56	23	433	13	13	482	13	22	12	12	59	11	467	18	12	508	1105
% Unshifted	100	100	100	100	100	100	99.1	100	100	99.2	100	100	92.3	100	98.3	100	99.8	100	100	99.8	99.5
Heavy Vehicles	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	1	0	0	1	6
% Heavy Vehicles	0	0	0	0	0	0	0.9	0	0	0.8	0	0	7.7	0	1.7	0	0.2	0	0	0.2	0.5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

Ashley Seyfried
Grand Boulevard and Crary Avenue
City of Binghamton

File Name : Grand Blvd. and Crary Ave. PM
Site Code : 00000000
Start Date : 12/5/2019
Page No : 2



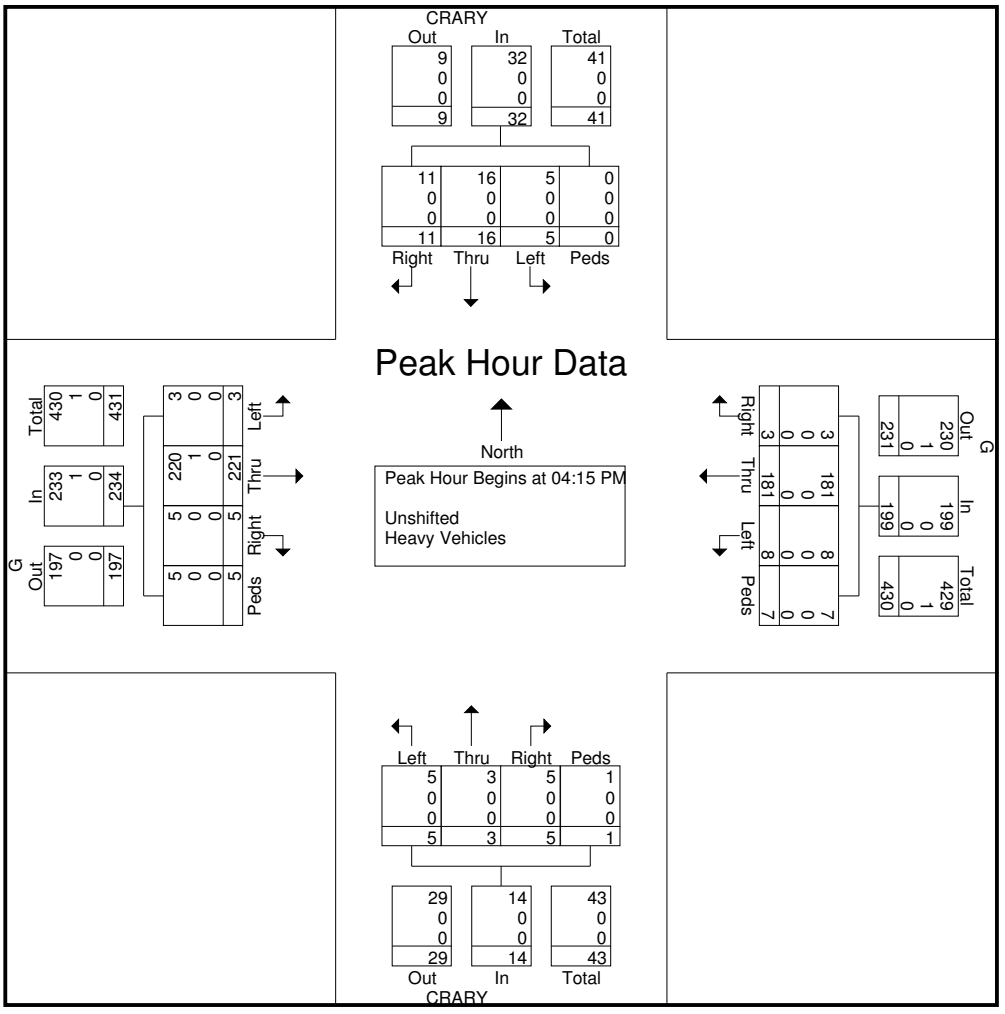
Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

Ashley Seyfried
Grand Boulevard and Crary Avenue
City of Binghamton

File Name : Grand Blvd. and Crary Ave. PM
Site Code : 00000000
Start Date : 12/5/2019
Page No : 3

	CRARY Southbound					G Westbound					CRARY Northbound					G Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	1	5	4	0	**10**	2	50	0	**3**	55	1	0	**2**	0	3	**1**	46	**2**	**2**	51	119
04:30 PM	1	1	**5**	0	7	**3**	**51**	0	3	**57**	**2**	0	2	0	4	0	**63**	0	1	**64**	**132**
04:45 PM	**2**	4	1	0	7	2	38	**3**	0	43	2	**3**	1	**1**	**7**	1	56	1	0	58	115
05:00 PM	1	**6**	1	0	8	1	42	0	1	44	0	0	0	0	0	1	56	2	2	61	113
Total Volume	5	16	11	0	32	8	181	3	7	199	5	3	5	1	14	3	221	5	5	234	479
% App. Total	15.6	50	34.4	0		4	91	1.5	3.5		35.7	21.4	35.7	7.1		1.3	94.4	2.1	2.1		
PHF	.625	.667	.550	.000	.800	.667	.887	.250	.583	.873	.625	.250	.625	.250	.500	.750	.877	.625	.625	.914	.907
Unshifted	5	16	11	0	32	8	181	3	7	199	5	3	5	1	14	3	220	5	5	233	478
% Unshifted																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0.4	0.2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

J.Reigle
Grand Blvd. and Mathews St AM
City of Binghamton
Then Click the Comments Tab

File Name : Grand Blvd and Mathews St AM
Site Code : 20192AM
Start Date : 7/30/2019
Page No : 1

Groups Printed- Unshifted - Heavy Vehicles - Bank 2

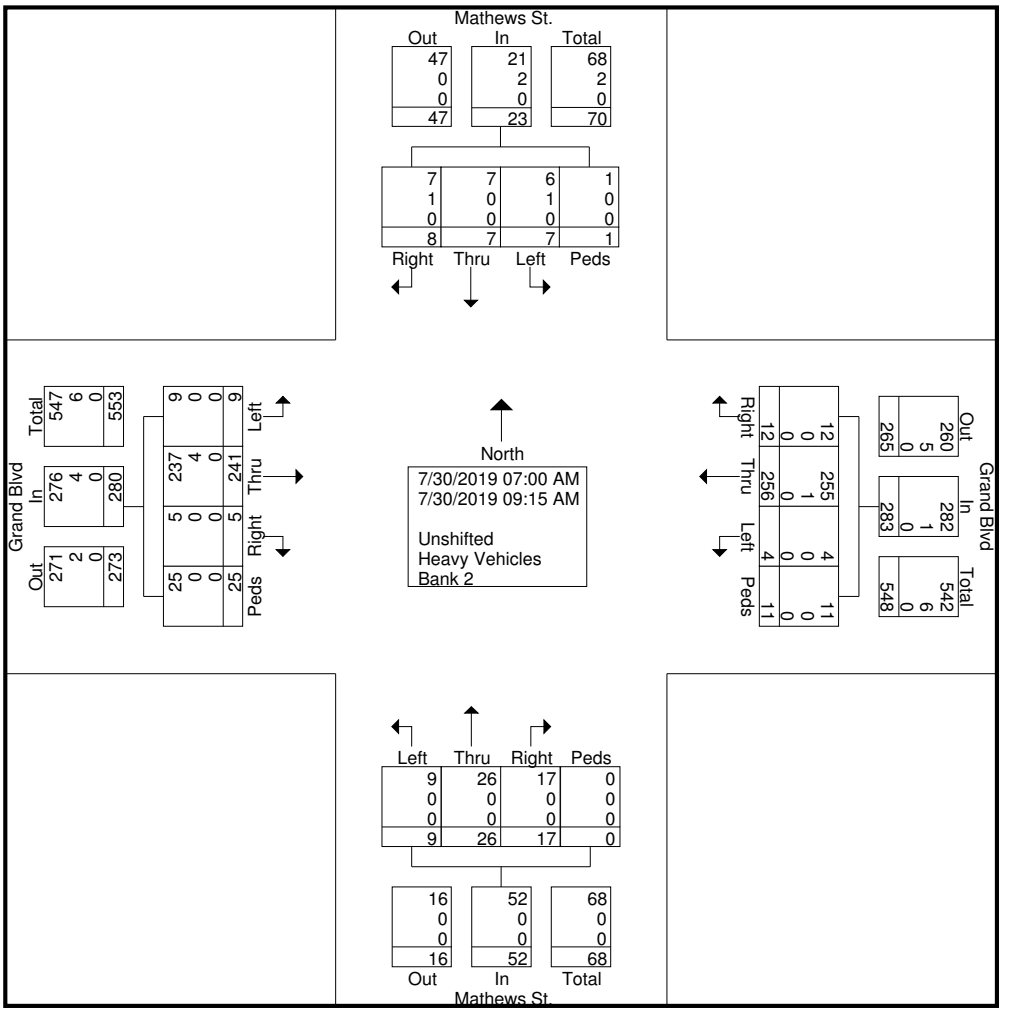
	Mathews St. Southbound					Grand Blvd Westbound					Mathews St. Northbound					Grand Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	2	1	0	4	0	9	0	2	11	0	3	2	0	5	0	10	1	4	15	35
07:15 AM	2	1	0	0	3	0	15	1	2	18	0	4	0	0	4	1	13	0	3	17	42
07:30 AM	0	0	0	0	0	1	27	1	0	29	1	6	2	0	9	1	31	0	2	34	72
07:45 AM	0	0	3	0	3	0	28	2	0	30	2	2	1	0	5	2	31	0	3	36	74
Total	3	3	4	0	10	1	79	4	4	88	3	15	5	0	23	4	85	1	12	102	223
08:00 AM	1	1	2	1	5	1	23	1	0	25	0	1	0	0	1	1	19	0	2	22	53
08:15 AM	2	0	0	0	2	0	31	2	2	35	0	1	2	0	3	0	31	0	0	31	71
08:30 AM	0	2	2	0	4	2	32	0	3	37	1	1	3	0	5	1	24	0	3	28	74
08:45 AM	1	0	0	0	1	0	31	0	0	31	0	1	2	0	3	0	29	1	4	34	69
Total	4	3	4	1	12	3	117	3	5	128	1	4	7	0	12	2	103	1	9	115	267
09:00 AM	0	1	0	0	1	0	31	1	1	33	2	1	3	0	6	1	29	0	1	31	71
09:15 AM	0	0	0	0	0	0	29	4	1	34	3	6	2	0	11	2	24	3	3	32	77
Grand Total	7	7	8	1	23	4	256	12	11	283	9	26	17	0	52	9	241	5	25	280	638
Apprch %	30.4	30.4	34.8	4.3		1.4	90.5	4.2	3.9		17.3	50	32.7	0		3.2	86.1	1.8	8.9		
Total %	1.1	1.1	1.3	0.2	3.6	0.6	40.1	1.9	1.7	44.4	1.4	4.1	2.7	0	8.2	1.4	37.8	0.8	3.9	43.9	
Unshifted	6	7	7	1	21	4	255	12	11	282	9	26	17	0	52	9	237	5	25	276	631
% Unshifted	85.7	100	87.5	100	91.3	100	99.6	100	100	99.6	100	100	100	0	100	100	98.3	100	100	98.6	98.9
Heavy Vehicles	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	7
% Heavy Vehicles	14.3	0	12.5	0	8.7	0	0.4	0	0	0.4	0	0	0	0	0	0	1.7	0	0	1.4	1.1
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

J.Reigle
Grand Blvd. and Mathews St AM
City of Binghamton
Then Click the Comments Tab

File Name : Grand Blvd and Mathews St AM
Site Code : 20192AM
Start Date : 7/30/2019
Page No : 2



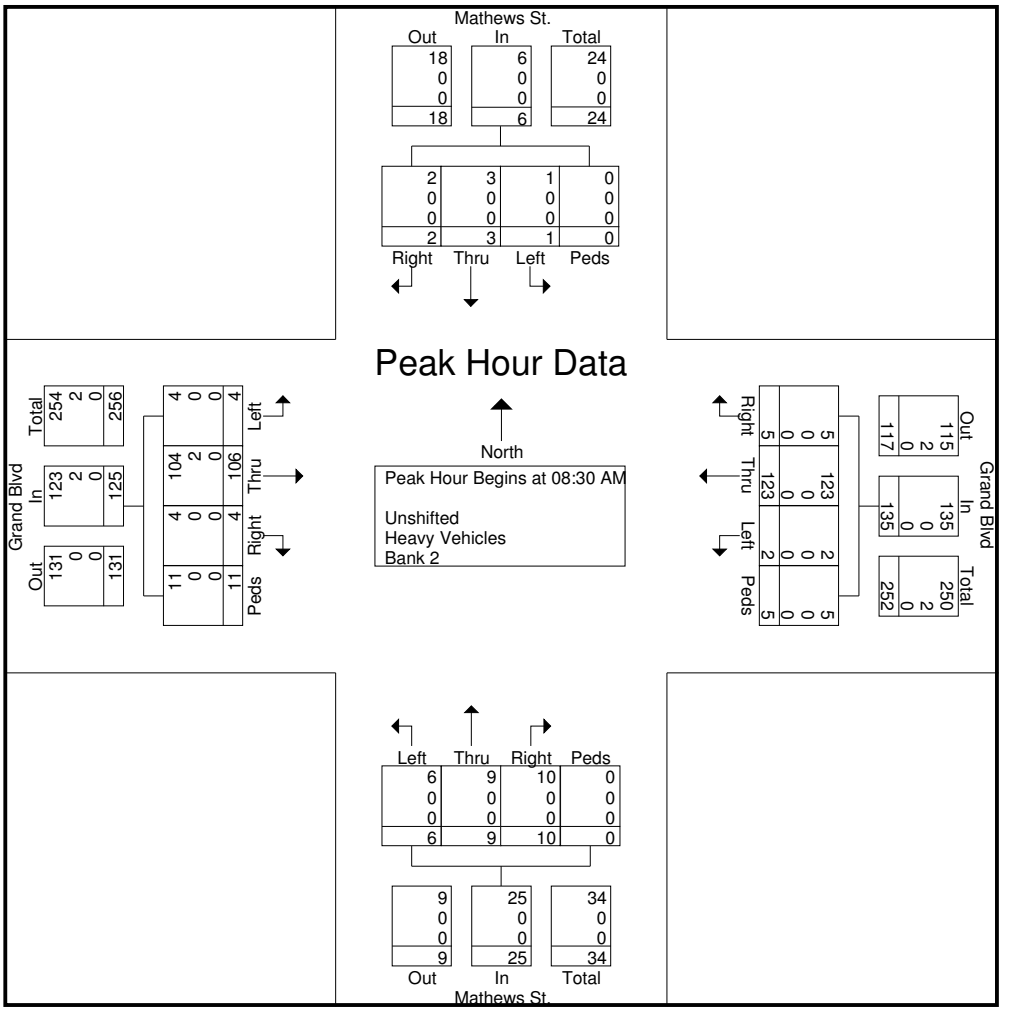
Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

J.Reigle
Grand Blvd. and Mathews St AM
City of Binghamton
Then Click the Comments Tab

File Name : Grand Blvd and Mathews St AM
Site Code : 20192AM
Start Date : 7/30/2019
Page No : 3

	Mathews St. Southbound					Grand Blvd Westbound					Mathews St. Northbound					Grand Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:30 AM																					
08:30 AM	0	**2**	**2**	0	**4**	**2**	**32**	0	**3**	**37**	1	1	**3**	0	5	1	24	0	3	28	74
08:45 AM	**1**	0	0	0	1	0	31	0	0	31	0	1	2	0	3	0	**29**	1	**4**	**34**	69
09:00 AM	0	1	0	0	1	0	31	1	1	33	2	1	3	0	6	1	29	0	1	31	71
09:15 AM	0	0	0	0	0	0	29	**4**	1	34	**3**	**6**	2	0	**11**	**2**	24	**3**	3	32	**77**
Total Volume	1	3	2	0	6	2	123	5	5	135	6	9	10	0	25	4	106	4	11	125	291
% App. Total	16.7	50	33.3	0		1.5	91.1	3.7	3.7		24	36	40	0		3.2	84.8	3.2	8.8		
PHF	.250	.375	.250	.000	.375	.250	.961	.313	.417	.912	.500	.375	.833	.000	.568	.500	.914	.333	.688	.919	.945
Unshifted	1	3	2	0	6	2	123	5	5	135	6	9	10	0	25	4	104	4	11	123	289
% Unshifted																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0	0	1.6	0.7
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

J.Reigle
Grand Blvd. and Mathews St.
City of Binghamton

File Name : Grand Blvd. and Mathews St. PMNew
Site Code : 20192
Start Date : 7/30/2019
Page No : 1

Groups Printed- Unshifted - Heavy Vehicles - Bank 2

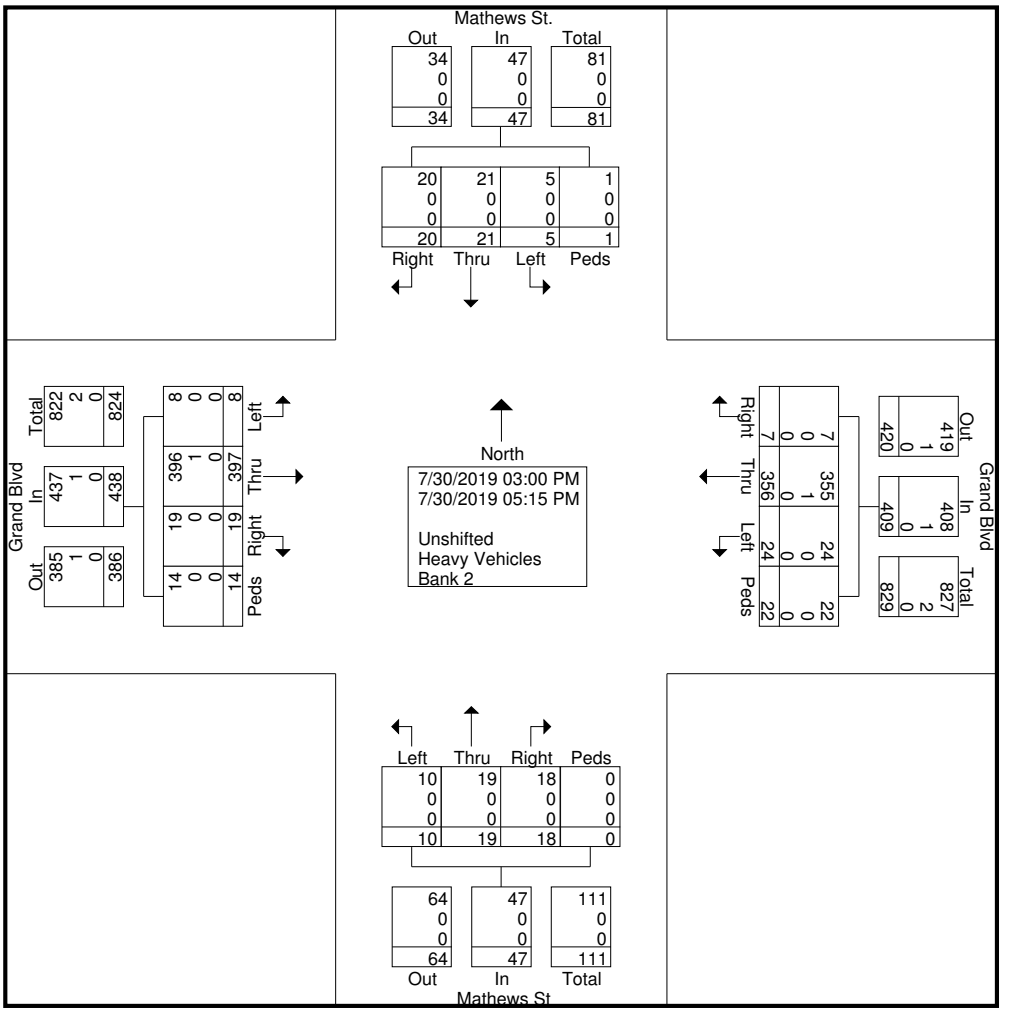
	Mathews St. Southbound					Grand Blvd Westbound					Mathews St Northbound					Grand Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	0	0	2	0	2	0	40	1	0	41	0	1	0	0	1	2	35	2	1	40	84
03:15 PM	1	4	1	0	6	4	30	0	1	35	1	1	2	0	4	0	52	0	0	52	97
03:30 PM	1	3	0	0	4	1	30	1	4	36	1	2	1	0	4	1	36	4	1	42	86
03:45 PM	0	1	2	0	3	2	33	0	0	35	1	1	4	0	6	1	35	1	5	42	86
Total	2	8	5	0	15	7	133	2	5	147	3	5	7	0	15	4	158	7	7	176	353
04:00 PM	1	1	5	1	8	3	32	0	1	36	1	2	3	0	6	1	41	2	2	46	96
04:15 PM	0	2	2	0	4	3	35	2	5	45	0	0	1	0	1	0	45	0	1	46	96
04:30 PM	1	0	3	0	4	4	47	0	6	57	0	5	1	0	6	0	39	1	2	42	109
04:45 PM	0	4	1	0	5	1	34	2	2	39	3	1	3	0	7	0	30	3	1	34	85
Total	2	7	11	1	21	11	148	4	14	177	4	8	8	0	20	1	155	6	6	168	386
05:00 PM	0	5	2	0	7	6	31	0	1	38	2	2	1	0	5	0	36	2	0	38	88
05:15 PM	1	1	2	0	4	0	44	1	2	47	1	4	2	0	7	3	48	4	1	56	114
Grand Total	5	21	20	1	47	24	356	7	22	409	10	19	18	0	47	8	397	19	14	438	941
Apprch %	10.6	44.7	42.6	2.1		5.9	87	1.7	5.4		21.3	40.4	38.3	0		1.8	90.6	4.3	3.2		
Total %	0.5	2.2	2.1	0.1	5	2.6	37.8	0.7	2.3	43.5	1.1	2	1.9	0	5	0.9	42.2	2	1.5	46.5	
Unshifted	5	21	20	1	47	24	355	7	22	408	10	19	18	0	47	8	396	19	14	437	939
% Unshifted	100	100	100	100	100	100	99.7	100	100	99.8	100	100	100	0	100	100	99.7	100	100	99.8	99.8
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Heavy Vehicles	0	0	0	0	0	0	0.3	0	0	0.2	0	0	0	0	0	0	0.3	0	0	0.2	0.2
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

J.Reigle
Grand Blvd. and Mathews St.
City of Binghamton

File Name : Grand Blvd. and Mathews St. PMNew
Site Code : 20192
Start Date : 7/30/2019
Page No : 2



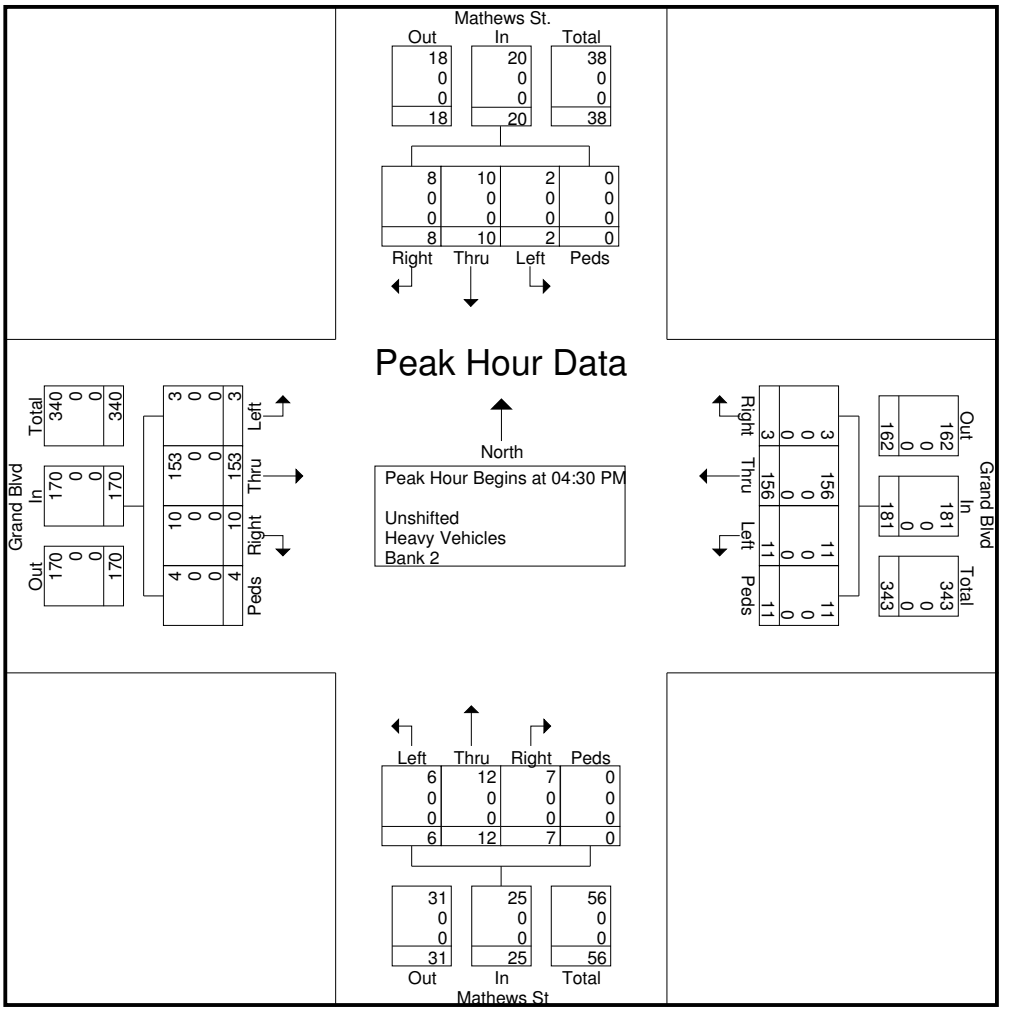
Binghamton Metropolitan Transportation Study

PO Box 1766
Binghamton, NY 13902

J.Reigle
Grand Blvd. and Mathews St.
City of Binghamton

File Name : Grand Blvd. and Mathews St. PMNew
Site Code : 20192
Start Date : 7/30/2019
Page No : 3

	Mathews St. Southbound					Grand Blvd Westbound					Mathews St Northbound					Grand Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**1**	0	**3**	0	4	4	**47**	0	**6**	**57**	0	**5**	1	0	6	0	39	1	**2**	42	109
04:45 PM	0	4	1	0	5	1	34	**2**	2	39	**3**	1	**3**	0	**7**	0	30	3	1	34	85
05:00 PM	0	**5**	2	0	**7**	**6**	31	0	1	38	2	2	1	0	5	0	36	2	0	38	88
05:15 PM	1	1	2	0	4	0	44	1	2	47	1	4	2	0	7	**3**	**48**	**4**	1	**56**	**114**
Total Volume	2	10	8	0	20	11	156	3	11	181	6	12	7	0	25	3	153	10	4	170	396
% App. Total	10	50	40	0		6.1	86.2	1.7	6.1		24	48	28	0		1.8	90	5.9	2.4		
PHF	.500	.500	.667	.000	.714	.458	.830	.375	.458	.794	.500	.600	.583	.000	.893	.250	.797	.625	.500	.759	.868
Unshifted	2	10	8	0	20	11	156	3	11	181	6	12	7	0	25	3	153	10	4	170	396
% Unshifted																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Study Name	28-GRAND BLVD AT CRESTMONT RD
Start Date	Tuesday, September 17, 2019 7:00 AM
End Date	Tuesday, September 17, 2019 5:30 PM
Site Code	

Report Summary

		Southbound						Westbound						Northbound						Eastbound								Crosswalk		
Time Period	**Class.**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**Total**		**s on Crc**	**destria**	**Total**
Peak 1	Lights	4	8	2	0	14	35	10	164	8	0	182	160	14	22	16	0	52	32	5	140	14	0	159	180	407	SB	0	4	4
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	98%	100%	0%	98%	96%	100%	100%	100%	0%	100%	97%	100%	96%	93%	0%	96%	98%	98%		0%	100%	
7:00 AM - 9:30 AM	Buses	0	0	0	0	0	0	0	3	0	0	3	6	0	0	0	0	0	1	0	6	1	0	7	3	10	WB	0	1	1
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	4%	0%	0%	0%	0%	0%	3%	0%	4%	7%	0%	4%	2%	2%		0%	100%	
7:30 AM - 8:30 AM	Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NB	1	14	15
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		7%	93%	
	Total	**4**	**8**	**2**	**0**	**14**	**35**	**10**	**167**	**8**	**0**	**185**	**166**	**14**	**22**	**16**	**0**	**52**	**33**	**5**	**146**	**15**	**0**	**166**	**183**	**417**	EB	0	2	2
	PHF	0.5	0.67	0.5	0	0.7	0.73	0.42	0.72	0.67	0	0.71	0.86	0.44	0.69	0.57	0	0.68	0.75	0.62	0.94	0.47	0	0.88	0.74	0.87		0%	100%	
	Approach %					3%	8%					44%	40%					12%	8%					40%	44%			**1**	**21**	**22**
Peak 2	Lights	18	17	10	0	45	30	8	152	6	0	166	215	11	13	6	0	30	36	11	191	11	0	213	173	454	SB	0	7	7
Specified Period	%	100%	94%	100%	0%	98%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	97%	100%	100%	100%	0%	100%	100%	100%		0%	100%	
3:00 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	WB	0	1	1
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	100%	
4:30 PM - 5:30 PM	Trucks	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	NB	0	7	7
	%	0%	6%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%		0%	100%	
	Total	**18**	**18**	**10**	**0**	**46**	**30**	**8**	**152**	**6**	**0**	**166**	**215**	**11**	**13**	**6**	**0**	**30**	**37**	**11**	**191**	**11**	**0**	**213**	**173**	**455**	EB	0	5	5
	PHF	0.64	0.64	0.62	0	0.77	0.83	0.5	0.9	0.75	0	0.92	0.81	0.69	0.65	0.5	0	0.83	0.92	0.69	0.82	0.55	0	0.86	0.96	0.9		0%	100%	
	Approach %					10%	7%					36%	47%					7%	8%					47%	38%			**0**	**20**	**20**

Study Name	30-GRAND BLVD AT MINERVA ST
Start Date	Tuesday, September 17, 2019 7:00 AM
End Date	Tuesday, September 17, 2019 5:30 PM
Site Code	

Report Summary

		Southbound						Westbound						Northbound						Eastbound							Crosswalk		
Time Period	**Class.**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**Total**		**s on Crc**	**destria**	**Total**
Peak 1	Lights	3	0	2	0	5	12	4	167	6	0	177	166	14	0	16	0	30	16	6	147	12	0	165	183	377	SB	0	8	8
Specified Period	%	100%	0%	100%	0%	100%	100%	100%	98%	100%	0%	98%	97%	100%	0%	100%	0%	100%	100%	100%	96%	100%	0%	96%	98%	98%		0%	100%	
7:00 AM - 9:30 AM	Buses	0	0	0	0	0	0	0	3	0	0	3	6	0	0	0	0	0	0	0	6	0	0	6	3	9	WB	0	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	4%	2%	2%		0%	0%	
7:30 AM - 8:30 AM	Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NB	1	13	14
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		7%	93%	
	Total	**3**	**0**	**2**	**0**	**5**	**12**	**4**	**170**	**6**	**0**	**180**	**172**	**14**	**0**	**16**	**0**	**30**	**16**	**6**	**153**	**12**	**0**	**171**	**186**	**386**	EB	0	3	3
	PHF	0.38	0	0.5	0	0.42	0.75	0.33	0.75	0.75	0	0.76	0.88	0.58	0	0.44	0	0.54	0.33	0.75	0.89	0.33	0	0.87	0.73	0.82		0%	100%	
	Approach %					1%	3%					47%	45%					8%	4%					44%	48%			**1**	**24**	**25**
Peak 2	Lights	4	0	8	0	12	7	2	155	4	0	161	213	3	0	6	0	9	8	3	203	6	0	212	166	394	SB	0	11	11
Specified Period	%	100%	0%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%		0%	100%	
3:00 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	WB	0	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%	
4:30 PM - 5:30 PM	Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NB	0	6	6
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	100%	
	Total	**4**	**0**	**8**	**0**	**12**	**7**	**2**	**155**	**4**	**0**	**161**	**213**	**3**	**0**	**6**	**0**	**9**	**8**	**3**	**203**	**6**	**0**	**212**	**166**	**394**	EB	0	1	1
	PHF	0.5	0	0.5	0	0.6	0.58	0.5	0.9	0.5	0	0.89	0.89	0.38	0	0.75	0	0.56	0.67	0.38	0.86	0.5	0	0.85	0.92	0.92		0%	100%	
	Approach %					3%	2%					41%	54%					2%	2%					54%	42%			**0**	**18**	**18**

Study Name	27-GRAND BLVD AT HELEN ST
Start Date	Tuesday, September 17, 2019 7:00 AM
End Date	Tuesday, September 17, 2019 5:30 PM
Site Code	

Report Summary

		Southbound						Westbound						Northbound						Eastbound								Crosswalk		
Time Period	**Class.**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**Total**		**s on Crc**	**destria**	**Total**
Peak 1	Lights	11	53	23	0	87	111	8	126	19	0	153	141	21	60	18	0	99	81	32	112	20	0	164	170	503	SB	0	3	3
Specified Period	%	92%	98%	96%	0%	97%	95%	100%	98%	95%	0%	98%	97%	100%	95%	100%	0%	97%	98%	94%	97%	95%	0%	96%	98%	97%		0%	100%	
7:00 AM - 9:30 AM	Buses	1	1	1	0	3	6	0	2	1	0	3	4	0	3	0	0	3	2	2	3	1	0	6	3	15	WB	0	10	10
One Hour Peak	%	8%	2%	4%	0%	3%	5%	0%	2%	5%	0%	2%	3%	0%	5%	0%	0%	3%	2%	6%	3%	5%	0%	4%	2%	3%		0%	100%	
7:30 AM - 8:30 AM	Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NB	0	12	12
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	100%	
	Total	**12**	**54**	**24**	**0**	**90**	**117**	**8**	**128**	**20**	**0**	**156**	**145**	**21**	**63**	**18**	**0**	**102**	**83**	**34**	**115**	**21**	**0**	**170**	**173**	**518**	EB	0	19	19
	PHF	0.75	0.71	0.75	0	0.78	0.79	0.4	0.78	0.62	0	0.72	0.81	0.66	0.75	0.64	0	0.8	0.65	0.77	0.76	0.52	0	0.83	0.79	0.81		0%	100%	
	Approach %					17%	23%					30%	28%					20%	16%					33%	33%			**0**	**44**	**44**
Peak 2	Lights	28	67	49	0	144	123	7	102	25	0	134	145	14	56	5	0	75	95	42	112	21	2	177	167	530	SB	0	12	12
Specified Period	%	97%	97%	100%	0%	98%	98%	88%	98%	100%	0%	98%	97%	93%	97%	100%	0%	96%	96%	100%	97%	95%	100%	97%	98%	97%		0%	100%	
3:00 PM - 5:30 PM	Buses	1	2	0	0	3	2	1	1	0	0	2	2	0	2	0	0	2	3	0	1	0	0	1	1	8	WB	1	16	17
One Hour Peak	%	3%	3%	0%	0%	2%	2%	13%	1%	0%	0%	1%	1%	0%	3%	0%	0%	3%	3%	0%	1%	0%	0%	1%	1%	1%		6%	94%	
3:15 PM - 4:15 PM	Trucks	0	0	0	0	0	0	0	1	0	0	1	3	1	0	0	0	1	1	0	3	1	0	4	2	6	NB	0	13	13
	%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	2%	7%	0%	0%	0%	1%	1%	0%	3%	5%	0%	2%	1%	1%		0%	100%	
	Total	**29**	**69**	**49**	**0**	**147**	**125**	**8**	**104**	**25**	**0**	**137**	**150**	**15**	**58**	**5**	**0**	**78**	**99**	**42**	**116**	**22**	**2**	**182**	**170**	**544**	EB	0	10	10
	PHF	0.66	0.62	0.72	0	0.78	0.8	0.4	0.84	0.78	0	0.9	0.87	0.62	0.72	0.62	0	0.72	0.73	0.75	0.83	0.92	0.25	0.89	0.87	0.93		0%	100%	
	Approach %					27%	23%					25%	28%					14%	18%					33%	31%			**1**	**51**	**52**

Study Name	26-GRAND BLVD AT SCHILLER ST
Start Date	Tuesday, September 17, 2019 7:00 AM
End Date	Tuesday, September 17, 2019 5:30 PM
Site Code	

Report Summary

		Southbound						Westbound						Northbound						Eastbound							Crosswalk		
Time Period	**Class.**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**L**	**T**	**R**	**U**	**I**	**O**	**Total**		**s on Crc**	**destria**	**Total**
Peak 1	Lights	0	27	52	0	79	136	0	0	1	0	1	0	66	44	0	0	110	73	91	0	46	0	137	118	327	SB	0	3	3
Specified Period	%	0%	100%	95%	0%	96%	99%	0%	0%	100%	0%	100%	0%	100%	100%	0%	0%	100%	97%	98%	0%	96%	0%	97%	98%	98%		0%	100%	
7:00 AM - 9:30 AM	Buses	0	0	3	0	3	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2	0	4	3	7	WB	1	16	17
One Hour Peak	%	0%	0%	5%	0%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	2%	0%	4%	0%	3%	2%	2%		6%	94%	
7:30 AM - 8:30 AM	Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NB	0	5	5
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	100%	
	Total	**0**	**27**	**55**	**0**	**82**	**138**	**0**	**0**	**1**	**0**	**1**	**0**	**66**	**44**	**0**	**0**	**110**	**75**	**93**	**0**	**48**	**0**	**141**	**121**	**334**	EB	0	5	5
	PHF	0	0.68	0.72	0	0.93	0.75	0	0	0.25	0	0.25	0	0.79	0.69	0	0	0.83	0.89	0.68	0	0.86	0	0.73	0.76	0.83		0%	100%	
	Approach %					25%	41%					0%	0%					33%	22%					42%	36%			**1**	**29**	**30**
Peak 2	Lights	0	36	61	0	97	107	0	0	0	0	0	0	54	38	0	0	92	109	69	0	73	0	142	115	331	SB	0	0	0
Specified Period	%	0%	97%	98%	0%	98%	97%	0%	0%	0%	0%	0%	0%	96%	97%	0%	0%	97%	95%	97%	0%	94%	0%	95%	97%	97%		0%	0%	
3:00 PM - 5:30 PM	Buses	0	1	1	0	2	1	0	0	0	0	0	0	1	1	0	0	2	5	0	0	4	0	4	2	8	WB	0	18	18
One Hour Peak	%	0%	3%	2%	0%	2%	1%	0%	0%	0%	0%	0%	0%	2%	3%	0%	0%	2%	4%	0%	0%	5%	0%	3%	2%	2%		0%	100%	
3:00 PM - 4:00 PM	Trucks	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	1	2	0	1	0	3	1	4	NB	0	16	16
	%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	1%	3%	0%	1%	0%	2%	1%	1%		0%	100%	
	Total	**0**	**37**	**62**	**0**	**99**	**110**	**0**	**0**	**0**	**0**	**0**	**0**	**56**	**39**	**0**	**0**	**95**	**115**	**71**	**0**	**78**	**0**	**149**	**118**	**343**	EB	0	6	6
	PHF	0	0.58	0.78	0	0.73	0.89	0	0	0	0	0	0	0.82	0.57	0	0	0.79	0.8	0.89	0	0.78	0	0.87	0.89	0.89		0%	100%	
	Approach %					29%	32%					0%	0%					28%	34%					43%	34%			**0**	**40**	**40**

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/17/19	0	1	0	1	9	11	3	0	0	0	0	0	0	0	25	31-40	20
01:00	0	0	1	0	3	5	0	0	0	0	0	0	0	0	9	31-40	8
02:00	0	0	0	0	6	2	1	1	**1**	0	0	0	0	0	11	31-40	8
03:00	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
04:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4	30-39	3
05:00	0	0	1	0	5	10	1	0	0	0	0	0	0	0	17	31-40	15
06:00	0	0	1	2	8	17	2	2	0	0	0	0	0	0	32	31-40	25
07:00	0	**5**	**5**	9	**65**	40	16	**5**	0	0	0	0	0	0	145	31-40	105
08:00	0	4	2	5	47	58	18	1	0	**1**	0	0	0	0	136	31-40	105
09:00	0	2	1	5	29	50	8	2	0	0	0	0	0	0	97	31-40	79
10:00	0	3	2	7	50	35	15	2	1	0	0	0	0	0	115	31-40	85
11:00	0	0	1	**12**	49	**60**	**20**	4	0	0	0	0	0	0	**146**	31-40	109
12 PM	0	4	**3**	11	59	74	16	2	1	0	0	**1**	0	0	171	31-40	133
13:00	**2**	3	1	17	46	64	**21**	**5**	0	0	0	0	0	0	159	31-40	110
14:00	0	2	3	10	78	66	8	5	1	0	0	0	0	0	173	31-40	144
15:00	0	**5**	3	16	74	70	15	4	0	0	0	0	0	0	187	31-40	144
16:00	0	4	3	12	71	74	14	3	**2**	0	0	0	0	0	183	31-40	145
17:00	0	3	1	16	**90**	**95**	16	2	1	0	0	0	0	0	**224**	31-40	185
18:00	0	3	0	10	52	63	13	4	0	**2**	0	0	0	0	147	31-40	115
19:00	0	5	3	**22**	70	55	4	0	1	0	0	0	0	0	160	31-40	125
20:00	1	1	0	17	52	17	5	0	0	0	0	0	0	0	93	26-35	69
21:00	0	0	1	12	38	21	7	1	0	0	0	0	0	0	80	31-40	59
22:00	0	0	0	9	28	15	3	0	0	0	0	0	0	0	55	31-40	43
23:00	0	0	2	4	17	6	3	2	0	1	0	0	0	0	35	30-39	23
Total	4	45	34	197	947	910	210	45	8	4	0	1	0	0	2405		
Percent	0.2%	1.9%	1.4%	8.2%	39.4%	37.8%	8.7%	1.9%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%			
AM Peak	03:00	07:00	07:00	11:00	07:00	11:00	11:00	07:00	02:00	08:00					11:00		
Vol.	1	5	5	12	65	60	20	5	1	1					146		
PM Peak	13:00	15:00	12:00	19:00	17:00	17:00	13:00	13:00	16:00	18:00		12:00			17:00		
Vol.	2	5	3	22	90	95	21	5	2	2		1			224		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/18/19	0	0	0	4	8	6	1	0	**1**	0	0	0	0	0	20	30-39	14
01:00	0	0	0	1	4	1	2	1	0	0	0	0	0	0	9	28-37	5
02:00	0	1	0	1	0	5	2	0	0	0	0	0	0	0	9	36-45	7
03:00	0	2	0	0	1	1	1	0	0	0	0	0	0	0	5	36-45	2
04:00	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	30-39	4
05:00	0	0	3	1	7	8	1	1	0	0	0	0	0	0	21	31-40	15
06:00	0	0	0	2	13	13	3	0	0	0	0	0	0	0	31	31-40	26
07:00	0	**5**	3	10	**63**	55	7	**4**	0	0	0	0	0	0	147	31-40	118
08:00	0	4	**4**	**11**	50	**70**	**21**	2	0	0	0	0	0	0	**162**	31-40	120
09:00	0	3	2	9	43	47	13	3	0	0	0	0	0	0	120	31-40	90
10:00	0	2	1	7	62	44	11	2	0	0	0	0	0	0	129	31-40	106
11:00	0	3	2	6	34	70	19	0	1	0	0	0	0	0	135	31-40	104
12 PM	0	6	3	11	56	58	11	1	0	**1**	0	0	0	0	147	31-40	114
13:00	**1**	5	3	12	58	56	9	**6**	0	0	0	0	0	0	150	31-40	114
14:00	1	1	4	24	82	**78**	14	3	0	0	0	0	0	0	207	31-40	160
15:00	0	7	3	10	78	73	16	2	0	0	0	0	0	0	189	31-40	151
16:00	0	1	**12**	18	96	70	**18**	1	**2**	0	0	0	0	0	**218**	31-40	166
17:00	0	5	3	13	**99**	75	18	4	0	0	0	0	0	0	217	31-40	174
18:00	0	3	3	13	85	64	17	2	1	0	0	0	0	0	188	31-40	149
19:00	0	**8**	3	**27**	54	36	5	1	0	0	0	0	0	0	134	31-40	90
20:00	0	2	1	12	52	33	6	0	0	0	0	0	0	0	106	31-40	85
21:00	0	2	3	12	32	18	6	3	0	1	0	0	**1**	0	78	31-40	50
22:00	0	2	1	10	22	14	2	2	0	0	0	0	0	0	53	31-40	36
23:00	0	0	0	5	16	15	2	0	0	0	0	0	0	0	38	31-40	31
Total	2	62	54	219	1017	912	205	38	5	2	0	0	1	0	2517		
Percent	0.1%	2.5%	2.1%	8.7%	40.4%	36.2%	8.1%	1.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak		07:00	08:00	08:00	07:00	08:00	08:00	07:00	00:00						08:00		
Vol.		5	4	11	63	70	21	4	1						162		
PM Peak	13:00	19:00	16:00	19:00	17:00	14:00	16:00	13:00	16:00	12:00			21:00		16:00		
Vol.	1	8	12	27	99	78	18	6	2	1			1		218		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/19/19	0	0	1	5	7	5	4	0	0	0	0	0	0	0	22	31-40	12
01:00	0	0	0	0	3	1	2	1	0	0	0	0	0	0	7	31-40	4
02:00	0	0	0	0	6	0	1	0	0	0	0	0	0	0	7	31-40	6
03:00	0	1	0	1	1	0	1	0	0	0	0	0	0	0	4	24-33	2
04:00	0	0	0	1	0	3	1	0	0	0	0	0	0	0	5	36-45	4
05:00	0	0	0	1	10	3	0	0	0	0	0	0	0	0	14	31-40	13
06:00	0	0	1	4	14	14	5	2	0	**1**	0	0	0	0	41	31-40	28
07:00	0	**5**	5	8	48	45	**22**	3	**2**	0	0	0	0	0	138	31-40	93
08:00	0	5	3	10	**51**	**73**	9	2	1	0	0	0	0	0	**154**	31-40	124
09:00	0	1	3	5	36	45	19	1	1	0	0	0	0	0	111	31-40	81
10:00	0	5	6	**15**	48	45	12	0	1	0	0	0	0	0	132	31-40	93
11:00	0	4	**7**	11	46	55	12	**5**	0	0	0	0	0	0	140	31-40	101
12 PM	**1**	5	2	7	50	56	21	3	0	0	0	0	0	0	145	31-40	106
13:00	0	4	**6**	9	61	59	14	2	0	0	0	0	0	0	155	31-40	120
14:00	0	5	5	20	89	59	**27**	0	**1**	0	0	0	0	0	206	31-40	148
15:00	0	5	1	**22**	87	79	18	2	0	0	0	0	0	0	214	31-40	166
16:00	0	1	1	18	89	**86**	19	**4**	0	0	0	0	0	0	**218**	31-40	175
17:00	0	**6**	4	12	**95**	65	23	0	0	0	0	0	0	0	205	31-40	160
18:00	0	4	1	17	87	46	11	0	0	0	0	0	0	0	166	31-40	133
19:00	0	2	5	15	64	45	8	2	0	0	0	0	0	0	141	31-40	109
20:00	0	2	3	12	45	37	4	0	0	0	0	0	0	0	103	31-40	82
21:00	0	3	2	16	39	25	3	1	0	0	0	0	0	0	89	31-40	64
22:00	0	0	0	4	32	17	2	0	1	0	0	0	0	0	56	31-40	49
23:00	0	1	1	2	13	17	4	1	0	0	0	0	0	0	39	31-40	30
Total	1	59	57	215	1021	880	242	29	7	1	0	0	0	0	2512		
Percent	0.0%	2.3%	2.3%	8.6%	40.6%	35.0%	9.6%	1.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		07:00	11:00	10:00	08:00	08:00	07:00	11:00	07:00	06:00					08:00		
Vol.		5	7	15	51	73	22	5	2	1					154		
PM Peak	12:00	17:00	13:00	15:00	17:00	16:00	14:00	16:00	14:00						16:00		
Vol.	1	6	6	22	95	86	27	4	1						218		
Total	7	166	145	631	2985	2702	657	112	20	7	0	1	1	0	7434		
Percent	0.1%	2.2%	2.0%	8.5%	40.2%	36.3%	8.8%	1.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 30 MPH
50th Percentile : 34 MPH
85th Percentile : 39 MPH
95th Percentile : 43 MPH

Stats

10 MPH Pace Speed : 31-40 MPH
Number in Pace : 5687
Percent in Pace : 76.5%
Number of Vehicles > 55 MPH : 9
Percent of Vehicles > 55 MPH : 0.1%
Mean Speed(Average) : 35 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/17/19	0	0	0	2	9	4	0	0	0	0	0	0	0	0	15	30-39	13
01:00	0	0	1	1	4	3	0	0	0	0	0	0	0	0	9	30-39	7
02:00	0	0	0	1	3	3	1	0	0	0	0	0	0	0	8	31-40	6
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
04:00	0	0	2	0	4	1	0	1	0	0	0	0	0	0	8	29-38	5
05:00	0	0	1	3	8	6	1	0	0	0	0	0	0	0	19	31-40	14
06:00	0	2	0	9	18	16	2	**2**	0	0	0	0	0	0	49	31-40	34
07:00	**1**	4	4	14	67	38	3	0	0	0	0	0	0	0	131	31-40	105
08:00	0	3	3	**19**	**70**	47	8	2	**1**	0	0	0	0	0	**153**	31-40	117
09:00	0	**7**	3	11	50	**50**	13	0	1	0	0	0	0	0	135	31-40	100
10:00	0	7	**6**	16	41	40	7	1	0	0	0	0	0	0	118	31-40	81
11:00	0	3	4	13	61	48	**16**	2	0	0	0	0	0	0	147	31-40	109
12 PM	0	**8**	1	17	73	60	8	**1**	0	0	0	0	0	0	168	31-40	133
13:00	0	4	4	18	72	54	**13**	0	0	0	0	0	0	0	165	31-40	126
14:00	0	8	**11**	**29**	70	57	12	1	0	0	0	0	0	0	**188**	31-40	127
15:00	0	8	8	19	70	**65**	3	1	0	0	0	0	0	0	174	31-40	135
16:00	0	3	4	15	**94**	55	4	0	0	0	0	0	0	0	175	31-40	149
17:00	**2**	2	5	18	76	52	3	1	0	0	0	0	0	0	159	31-40	128
18:00	0	4	6	16	59	36	2	0	0	0	0	0	0	0	123	31-40	95
19:00	1	2	6	13	50	35	3	1	0	0	0	0	0	0	111	31-40	85
20:00	0	6	4	17	34	14	1	0	0	0	0	0	0	0	76	26-35	51
21:00	0	2	4	13	22	21	1	0	0	0	0	0	0	0	63	31-40	43
22:00	0	0	0	2	22	11	1	0	0	0	0	0	0	0	36	31-40	33
23:00	0	0	2	5	12	9	2	0	**1**	0	0	0	0	0	31	31-40	21
Total	4	73	79	272	989	725	104	13	3	0	0	0	0	0	2262		
Percent	0.2%	3.2%	3.5%	12.0%	43.7%	32.1%	4.6%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	09:00	10:00	08:00	08:00	09:00	11:00	06:00	08:00						08:00		
Vol.	1	7	6	19	70	50	16	2	1						153		
PM Peak	17:00	12:00	14:00	14:00	16:00	15:00	13:00	12:00	23:00						14:00		
Vol.	2	8	11	29	94	65	13	1	1						188		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/18/19	0	0	0	2	11	2	0	0	0	0	0	0	0	0	15	31-40	13
01:00	0	0	1	0	7	2	0	0	0	0	0	0	0	0	10	31-40	9
02:00	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	30-39	4
03:00	0	1	0	1	3	1	0	0	0	0	0	0	0	0	6	31-40	4
04:00	0	0	1	0	2	1	1	0	0	0	0	0	0	0	5	31-40	3
05:00	0	0	0	3	10	10	1	0	0	0	0	0	0	0	24	31-40	20
06:00	0	0	1	3	27	15	3	**2**	0	0	0	0	0	0	51	31-40	42
07:00	0	3	0	11	46	**59**	6	1	0	**2**	0	0	0	0	128	31-40	105
08:00	1	3	3	12	58	53	**8**	0	0	0	0	0	0	0	138	31-40	111
09:00	**2**	1	**4**	17	57	44	8	0	0	0	0	0	0	0	133	31-40	101
10:00	0	4	3	**22**	47	35	2	2	0	0	0	0	0	0	115	31-40	82
11:00	0	**5**	3	16	**67**	42	8	2	0	0	0	0	0	0	**143**	31-40	109
12 PM	0	8	4	16	76	45	11	0	0	0	0	0	0	0	160	31-40	121
13:00	0	6	5	20	68	39	4	**4**	0	0	0	0	0	0	146	31-40	107
14:00	0	6	10	19	80	57	7	1	0	0	0	0	0	0	180	31-40	137
15:00	0	4	**11**	15	**103**	50	10	0	0	0	0	0	0	0	193	31-40	153
16:00	**1**	1	7	12	82	**89**	**15**	3	0	0	0	0	0	0	**210**	31-40	171
17:00	0	3	4	20	57	60	9	0	0	**1**	0	0	0	0	154	31-40	117
18:00	0	**10**	8	21	84	45	9	1	0	0	0	0	0	0	178	31-40	129
19:00	0	3	7	**32**	61	21	5	0	0	0	0	0	0	0	129	26-35	93
20:00	1	4	7	25	36	10	3	0	0	0	0	0	0	0	86	26-35	61
21:00	0	3	2	8	23	25	1	0	0	0	0	0	**1**	0	63	31-40	48
22:00	0	1	0	4	13	8	2	0	0	0	0	0	0	0	28	31-40	21
23:00	1	1	2	8	5	4	0	0	0	0	0	0	0	0	21	26-35	13
Total	6	67	83	287	1025	719	113	16	0	3	0	0	1	0	2320		
Percent	0.3%	2.9%	3.6%	12.4%	44.2%	31.0%	4.9%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	09:00	10:00	11:00	07:00	08:00	06:00		07:00					11:00		
Vol.	2	5	4	22	67	59	8	2		2					143		
PM Peak	16:00	18:00	15:00	19:00	15:00	16:00	16:00	13:00		17:00			21:00		16:00		
Vol.	1	10	11	32	103	89	15	4		1			1		210		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/19/19	0	0	0	2	8	0	0	0	0	0	0	0	0	0	10	26-35	10
01:00	0	0	0	1	5	4	1	0	0	0	0	0	0	0	11	31-40	9
02:00	0	0	0	0	3	2	0	0	0	0	0	0	0	0	5	30-39	5
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	29-38	1
04:00	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	30-39	4
05:00	0	0	0	1	12	4	0	1	0	0	0	0	0	0	18	31-40	16
06:00	0	0	1	2	17	20	4	0	0	0	0	0	0	0	44	31-40	37
07:00	0	4	4	18	**68**	32	3	**2**	0	0	0	0	0	0	131	31-40	100
08:00	**1**	**5**	4	12	65	**66**	**9**	0	**1**	0	0	0	0	0	**163**	31-40	131
09:00	0	4	1	15	50	56	5	2	0	0	**1**	0	0	0	134	31-40	106
10:00	0	2	**9**	**20**	40	36	9	0	1	0	0	0	0	0	117	31-40	76
11:00	1	2	3	17	67	43	5	0	0	0	1	0	0	0	139	31-40	110
12 PM	0	3	**8**	12	79	44	8	0	0	0	0	0	0	0	154	31-40	123
13:00	0	4	5	**20**	55	37	12	**3**	0	0	0	0	0	0	136	31-40	92
14:00	0	3	5	20	67	56	12	0	0	0	0	0	0	0	163	31-40	123
15:00	1	6	8	17	**98**	66	11	0	0	0	0	0	0	0	**207**	31-40	164
16:00	1	5	6	12	84	**70**	13	2	**1**	0	0	0	0	0	194	31-40	154
17:00	2	2	7	20	64	46	**14**	2	0	0	0	0	0	0	157	31-40	110
18:00	0	1	1	13	72	36	4	0	0	0	0	0	0	0	127	31-40	108
19:00	**3**	6	2	17	70	33	5	1	0	0	0	0	0	0	137	31-40	103
20:00	0	5	3	15	41	28	4	0	0	0	0	0	0	0	96	31-40	69
21:00	0	**8**	2	16	23	11	0	0	0	0	0	0	0	0	60	26-35	39
22:00	0	1	1	6	24	14	1	0	0	0	0	0	0	0	47	31-40	38
23:00	0	0	2	0	15	12	1	0	0	0	0	0	0	0	30	31-40	27
Total	9	61	72	256	1029	719	121	13	3	0	2	0	0	0	2285		
Percent	0.4%	2.7%	3.2%	11.2%	45.0%	31.5%	5.3%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	10:00	10:00	07:00	08:00	08:00	07:00	08:00		09:00				08:00		
Vol.	1	5	9	20	68	66	9	2	1		1				163		
PM Peak	19:00	21:00	12:00	13:00	15:00	16:00	17:00	13:00	16:00						15:00		
Vol.	3	8	8	20	98	70	14	3	1						207		
Total	19	201	234	815	3043	2163	338	42	6	3	2	0	1	0	6867		
Percent	0.3%	2.9%	3.4%	11.9%	44.3%	31.5%	4.9%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	28 MPH
50th Percentile :	33 MPH
85th Percentile :	38 MPH
95th Percentile :	40 MPH

Stats

10 MPH Pace Speed :	31-40 MPH
Number in Pace :	5206
Percent in Pace :	75.8%
Number of Vehicles > 55 MPH :	6
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	34 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 9-GRAND BLVD
EAST OF MATHEWS ST
Latitude: 0' 0.0000 Undefined

Start	16-Sep-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	25	15	20	15	22	10	*	*	*	*	*	*	22	13
01:00	*	*	9	9	9	10	7	11	*	*	*	*	*	*	8	10
02:00	*	*	11	8	9	4	7	5	*	*	*	*	*	*	9	6
03:00	*	*	1	1	5	6	4	1	*	*	*	*	*	*	3	3
04:00	*	*	4	8	4	5	5	4	*	*	*	*	*	*	4	6
05:00	*	*	17	19	21	24	14	18	*	*	*	*	*	*	17	20
06:00	*	*	32	49	31	51	41	44	*	*	*	*	*	*	35	48
07:00	*	*	145	131	147	128	138	131	*	*	*	*	*	*	143	130
08:00	*	*	136	**153**	**162**	138	**154**	**163**	*	*	*	*	*	*	**151**	**151**
09:00	*	*	97	135	120	133	111	134	*	*	*	*	*	*	109	134
10:00	*	*	115	118	129	115	132	117	*	*	*	*	*	*	125	117
11:00	*	*	**146**	147	135	**143**	140	139	*	*	*	*	*	*	140	143
12:00 PM	*	*	171	168	147	160	145	154	*	*	*	*	*	*	154	161
01:00	*	*	159	165	150	146	155	136	*	*	*	*	*	*	155	149
02:00	*	*	173	**188**	207	180	206	163	*	*	*	*	*	*	195	177
03:00	*	*	187	174	189	193	214	**207**	*	*	*	*	*	*	197	191
04:00	*	*	183	175	**218**	**210**	**218**	194	*	*	*	*	*	*	206	**193**
05:00	*	*	**224**	159	217	154	205	157	*	*	*	*	*	*	**215**	157
06:00	*	*	147	123	188	178	166	127	*	*	*	*	*	*	167	143
07:00	*	*	160	111	134	129	141	137	*	*	*	*	*	*	145	126
08:00	*	*	93	76	106	86	103	96	*	*	*	*	*	*	101	86
09:00	*	*	80	63	78	63	89	60	*	*	*	*	*	*	82	62
10:00	*	*	55	36	53	28	56	47	*	*	*	*	*	*	55	37
11:00	*	*	35	31	38	21	39	30	*	*	*	*	*	*	37	27
Lane	0	0	2405	2262	2517	2320	2512	2285	0	0	0	0	0	0	2475	2290
Day	0		4667		4837		4797		0		0		0		4765	
AM Peak	-	-	11:00	08:00	08:00	11:00	08:00	08:00	-	-	-	-	-	-	08:00	08:00
Vol.	-	-	146	153	162	143	154	163	-	-	-	-	-	-	151	151
PM Peak	-	-	17:00	14:00	16:00	16:00	16:00	15:00	-	-	-	-	-	-	17:00	16:00
Vol.	-	-	224	188	218	210	218	207	-	-	-	-	-	-	215	193

Comb. Total	0	4667	4837	4797	0	0	0	4765

ADT ADT 6,189 AADT 6,189

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/17/19	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
01:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	21-30	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
04:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3	19-28	2
05:00	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
06:00	0	0	1	7	2	0	0	0	0	0	0	0	0	0	10	26-35	9
07:00	0	0	**4**	13	12	0	0	0	0	0	0	0	0	0	29	26-35	25
08:00	0	**2**	2	7	**19**	0	0	0	0	0	0	0	0	0	30	26-35	26
09:00	0	0	0	11	7	1	0	0	0	0	0	0	0	0	19	26-35	18
10:00	0	0	1	14	9	**2**	0	0	0	0	0	0	0	0	26	26-35	23
11:00	0	0	4	**24**	11	1	0	0	0	0	0	0	0	0	**40**	26-35	35
12 PM	0	0	11	15	7	1	0	0	0	0	0	0	0	0	34	21-30	26
13:00	0	0	2	15	**13**	1	0	0	0	0	0	0	0	0	31	26-35	28
14:00	0	1	8	**20**	9	**2**	0	0	0	0	0	0	0	0	40	24-33	29
15:00	0	**5**	**13**	16	6	1	0	0	0	0	0	0	0	0	**41**	21-30	29
16:00	**1**	3	6	15	8	0	0	0	0	0	0	0	0	0	33	26-35	23
17:00	0	0	3	11	8	1	0	0	0	0	0	0	0	0	23	26-35	19
18:00	0	0	6	18	6	0	0	0	0	0	0	0	0	0	30	21-30	24
19:00	0	0	4	10	4	0	0	0	0	0	0	0	0	0	18	26-35	14
20:00	0	2	2	13	2	1	0	0	0	0	0	0	0	0	20	21-30	15
21:00	0	0	0	5	6	0	0	0	0	0	0	0	0	0	11	26-35	11
22:00	0	0	1	3	1	0	0	0	0	0	0	0	0	0	5	26-35	4
23:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	29-38	1
Total	2	13	69	223	132	12	0	0	0	0	0	0	0	0	451		
Percent	0.4%	2.9%	15.3%	49.4%	29.3%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	08:00	07:00	11:00	08:00	10:00									11:00		
Vol.	1	2	4	24	19	2									40		
PM Peak	16:00	15:00	15:00	14:00	13:00	14:00									15:00		
Vol.	1	5	13	20	13	2									41		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/18/19	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	19-28	2
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	24-33	1
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
05:00	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	2	14-23	2
06:00	0	0	3	6	7	0	0	0	0	0	0	0	0	0	16	26-35	13
07:00	0	1	2	15	**10**	0	0	0	0	0	0	0	0	0	**28**	26-35	25
08:00	0	0	**4**	**18**	4	0	0	0	0	0	0	0	0	0	26	23-32	22
09:00	0	0	4	7	10	2	0	0	0	0	0	0	0	0	23	26-35	17
10:00	0	0	2	15	7	1	0	0	0	0	0	0	0	0	25	26-35	22
11:00	0	0	0	15	7	**3**	0	0	0	0	0	0	0	0	25	26-35	22
12 PM	1	0	**5**	18	9	0	0	0	0	0	0	0	0	0	33	26-35	27
13:00	0	0	3	12	11	**4**	**1**	0	0	0	0	0	0	0	31	26-35	23
14:00	**2**	**1**	5	13	**15**	2	0	0	0	0	0	0	0	0	**38**	26-35	28
15:00	0	1	2	19	12	1	1	0	0	0	0	0	0	0	36	26-35	31
16:00	0	0	1	13	15	1	0	0	0	0	0	0	0	0	30	26-35	28
17:00	0	0	3	12	12	1	0	0	0	0	0	0	0	0	28	26-35	24
18:00	0	0	2	**20**	3	0	0	0	0	0	0	0	0	0	25	24-33	23
19:00	1	0	2	12	5	0	0	0	0	0	0	0	0	0	20	26-35	17
20:00	0	1	3	9	7	0	1	0	0	0	0	0	0	0	21	26-35	16
21:00	0	0	3	8	0	1	0	0	0	0	0	0	0	0	12	21-30	11
22:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4	24-33	3
23:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	24-33	3
Total	4	5	47	218	139	16	3	0	0	0	0	0	0	0	432		
Percent	0.9%	1.2%	10.9%	50.5%	32.2%	3.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		05:00	08:00	08:00	07:00	11:00									07:00		
Vol.		1	4	18	10	3									28		
PM Peak	14:00	14:00	12:00	18:00	14:00	13:00	13:00								14:00		
Vol.	2	1	5	20	15	4	1								38		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/19/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	20-29	2
06:00	0	1	0	7	3	0	0	0	0	0	0	0	0	0	11	26-35	10
07:00	0	1	3	**19**	**14**	0	0	0	0	0	0	0	0	0	**37**	26-35	33
08:00	0	**2**	3	18	8	0	0	0	0	0	0	0	0	0	31	26-35	26
09:00	0	0	4	14	6	**2**	0	0	0	0	0	0	0	0	26	25-34	20
10:00	0	0	**5**	15	8	1	0	0	0	0	0	0	0	0	29	26-35	23
11:00	0	0	5	12	8	0	0	0	0	0	0	0	0	0	25	26-35	20
12 PM	0	0	4	**24**	6	**1**	0	0	0	0	0	0	0	0	35	25-34	30
13:00	0	0	3	11	10	0	0	0	0	0	0	0	0	0	24	26-35	21
14:00	**2**	0	2	13	13	1	**1**	0	0	0	0	0	0	0	32	26-35	26
15:00	0	0	3	17	**19**	1	0	0	0	0	0	0	0	0	**40**	26-35	36
16:00	0	0	3	24	9	1	0	0	0	0	0	0	0	0	37	26-35	33
17:00	0	**2**	2	9	8	0	0	0	0	0	0	0	0	0	21	26-35	17
18:00	0	0	4	15	6	0	0	0	0	0	0	0	0	0	25	25-34	21
19:00	0	1	**6**	17	3	1	0	0	0	0	0	0	0	0	28	21-30	23
20:00	0	0	5	10	2	0	0	0	0	0	0	0	0	0	17	21-30	15
21:00	0	1	2	1	5	0	0	0	0	0	0	0	0	0	9	26-35	6
22:00	0	0	1	5	1	0	0	0	0	0	0	0	0	0	7	21-30	6
23:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	21-30	4
Total	2	8	56	237	129	8	1	0	0	0	0	0	0	0	441		
Percent	0.5%	1.8%	12.7%	53.7%	29.3%	1.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		08:00	10:00	07:00	07:00	09:00									07:00		
Vol.		2	5	19	14	2									37		
PM Peak	14:00	17:00	19:00	12:00	15:00	12:00	14:00								15:00		
Vol.	2	2	6	24	19	1	1								40		
Total	8	26	172	678	400	36	4	0	0	0	0	0	0	0	1324		
Percent	0.6%	2.0%	13.0%	51.2%	30.2%	2.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	24 MPH
50th Percentile :	28 MPH
85th Percentile :	33 MPH
95th Percentile :	34 MPH

Stats

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	1078
Percent in Pace :	81.4%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	29 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/17/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5	21-30	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
05:00	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	2	*	1
06:00	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4	19-28	3
07:00	0	**2**	**13**	10	0	0	0	0	0	0	0	0	0	0	25	21-30	23
08:00	0	1	9	9	0	0	0	0	0	0	0	0	0	0	19	21-30	18
09:00	0	2	6	11	**2**	0	0	0	0	0	0	0	0	0	21	21-30	17
10:00	0	1	10	**19**	2	0	0	0	0	0	0	0	0	0	32	21-30	29
11:00	0	0	13	19	1	0	0	0	0	0	0	0	0	0	**33**	21-30	32
12 PM	0	1	12	**18**	2	0	0	0	0	0	0	0	0	0	33	21-30	30
13:00	0	0	13	11	**3**	0	0	0	0	0	0	0	0	0	27	21-30	24
14:00	2	0	15	18	2	0	0	0	0	0	0	0	0	0	37	21-30	33
15:00	1	4	17	8	0	0	0	0	0	0	0	0	0	0	30	21-30	25
16:00	1	2	16	13	0	0	0	0	0	0	0	0	0	0	32	21-30	29
17:00	**3**	**7**	13	16	0	0	0	0	0	0	0	0	0	0	**39**	21-30	29
18:00	0	3	14	11	0	0	0	0	0	0	0	0	0	0	28	21-30	25
19:00	0	1	**20**	10	3	0	0	0	0	0	0	0	0	0	34	21-30	30
20:00	0	0	20	6	0	0	0	0	0	0	0	0	0	0	26	21-30	26
21:00	0	1	4	7	0	0	0	0	0	0	0	0	0	0	12	21-30	11
22:00	0	1	1	3	0	0	0	0	0	0	0	0	0	0	5	20-29	4
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	9-18	1
Total	8	28	204	192	16	0	0	0	0	0	0	0	0	0	448		
Percent	1.8%	6.3%	45.5%	42.9%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	07:00	07:00	10:00	09:00										11:00		
Vol.	1	2	13	19	2										33		
PM Peak	17:00	17:00	19:00	12:00	13:00										17:00		
Vol.	3	7	20	18	3										39		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/18/19	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
01:00	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1	9-18	1
02:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
06:00	**1**	0	5	1	0	0	0	0	0	0	0	0	0	0	7	19-28	6
07:00	0	0	**11**	**12**	1	0	0	0	0	0	0	0	0	0	**24**	21-30	23
08:00	0	1	8	8	2	0	0	0	0	0	0	0	0	0	19	21-30	16
09:00	1	0	7	9	3	0	0	0	0	0	0	0	0	0	20	21-30	16
10:00	0	0	1	12	**6**	**1**	0	0	0	0	0	0	0	0	20	26-35	18
11:00	0	1	8	9	1	0	0	0	0	0	0	0	0	0	19	21-30	17
12 PM	0	0	9	20	0	0	0	0	0	0	0	0	0	0	29	21-30	29
13:00	0	7	13	**21**	**2**	0	0	0	0	0	0	0	0	0	**43**	21-30	34
14:00	1	5	20	10	2	**1**	0	0	0	0	0	0	0	0	39	21-30	30
15:00	1	2	**22**	16	1	0	0	0	0	0	0	0	0	0	42	21-30	38
16:00	0	3	14	13	2	0	0	0	0	0	0	0	0	0	32	21-30	27
17:00	**2**	**10**	13	7	1	0	0	0	0	0	0	0	0	0	33	16-25	23
18:00	1	2	16	12	1	0	0	0	0	0	0	0	0	0	32	21-30	28
19:00	1	1	15	7	0	0	0	0	0	0	0	0	0	0	24	21-30	22
20:00	0	3	10	3	0	0	0	0	0	0	0	0	0	0	16	21-30	13
21:00	0	0	7	5	1	0	0	0	0	0	0	0	0	0	13	21-30	12
22:00	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4	15-24	3
23:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	21-30	4
Total	8	37	186	170	23	2	0	0	0	0	0	0	0	0	426		
Percent	1.9%	8.7%	43.7%	39.9%	5.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	01:00	07:00	07:00	10:00	10:00									07:00		
Vol.	1	1	11	12	6	1									24		
PM Peak	17:00	17:00	15:00	13:00	13:00	14:00									13:00		
Vol.	2	10	22	21	2	1									43		

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
09/19/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
02:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3	15-24	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4	14-23	2
06:00	**1**	1	4	2	0	0	0	0	0	0	0	0	0	0	8	19-28	6
07:00	0	0	**16**	7	0	0	0	0	0	0	0	0	0	0	23	21-30	23
08:00	0	2	12	12	0	0	0	0	0	0	0	0	0	0	26	21-30	24
09:00	0	2	5	11	**2**	0	0	0	0	0	0	0	0	0	20	21-30	16
10:00	0	**6**	15	**15**	0	0	0	0	0	0	0	0	0	0	**36**	21-30	30
11:00	1	4	15	4	2	0	0	0	0	0	0	0	0	0	26	21-30	19
12 PM	**3**	**3**	16	10	0	**1**	0	0	0	0	0	0	0	0	33	21-30	26
13:00	1	3	20	7	0	0	0	0	0	0	0	0	0	0	31	21-30	27
14:00	2	0	15	7	**1**	0	0	0	0	0	0	0	0	0	25	21-30	22
15:00	0	1	**25**	13	1	0	0	0	0	0	0	0	0	0	40	21-30	38
16:00	1	2	21	**17**	0	0	0	0	0	0	0	0	0	0	**41**	21-30	38
17:00	0	3	15	13	1	0	0	0	0	0	0	0	0	0	32	21-30	28
18:00	0	3	13	4	0	0	0	0	0	0	0	0	0	0	20	21-30	17
19:00	0	3	24	6	0	0	0	0	0	0	0	0	0	0	33	21-30	30
20:00	0	1	22	5	0	0	0	0	0	0	0	0	0	0	28	21-30	27
21:00	0	1	5	3	0	0	0	0	0	0	0	0	0	0	9	20-29	8
22:00	0	1	2	2	0	0	0	0	0	0	0	0	0	0	5	19-28	4
23:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4	20-29	3
Total	9	38	249	142	9	1	0	0	0	0	0	0	0	0	448		
Percent	2.0%	8.5%	55.6%	31.7%	2.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	10:00	07:00	10:00	09:00										10:00		
Vol.	1	6	16	15	2										36		
PM Peak	12:00	12:00	15:00	16:00	14:00	12:00									16:00		
Vol.	3	3	25	17	1	1									41		
Total	25	103	639	504	48	3	0	0	0	0	0	0	0	0	1322		
Percent	1.9%	7.8%	48.3%	38.1%	3.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	20 MPH
50th Percentile :	24 MPH
85th Percentile :	28 MPH
95th Percentile :	29 MPH

Stats

10 MPH Pace Speed :	21-30 MPH
Number in Pace :	1143
Percent in Pace :	86.5%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	25 MPH

TRAFFIC DATABANK LLC

716 SOUTH SIXTH AVE
MT VERNON,NY,10550

Site Code:
Station ID:
ATR 10-CRESTMONT RD
NORTH OF GRAND BLVD
Latitude: 0' 0.0000 Undefined

Start	16-Sep-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	1	0	2	1	0	0	*	*	*	*	*	*	1	0
01:00	*	*	3	5	1	1	0	1	*	*	*	*	*	*	1	2
02:00	*	*	0	0	2	2	0	3	*	*	*	*	*	*	1	2
03:00	*	*	2	2	0	0	1	0	*	*	*	*	*	*	1	1
04:00	*	*	3	1	1	1	0	0	*	*	*	*	*	*	1	1
05:00	*	*	1	2	2	1	2	4	*	*	*	*	*	*	2	2
06:00	*	*	10	4	16	7	11	8	*	*	*	*	*	*	12	6
07:00	*	*	29	25	**28**	**24**	**37**	23	*	*	*	*	*	*	**31**	24
08:00	*	*	30	19	26	19	31	26	*	*	*	*	*	*	29	21
09:00	*	*	19	21	23	20	26	20	*	*	*	*	*	*	23	20
10:00	*	*	26	32	25	20	29	**36**	*	*	*	*	*	*	27	**29**
11:00	*	*	**40**	**33**	25	19	25	26	*	*	*	*	*	*	30	26
12:00 PM	*	*	34	33	33	29	35	33	*	*	*	*	*	*	34	32
01:00	*	*	31	27	31	**43**	24	31	*	*	*	*	*	*	29	34
02:00	*	*	40	37	**38**	39	32	25	*	*	*	*	*	*	37	34
03:00	*	*	**41**	30	36	42	**40**	40	*	*	*	*	*	*	**39**	**37**
04:00	*	*	33	32	30	32	37	**41**	*	*	*	*	*	*	33	35
05:00	*	*	23	**39**	28	33	21	32	*	*	*	*	*	*	24	35
06:00	*	*	30	28	25	32	25	20	*	*	*	*	*	*	27	27
07:00	*	*	18	34	20	24	28	33	*	*	*	*	*	*	22	30
08:00	*	*	20	26	21	16	17	28	*	*	*	*	*	*	19	23
09:00	*	*	11	12	12	13	9	9	*	*	*	*	*	*	11	11
10:00	*	*	5	5	4	4	7	5	*	*	*	*	*	*	5	5
11:00	*	*	1	1	3	4	4	4	*	*	*	*	*	*	3	3
Lane	0	0	451	448	432	426	441	448	0	0	0	0	0	0	442	440
Day	0		899		858		889		0		0		0		882	
AM Peak	-	-	11:00	11:00	07:00	07:00	07:00	10:00	-	-	-	-	-	-	07:00	10:00
Vol.	-	-	40	33	28	24	37	36	-	-	-	-	-	-	31	29
PM Peak	-	-	15:00	17:00	14:00	13:00	15:00	16:00	-	-	-	-	-	-	15:00	15:00
Vol.	-	-	41	39	38	43	40	41	-	-	-	-	-	-	39	37

Comb. Total	0		899		858		889		0		0		0		882	

ADT ADT 6,189 AADT 6,189

Appendix B

Speed Data

RADAR SPOT SPEED STUDY DATA FORM

Date: 10/22/2019
Name: N. Skelding
Location:88 Grand Avenue
Speed Limit: 30 mph

Start Time: 10:10:00 AM
End Time: 10:30:00 AM
Weather: Cloudy

Speed	Passenger Vehicles		Buses		Trucks		Total
	Record	No.	Record	No.	Record	No.	
20							0
21							0
22	111	3					3
23							0
24	1	1					1
25	111	3					3
26	11	2					2
27	1111111	7					7
28	11	2					2
29	111111	6					6
30	111111111111	12					12
31	11111111	8					8
32	11111111	8					8
33	11111	5					5
34	11	2					2
35	1111	4					4
36	11111	5					5
37	1	1					1
38							0
39	11	2					2
40	1	1					1
41	1	1					1
42							

SPEED DISTRIBUTION TABLE				
Date: 10/22/2019			Start Time: 10:10:00 AM	
Name: N. Skelding			End Time: 10:30:00 AM	
Location:88 Grand Avenue			Weather: Cloudy	
Speed Limit: 30 mph				
Speed (MPH)	**Frequency of Vehicles**	**Cumulative Frequency**	**Cumulative Percent**	**Speed Percentile**
20	0	0	0.00%	
21	0	0	0.00%	
22	3	3	4.11%	
23	0	3	4.11%	
24	1	4	5.48%	
25	3	7	9.59%	
26	2	9	12.33%	
27	7	16	21.92%	
28	2	18	24.66%	
29	6	24	32.88%	
30	12	36	49.32%	**50th**
31	8	44	60.27%	
32	8	52	71.23%	
33	5	57	78.08%	
34	2	59	80.82%	**85th**
35	4	63	86.30%	
36	5	68	93.15%	
37	1	69	94.52%	
38	0	69	94.52%	
39	2	71	97.26%	
40	1	72	98.63%	
41	1	73	100.00%	

RADAR SPOT SPEED STUDY DATA FORM

Date: 10/22/2019
Start Time: 9:45:00 AM
Name: N. Skelding
End Time: 10:05:00 AM
Location: 42 Grand Avenue
Weather: Cloudy
Speed Limit: 30 mph

Speed	Passenger Vehicles		Buses		Trucks		Total
	Record	No.	Record	No.	Record	No.	
20		0					0
21		0					0
22		0					0
23	11	2					2
24	11	2					2
25	1	1					1
26	111	3			1	1	4
27	1	1					1
28	11111111	8					8
29	1111111	7					7
30	111111111	9					9
31	1111111	7			1	1	8
32	111111111111	12					12
33	111111	6					6
34	11111111	8					8
35	1111	4					4
36	1	1					1
37	1	1					1
38		0					0
39	1	1					1
40	11	2					2

SPEED DISTRIBUTION TABLE				
Date: 10/22/2019			Start Time: 9:45:00 AM	
Name: N. Skelding			End Time: 10:05:00 AM	
Location: 42 Grand Avenue			Weather: Cloudy	
Speed Limit: 30 mph				
Speed (MPH)	**Frequency of Vehicles**	**Cumulative Frequency**	**Cumulative Percent**	**Speed Percentile**
20	0	0	0.00%	
21	0	0	0.00%	
22	0	0	0.00%	
23	2	2	2.60%	
24	2	4	5.19%	
25	1	5	6.49%	
26	4	9	11.69%	
27	1	10	12.99%	
28	8	18	23.38%	
29	7	25	32.47%	
30	9	34	44.16%	**50th**
31	8	42	54.55%	
32	12	54	70.13%	
33	6	60	77.92%	**85th**
34	8	68	88.31%	
35	4	72	93.51%	
36	1	73	94.81%	
37	1	74	96.10%	
38	0	74	96.10%	
39	1	75	97.40%	
40	2	77	100.00%	

RADAR SPOT SPEED STUDY DATA FORM

Date: 10/22/2019
Name: N. Skelding
Location: 18 Grand Avenue
Speed Limit: 30 mph

Start Time: 9:20:00 AM
End Time: 9:40:00 AM
Weather: Cloudy

Speed	Passenger Vehicles		Buses		Trucks		Total
	Record	No.	Record	No.	Record	No.	
20	1	1					1
21	1	1					1
22	1	1	1	1			2
23	11	2					2
24	1	1					1
25	11111	5					5
26	1111	4			1	1	5
27	1	1					1
28	111111	6					6
29	111111	6					6
30	11111111111	11					11
31	11111	5			1	1	6
32	1111	4					4
33	11111	5					5
34	1	1					1
35	11111	5					5
36	1	1					1
37							
38							
39							
40							

SPEED DISTRIBUTION TABLE				
Date: 10/22/2019		Start Time: 9:20:00 AM		
Name: N. Skelding		End Time: 9:40:00 AM		
Location: 18 Grand Avenue		Weather: Cloudy		
Speed Limit: 30 mph				
Speed (MPH)	**Frequency of Vehicles**	**Cumulative Frequency**	**Cumulative Percent**	**Speed Percentile**
20	1	1	1.59%	
21	1	2	3.17%	
22	2	4	6.35%	
23	2	6	9.52%	
24	1	7	11.11%	
25	5	12	19.05%	
26	5	17	26.98%	
27	1	18	28.57%	
28	6	24	38.10%	
29	6	30	47.62%	**50th**
30	11	41	65.08%	
31	6	47	74.60%	
32	4	51	80.95%	**85th**
33	5	56	88.89%	
34	1	57	90.48%	
35	5	62	98.41%	
36	1	63	100.00%	
37	0	63	100.00%	
38	0	63	100.00%	
39	0	63	100.00%	
40	0	63	100.00%	

Appendix C

Crash Data

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Floral Ave

CASE No.:

FILE:

BY: N.SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	12/05/17	15:13	2	I	1	1	2	3	13	5, 7	3	COLLISION W/ BICYCLIST	A
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

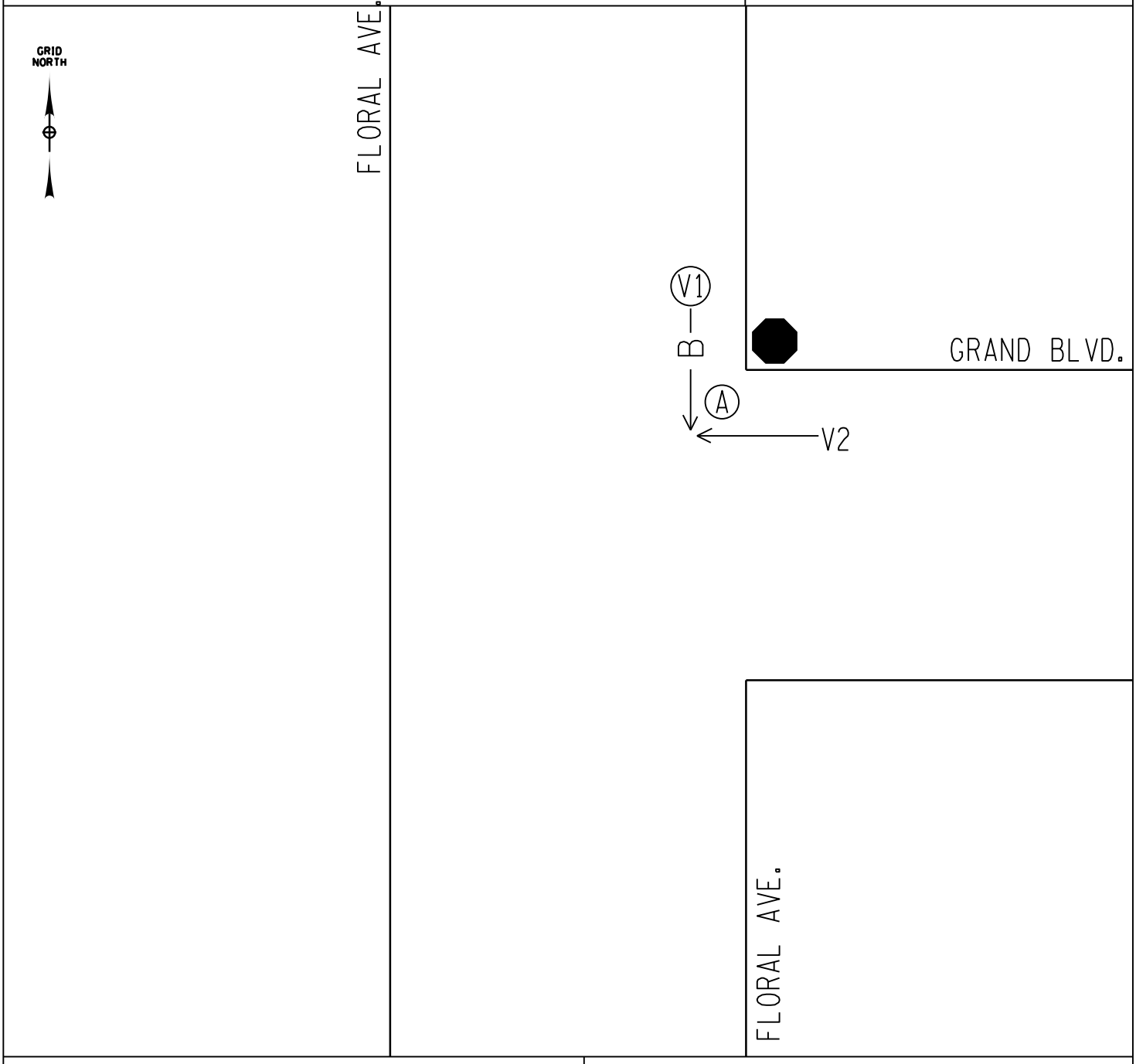
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-FLORAL AVE.DGN

INTERSECTION: GRAND BLVD. AND FLORAL AVE.

PERIOD: 3 YR __ MO | FROM / / | TO / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Park St

CASE No.:

FILE:

BY: N. SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** 11/28/16 **TO:** 7/8/17

No. OF MONTHS:

ENVIRONMENTAL: Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	07/08/17	16:29	2	PDO	1	1	1	2	3	3	1	COLLISION W/ OTHER VEHICLE	A
2	11/28/16	13:31	2	I	1	1	1	1	7	5, 3	1	COLLISION W/ OTHER VEHICLE	B
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

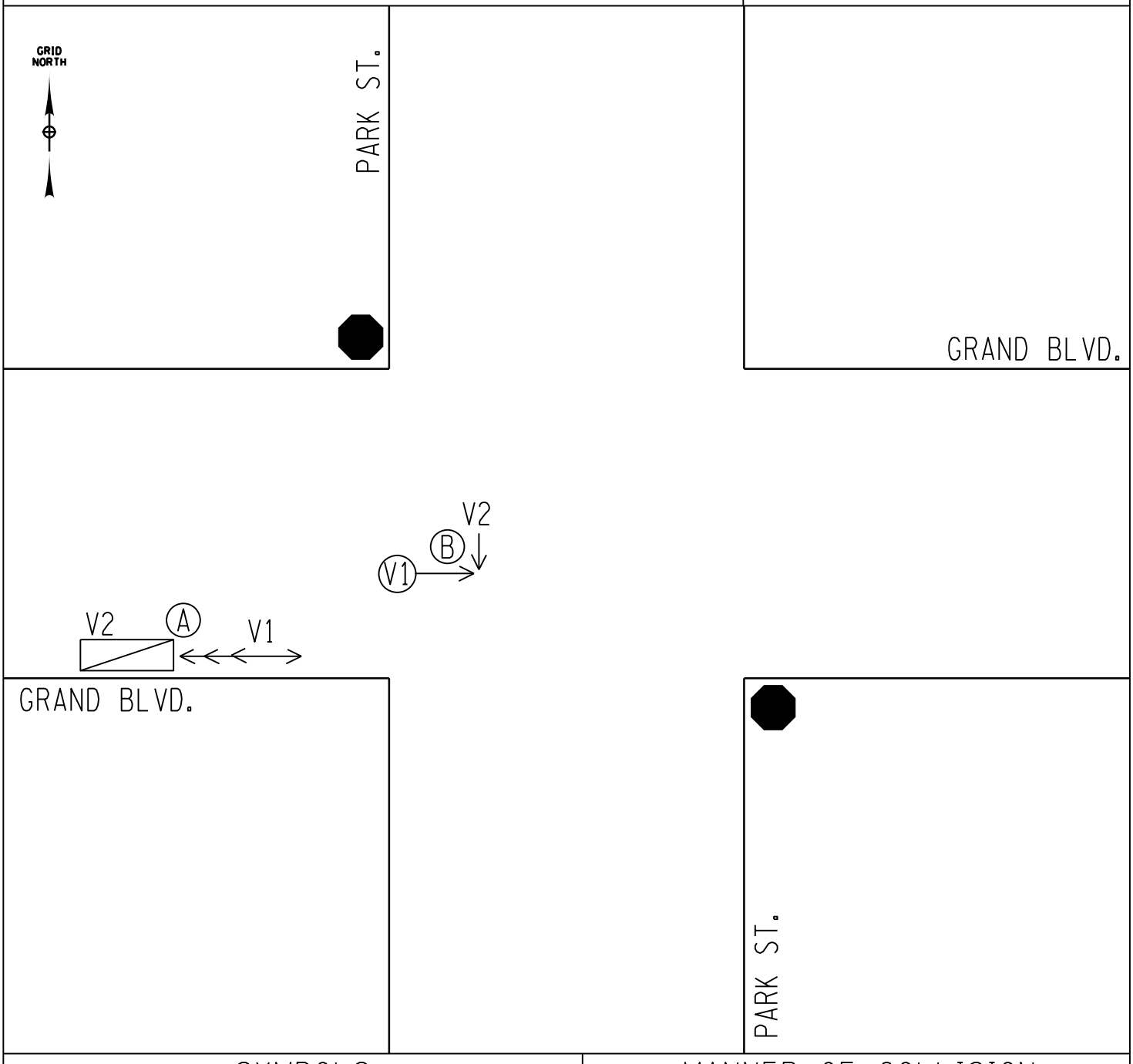
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-PARK ST.DGN

INTERSECTION: GRAND BLVD. AND PARK ST.

PERIOD: 3 YR __ MO | FROM / / | TO / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**
TOWN
CITY
VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Britnall Pl

CASE No.:
FILE:
BY: N. SKELDING
DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	09/06/18	16:37	2	I	1	1	2	3	7	5, 7	3	COLLISION W/ BICYCLIST	A
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

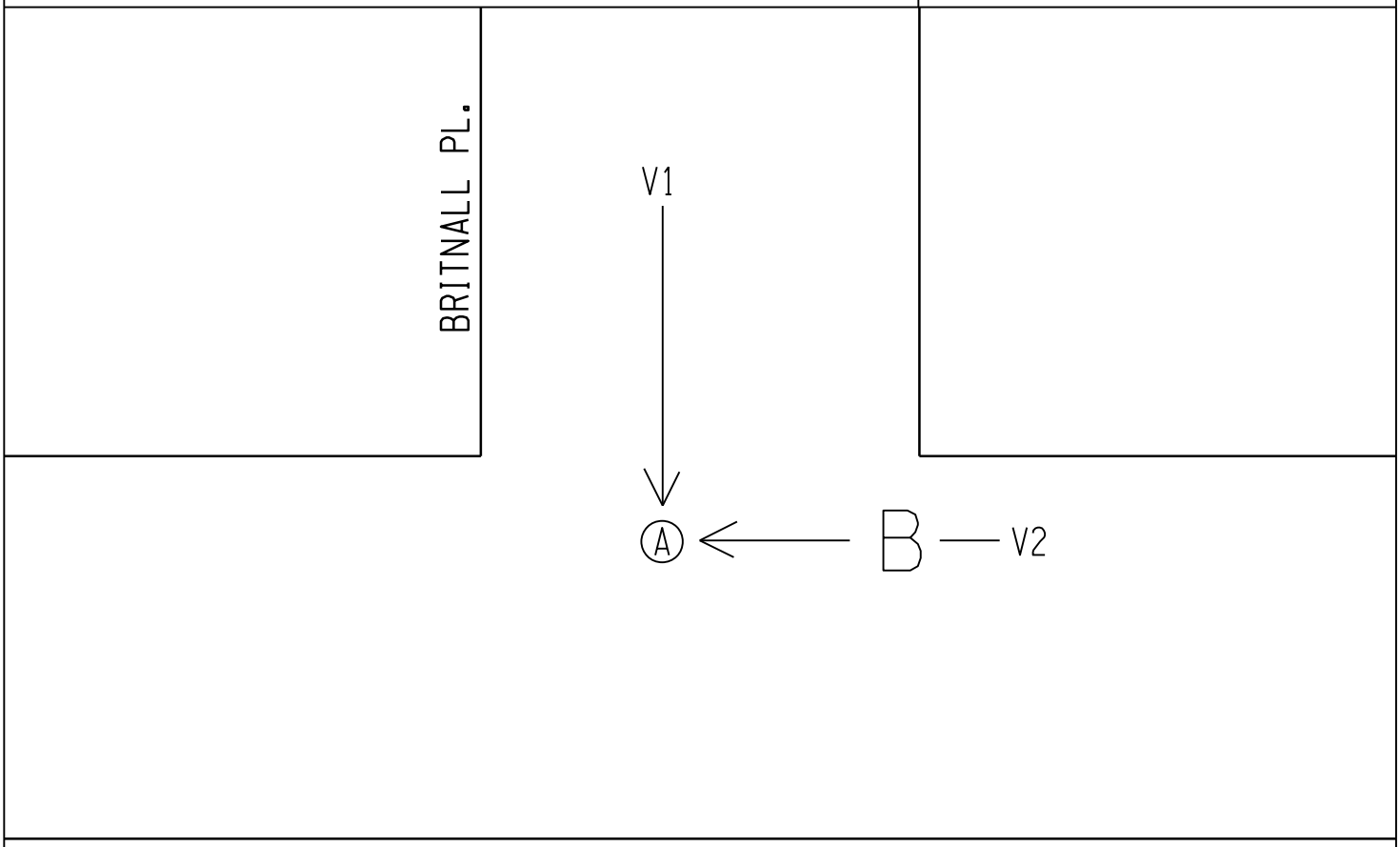
MUNICIPALITY CITY OF BINGHAMTON COUNTY BROOME

INTERSECTION GRAND BLVD. AND BRITNALL PLACE.

PERIOD 3 YR __ MO FROM / / TO / /

FILE TE 56-BRITNALL PLACE.DGN

BY N. SKELDING DATE 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Crary Ave

CASE No.:

FILE:

BY: N. SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	04/17/19	21:09	2	PDO	4	1	1	1	4, 7	5, 3	1	COLLISION W/ OTHER VEHICLE	A
2	03/16/18	22:42	2	I	5	1	1	1	4, 7	5, 7	1	COLLISION W/ OTHER VEHICLE	B
3	06/26/16	11:47	2	PDO	1	1	1	1	4, 7	1, 7	1	COLLISION W/ OTHER VEHICLE	C
4	06/09/16	10:38	2	PDO	1	1	1	1	4	7	1	COLLISION W/ OTHER VEHICLE	D
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

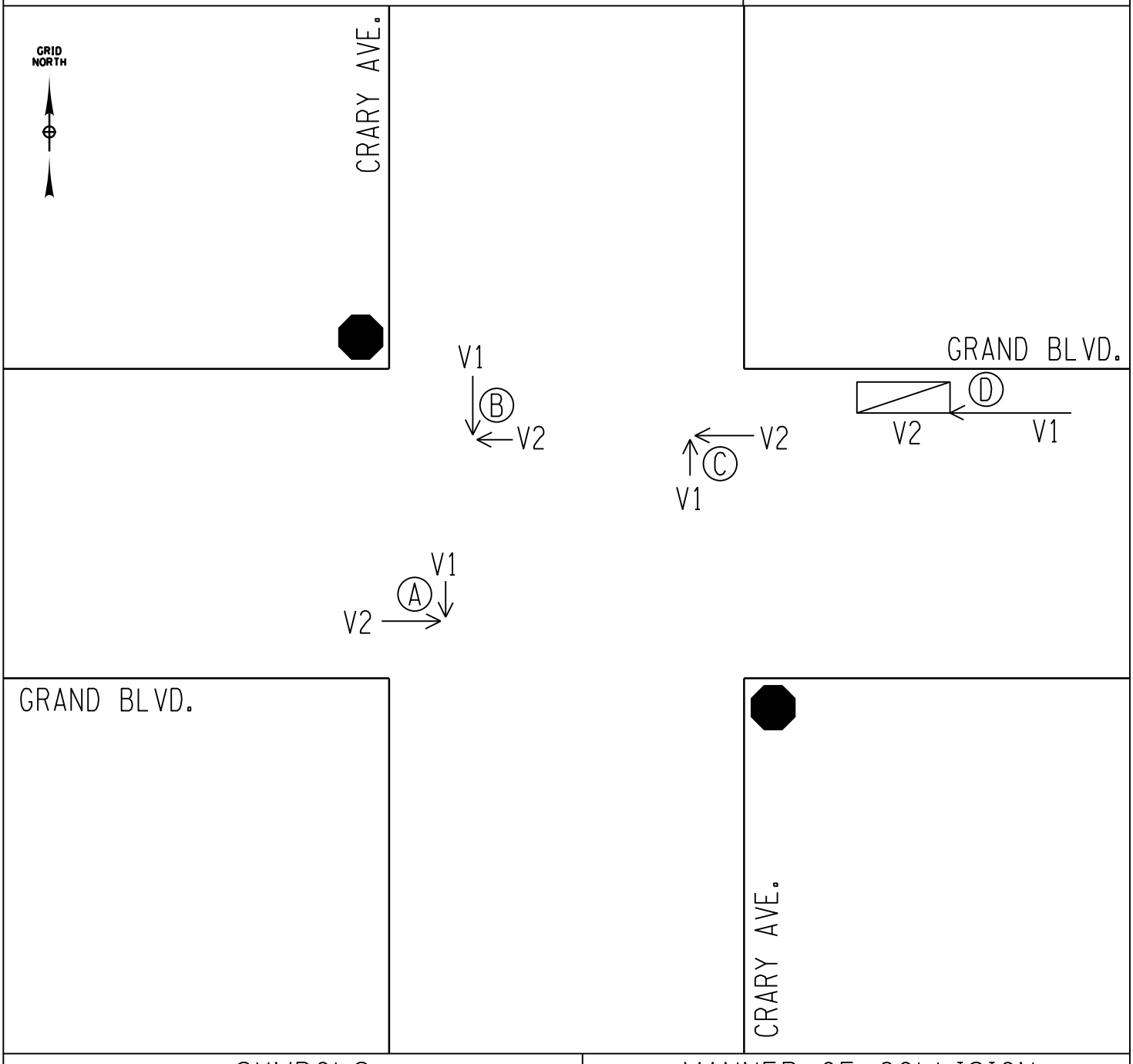
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-CRARY AVE.DGN

INTERSECTION: GRAND BLVD. AND BRITNALL AVE.

PERIOD: 3 YR __ MO | FROM / / | TO / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Matthews St.

CASE No.:

FILE:

BY: N.SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	01/16/19	17:51	2	PDO	4	1	2	2	13	3, 7	1	COLLISION W/ OTHER VEHICLE	A
2	11/08/18	14:36	2	PDO	1	1	1	2	3	7, 3	1	COLLISION W/ OTHER VEHICLE	B
3	05/21/18	10:56	2	I	1	1	1	1	7	7, 3	1	COLLISION W/ OTHER VEHICLE	C
4	12/28/16	4:59	3	I	4	1	4	4	19, 5	3, 0, 0	1	COLLISION W/ OTHER VEHICLE	D
5	09/13/16	9:09	2	I	1	1	1	1	7, 17	1, 3	1	COLLISION W/ OTHER VEHICLE	E
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

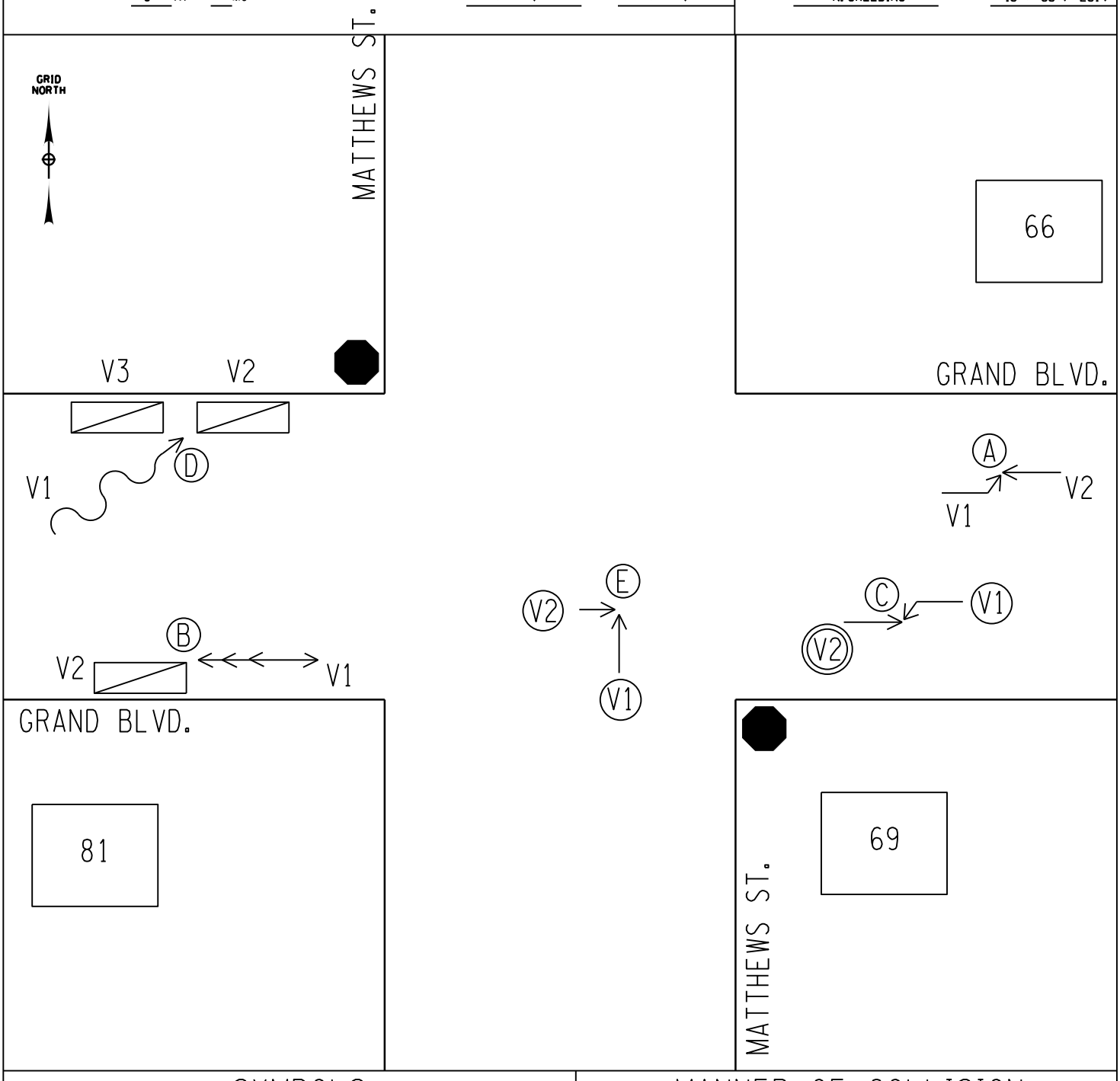
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-MATTHEWS ST.DGN

INTERSECTION: GRAND BLVD. AND MATTHEWS ST.

PERIOD: 3 YR __ MO | FROM / / | TO / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Crestmont Rd

CASE No.:

FILE:

BY: N. SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

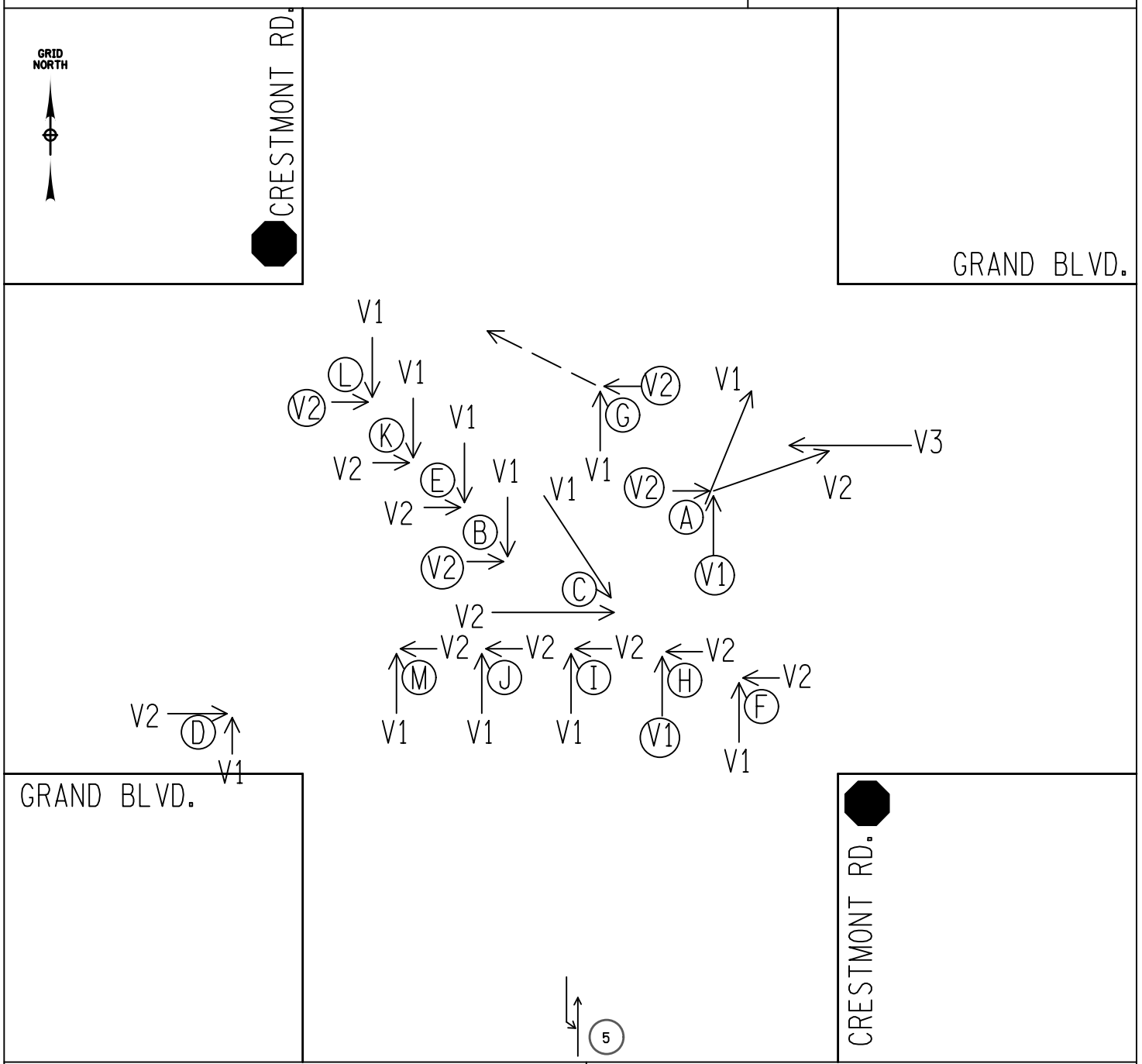
[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	09/02/19	13:25	3	I	1	1	1	1	7	1, 3, 7	1, 17, 14	COLLISION W/ OTHER VEHICLE, CURB, SIGN POST	A
2	11/03/16	16:05	2	I	1	1	1	2	5, 7	5, 3	1	COLLISION W/ OTHER VEHICLE	B
3	11/09/16	17:17	2	PDO	4	1	1	2	1, 12	4, 3	1	COLLISION W/ OTHER VEHICLE	C
4	01/19/17	7:53	2	PDO	1	1	2	2	4	1, 3	1	COLLISION W/ OTHER VEHICLE MAKING U-TURN	D
5	03/09/17	18:10	2	I	4	1	1	2	7	5, 3	1	COLLISION W/ OTHER VEHICLE	E
6	09/28/18	23:23	2	PDO	4	1	1	1	7	1, 7	1	COLLISION W/ OTHER VEHICLE	F
7	02/13/19	9:39	3	I	1	1	2	2	7, 62	1, 7	1, 2	COLLISION W/ OTHER VEHICLE AND PEDESTRIAN	G
8	03/13/19	7:27	2	I	1	1	1	1	17	1, 7	1	COLLISION W/ OTHER VEHICLE	H
9	01/28/15	13:53	2	PDO	1	1	1	1	7	1, 7	1	COLLISION W/ OTHER VEHICLE	I
10	08/01/15	21:50	2	I	5	1	1	1	4	1, 7	1	COLLISION W/ OTHER VEHICLE	J
11	02/28/16	19:32	2	PDO	4	1	1	1	17, 7	5, 3	1	COLLISION W/ OTHER VEHICLE	K
12	05/25/16	12:32	2	I	1	1	1	1	7	5, 3	1	COLLISION W/ OTHER VEHICLE	L
13	06/13/15	16:53	2	PDO	1	1	1	1	4	1, 3	1	COLLISION W/ OTHER VEHICLE	M
14													
15													
16													
17													
18													
19													
20													
21													
22													

TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY	CITY OF BINGHAMTON	COUNTY	BROOME	FILE	TE 56-CRESTMONT RD.DGN
INTERSECTION	GRAND BLVD. AND CRESTMONT RD.				
PERIOD	5 YR __ MO	FROM / /	TO / /	BY	N. SKELDING
				DATE	10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Minerva Ave

CASE No.:

FILE:

BY: N.SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	09/12/18	0:15	2	PDO	4	1	1	2	3	5, 7	1	COLLISION W/ OTHER VEHICLE	A
2	12/19/17	21:00	2	PDO	4	1	2	2	X	0, 3	1	COLLISION W/ OTHER VEHICLE	B
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

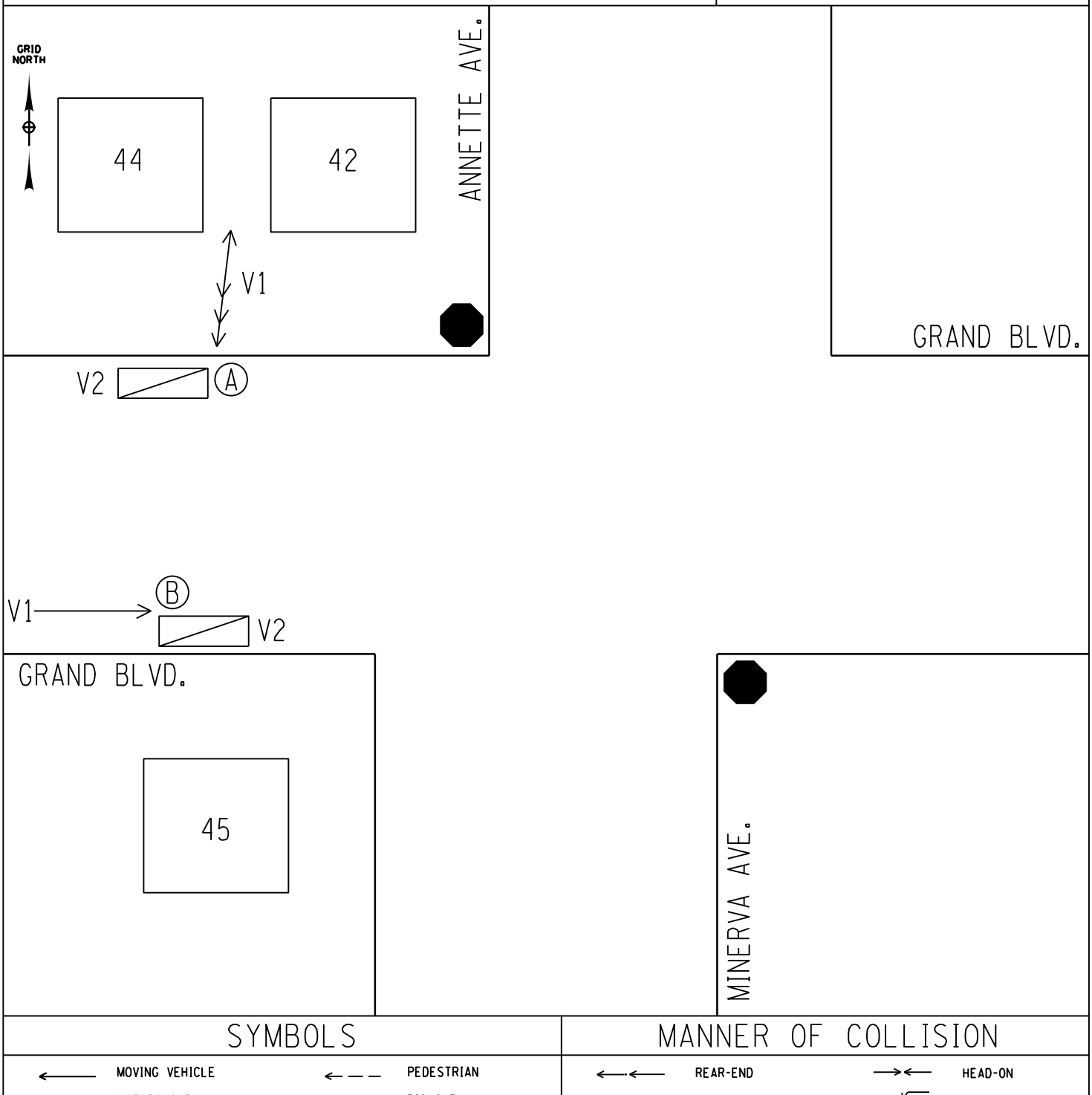
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-MINERVA-ANNETTE AVE.DGN

INTERSECTION: GRAND BLVD. AND MINERVA AVE./ANNETTE AVE.

PERIOD: 3 YR __ MO | FROM: / / | TO: / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**
TOWN
CITY
VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Helen St

CASE No.:
FILE:
BY: N.SKELDING
DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	04/01/19	15:38	2	PDO	1	1	1	1	4	1	1	COLLISION W/ OTHER VEHICLE	A
2	03/14/19	15:43	2	PDO	1	1	1	1	3	5, 1	1	COLLISION W/ OTHER VEHICLE	B
3	03/05/19	10:59	2	PDO	1	1	1	2	7	1, 3	1	COLLISION W/ OTHER VEHICLE	C
4	08/18/18	23:00	2	I	4	1	1	1	2, 9	7	1	COLLISION W/ OTHER VEHICLE	D
5	06/19/18	7:19	2	PDO	1	1	1	1	4	1, 3	1	COLLISION W/ OTHER VEHICLE	E
6	06/13/18	11:58	2	PDO	1	1	1	1	4	1, 3	1	COLLISION W/ OTHER VEHICLE	F
7	05/19/16	14:33	4	PDO	2	1	1	1	7	1,7,5,5	1,15	COLLISION W/OTHER VEHICLES AND TREE	G
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

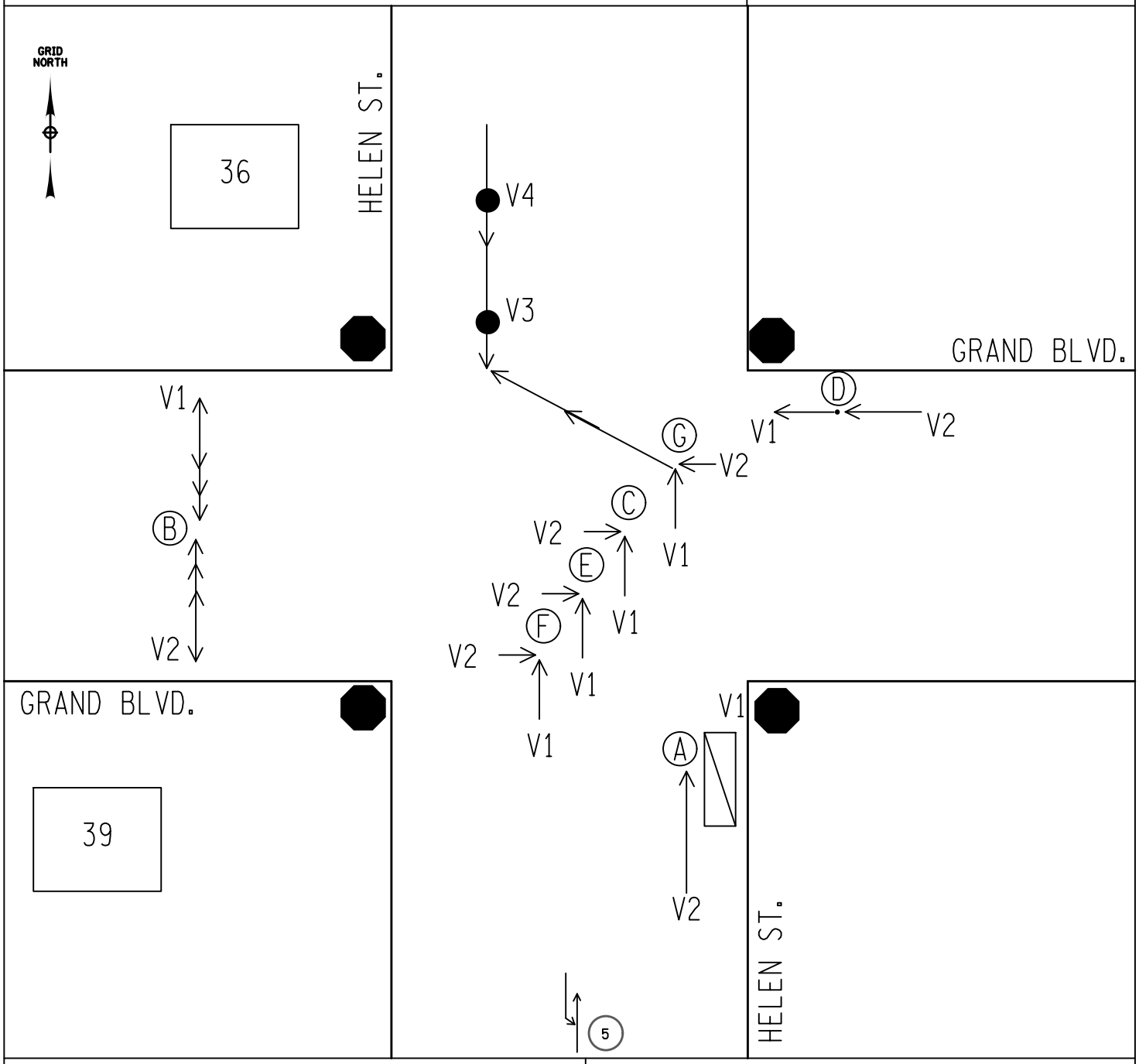
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-HELEN ST.DGN

INTERSECTION: GRAND BLVD. AND HELEN ST.

PERIOD: 5 YR __ MO | FROM: / / | TO: / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Bellevue Ave

CASE No.:

FILE:

BY: N. SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	05/06/19	16:31	2	PDO	1	1	1	1	4, 7	5, 3	1	COLLISION W/ OTHER VEHICLE	A
2	06/25/16	22:14	2	PDO	4	1	1	1	9	3, 3	1	COLLISION W/ OTHER VEHICLE	B
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

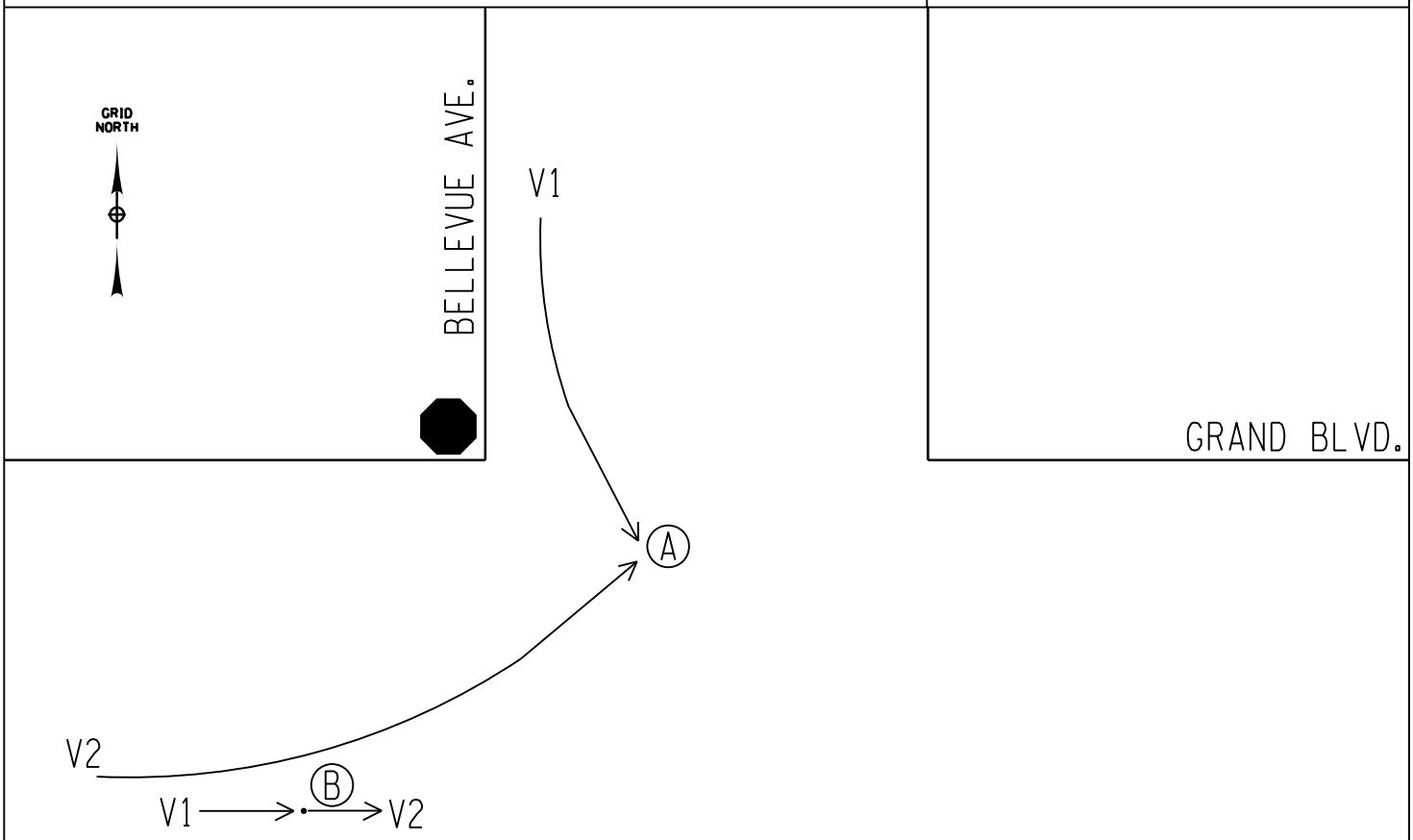
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-BELLEVUE AVE.DGN

INTERSECTION: GRAND BLVD. AND BELLEVUE AVE.

PERIOD: 3 YR __ MO | FROM 06 / 25 / 2016 | TO 05 / 16 / 2019 | BY: N. SKELDING | DATE: 10 / 30 / 2019



GRAND BLVD.

SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**
TOWN
CITY
VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Orton Ave

CASE No.:
FILE:
BY: N. SKELDING
DATE: 10/30/19

TIME PERIOD **FROM:** **TO:**

No. OF MONTHS:

ENVIRONMENTAL:
Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	02/12/18	8:44	2	PDO	1	2	4	2	7, 66	1, 7	1	COLLISION W/ OTHER VEHICLE	A
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

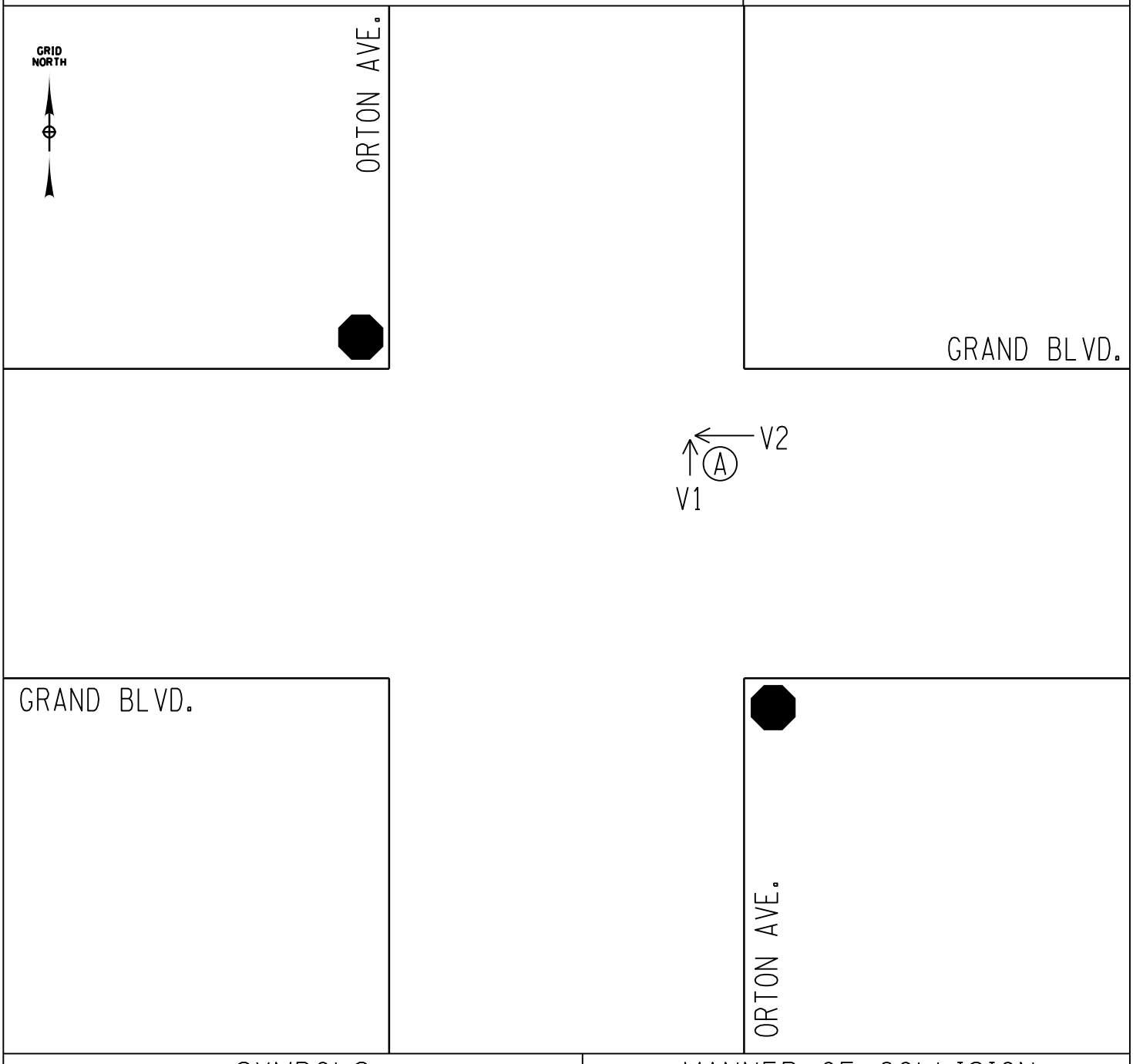
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-ORTON AVE.DGN

INTERSECTION: GRAND BLVD. AND ORTON AVE.

PERIOD: 3 YR __ MO | FROM / / | TO / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

TE 213 (9/79)

DIAGRAM No.:

COUNTY: Broome **P.I.N.:**

TOWN

CITY

VILLAGE OF Binghamton

ROUTE NO. OR STREET NAME: Grand Blvd

AT INTERSECTION WITH/OR BETWEEN: Schiller Ave.

CASE No.:

FILE:

BY: N. SKELDING

DATE: 10/30/19

TIME PERIOD **FROM:** 7/4/16 **TO:** 3/10/17

No. OF MONTHS:

ENVIRONMENTAL: Use Codes from MV 104 (shown at right) for these categories

Light Conditions:
1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

Roadway Character:
1. Straight & Level
2. Straight & Grade
3. Straight & Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve & Hillcrest

Roadway Surface Condition:
1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

Weather:
1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

[1]Use Codes from MV 104 Police Report

ACCIDENT No.	DATE	TIME	No. of VEHICLES	SEVERITY	LIGHT CONDITIONS	ROADWAY CHARACTER	ROADWAY SURFACE CONDITION	WEATHER	APPARENT CONTRIBUTING FACTORS	DIRECTION	TYPE[1]	DESCRIPTION	REFERENCE MARKER
1	07/04/16	0:21	1	PDO	4	1	1	1	18, 19	2	14	COLLISION W/ CURB	A
2	03/10/17	13:19	1	PDO	1	1	1	2	4	3	14	COLLISION W/ SIGN POST	B
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

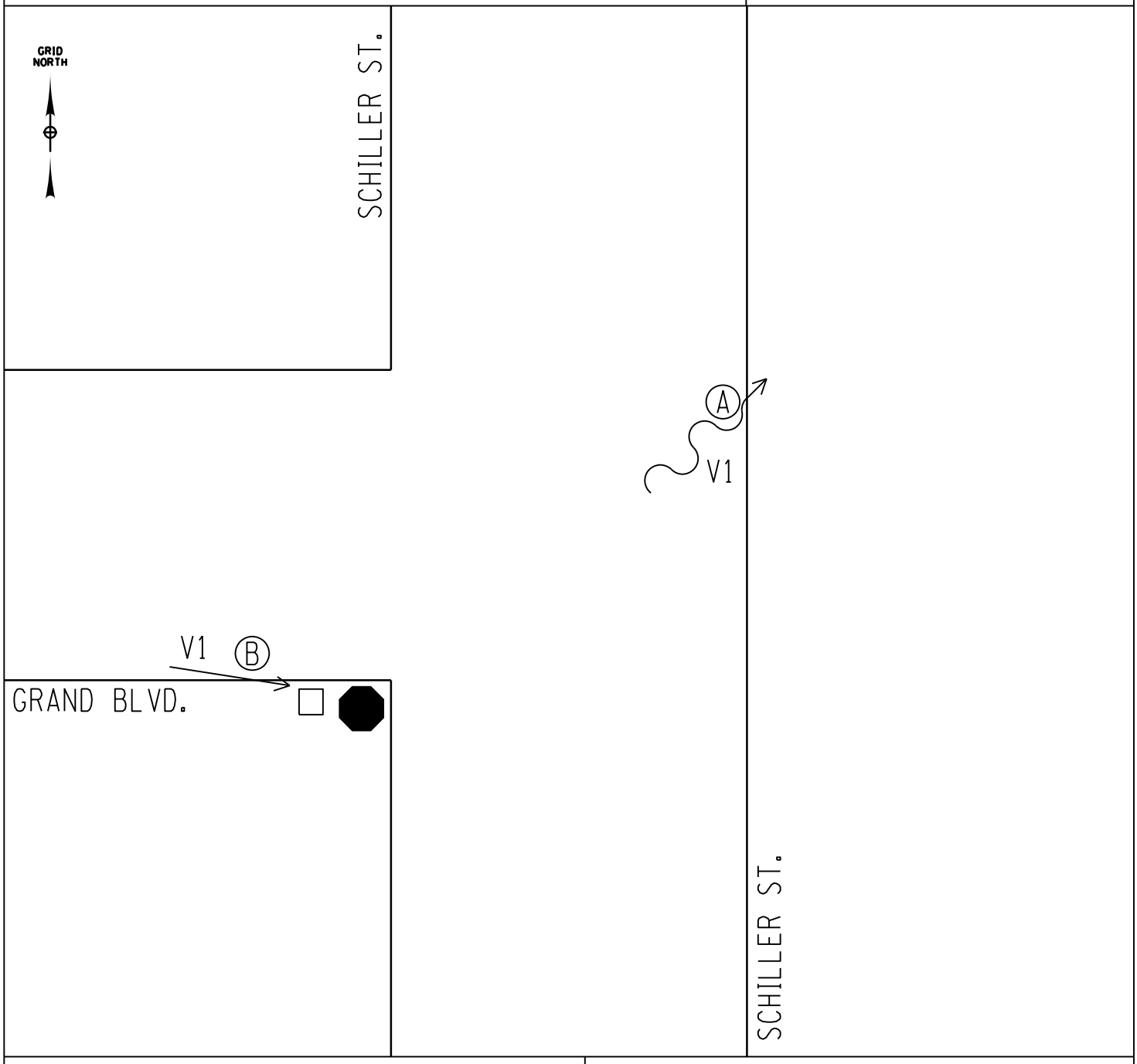
TE 56

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY: CITY OF BINGHAMTON | COUNTY: BROOME | FILE: TE 56-SCHILLER ST.DGN

INTERSECTION: GRAND BLVD. AND SCHILLER ST.

PERIOD: 3 YR __ MO | FROM: / / | TO: / / | BY: N. SKELDING | DATE: 10 / 30 / 2019



SYMBOLS

- MOVING VEHICLE
- M — MOTORCYCLE
- BACKING VEHICLE
- STOPPED VEHICLE
- PARKED VEHICLE
- PEDESTRIAN
- B — BICYCLE
- FIXED OBJECT
- PERSONAL INJURY
- FATAL INJURY

MANNER OF COLLISION

- REAR-END
- SIDE-SWIPE
- OUT OF CONTROL
- SKIDDING
- OVERTURNED
- HEAD-ON
- LEFT-TURN
- RIGHT-ANGLE

AVERAGE ACCIDENT RATES FOR STATE HIGHWAYS BY FACILITY TYPE

(BASED ON ACCIDENT DATA January 1, 2015 TO December 31, 2016)

Average accident rates are based on both reportable and available non-reportable crashes.

MAINLINE ACCIDENTS ONLY: "Non-Intersection Accidents/MVM" is used for linear highway sections where there are no intersecting roads or ramp junctions within analysis limits. An example of the correct use of these rates would involve a linear section of highway which contains no intersections with other public highways, but may contain intersections with private roads or driveways.

MAINLINE & JUNCTURE ACCIDENTS: "Intersection & Non-Intersection Accidents/MVM" includes intersection and mainline accidents. They are used for analysis of linear highway sections where intersections are involved within the analysis limits and are the most commonly used rates for accident analysis purposes.

FACILITY TYPE

FREE ACCESS CONTROLLED	MAINLINE ACCIDENTS ONLY			MAINLINE & JUNCTURE ACCIDENTS		
RURAL FUNCTION CLASS	ALL TYPES	WET ROAD	FIXED OBJECT	ALL TYPES	WET ROAD	FIXED OBJECT
UNDIVIDED	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM
2 LANES	2.1	0.33	0.58	2.61	0.4	0.68
3 LANES	1.87	0.24	0.57	2.25	0.27	0.64
4 LANES	1.9	0.26	0.36	2.55	0.34	0.44
ALL LANES	2.09	0.33	0.58	2.6	0.4	0.68
DIVIDED						
2 LANES	1.88	0.27	0.46	2.56	0.36	0.57
4 LANES	1.92	0.29	0.51	2.15	0.32	0.54
ALL LANES	1.92	0.29	0.48	2.3	0.33	0.57
URBAN FUNCTION CLASS						
UNDIVIDED						
2 LANES	2.23	0.33	0.34	3.5	0.52	0.45
3 LANES	2.71	0.36	0.27	4.31	0.63	0.38
4 LANES	3.22	0.49	0.22	5.5	0.86	0.31
ALL LANES	2.46	0.36	0.31	3.95	0.59	0.43
DIVIDED						
2 LANES	3.13	0.48	0.2	5.14	0.78	0.28
4 LANES	2.85	0.45	0.18	4.52	0.72	0.24
6 LANES	3.65	0.53	0.16	4.8	0.71	0.2
7 LANES	3.05	0.58	0.09	3.99	0.72	0.16
ALL LANES	3.1	0.48	0.18	4.7	0.73	0.25

PARTIAL CONTROL OF ACCESS

RURAL FUNCTION CLASS

	MAINLINE ACCIDENTS ONLY			MAINLINE & JUNCTURE ACCIDENTS		
UNDIVIDED	ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM	ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM
2 LANES	1.87	0.35	0.44	2.44	0.48	0.51
ALL LANES	1.91	0.35	0.43	2.47	0.48	0.53
DIVIDED						
4 LANES	1.85	0.29	0.81	1.97	0.32	0.85
ALL LANES	1.84	0.29	0.8	1.96	0.32	0.85

URBAN FUNCTION CLASS

UNDIVIDED						
2 LANES	1.73	0.32	0.39	2.51	0.45	0.47
ALL LANES	2.02	0.39	0.35	3.11	0.58	0.43
DIVIDED						
4 LANES	1.62	0.27	0.32	1.94	0.32	0.34
6 LANES	1.73	0.27	0.25	2	0.32	0.27
ALL LANES	1.73	0.28	0.31	2.1	0.34	0.33

CONTROLLED ACCESS (FULL)

RURAL FUNCTION CLASS

UNDIVIDED						
2 LANES	2.13	0.36	0.56	2.64	0.44	0.67
ALL LANES	2.26	0.37	0.57	2.79	0.44	0.67
DIVIDED						
4 LANES	1.07	0.16	0.45	1.11	0.16	0.46
5 LANES	1.01	0.16	0.47	1.04	0.16	0.5
6 LANES	1.11	0.23	0.51	1.23	0.24	0.55
ALL LANES	1.08	0.16	0.45	1.11	0.17	0.46

URBAN FUNCTION CLASS

	MAINLINE ACCIDENTS ONLY			MAINLINE & JUNCTURE ACCIDENTS		
UNDIVIDED	ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM	ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM
ALL LANES	1.46	0.21	0.27	2.1	0.31	0.34
DIVIDED						
4 LANES	1.08	0.16	0.29	1.18	0.18	0.3
5 LANES	0.99	0.16	0.29	1.14	0.18	0.31
6 LANES	1.16	0.18	0.19	1.26	0.19	0.21
7 LANES	1.42	0.2	0.28	1.47	0.21	0.33
ALL LANES	1.12	0.17	0.22	1.22	0.19	0.24

AVERAGE INTERSECTION ACCIDENT RATES FOR STATE HIGHWAYS BY INTERSECTION TYPE

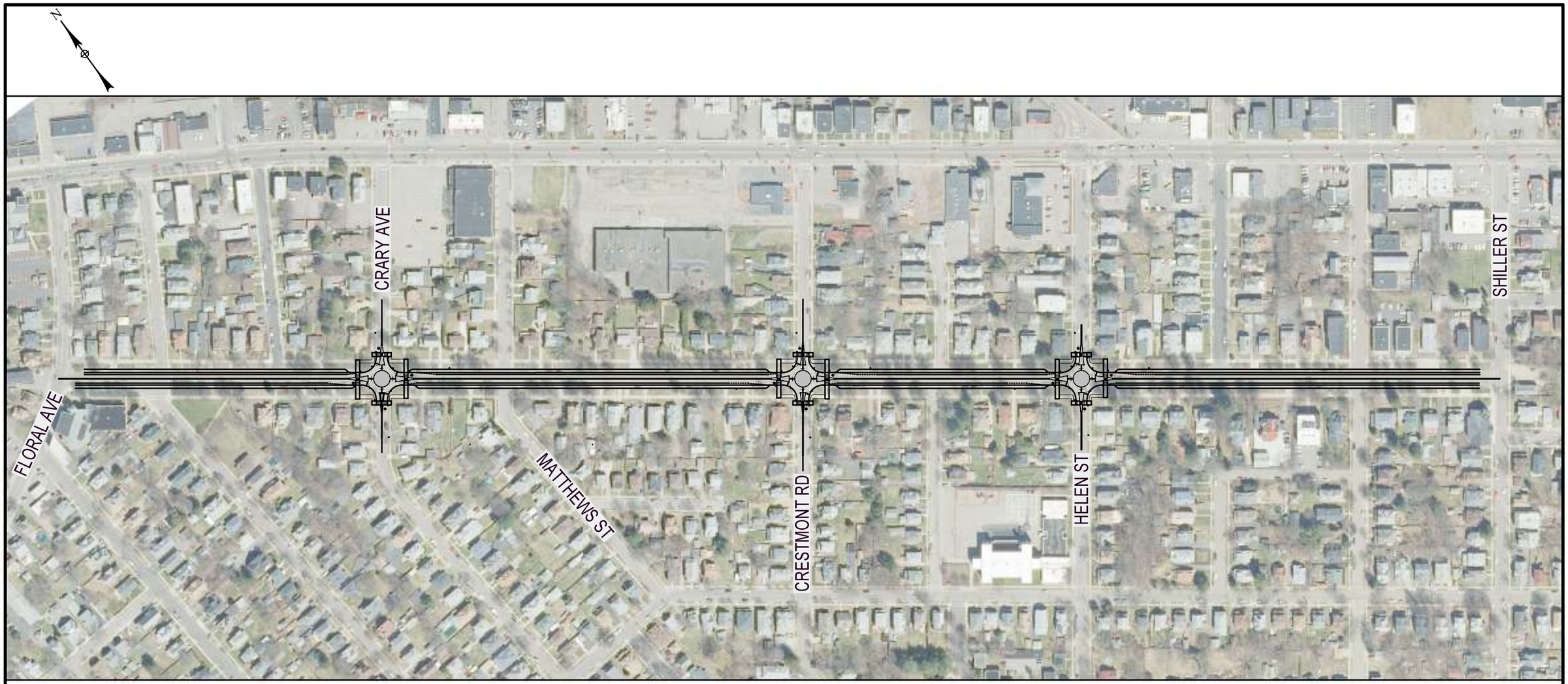
(BASED ON ACCIDENT DATA January 1, 2015 TO December 31, 2016)

INTERSECTION TYPE RURAL FUNCTION CLASS	ALL TYPES ACC/MEV	WET ROAD ACC/MEV	LEFT TURN ACC/MEV	REAR END CC/ME	OVER-TAKING ACC/MEV	RIGHT ANGLE ACC/MEV	RIGHT TURN ACC/MEV	HEAD ON ACC/MEV	SIDE-SWIPE ACC/MEV
3 LEGGED INTERSECTIONS									
SIGNAL ALL LANES	0.26	0.04	0.03	0.09	0.03	0.03	0.01	0.00	0.00
SIGN ALL LANES	0.17	0.02	0.01	0.03	0.01	0.01	0.00	0.00	0.00
NO CONTROL ALL LANES	0.11	0.02	0.01	0.02	0.01	0.01	0.00	0.00	0.00
4LEGGED&>INTERSECTIONS									
SIGNAL ALL LANES	0.58	0.09	0.06	0.16	0.03	0.15	0.02	0.01	0.01
SIGN ALL LANES	0.35	0.05	0.03	0.05	0.01	0.1	0.01	0	0.01
NO CONTROL ALL LANES	0.23	0.05	0.02	0.05	0.01	0.04	0	0.01	0
ON RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.19	0	0	0.19	0	0	0	0	0
MERGE W/ 2&> LANES	0.03	0.01	- -	- -	- -	- -	- -	- -	- -
OFF RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0	0	- -	- -	- -	- -	- -	- -	- -
MERGE W/ 2&> LANES	0.08	0.01	- -	0.01	0	- -	- -	- -	- -

INTERSECTION TYPE URBAN FUNCTION CLASS	ALL TYPES ACC/MEV	WET ROAD ACC/MEV	LEFT TURN ACC/MEV	REAR END CC/ME	OVER-TAKING ACC/MEV	RIGHT ANGLE ACC/MEV	RIGHT TURN ACC/MEV	HEAD ON ACC/MEV	SIDE-SWIPE ACC/MEV
3 LEGGED INTERSECTIONS									
SIGNAL 1-4 LANES	0.32	0.05	0.03	0.12	0.04	0.04	0.01	0	0.01
SIGNAL W/ LEFT TURN 5 & > LANES	0.14	0.02	0.01	0.05	0.03	0.02	0	0	0
SIGNAL W/0 LEFT TURN 5 & > LANES	0.14	0.02	0.01	0.06	0.03	0.01	0	0	0
SIGN 1-3 LANES	0.18	0.03	0.02	0.06	0.01	0.02	0	0	0
SIGN 4 LANES	0.12	0.02	0.01	0.04	0.01	0.02	0	0	0
SIGN 5 & > LANES	0.06	0.01	0	0.02	0.01	0.01	0	0	0
NO CONTROL ALL LANES	0.05	0.01	0	0.02	0.01	0	0	0	0
4 LEGGED &> INTERSECTIONS									
SIGNAL 1-4 LANES	0.52	0.08	0.05	0.21	0.06	0.08	0.02	0.01	0.01
SIGNAL W/ LEFT TURN 5 & > LANES	0.25	0.04	0.01	0.11	0.04	0.03	0.01	0	0
SIGNAL W/0 LEFT TURN 5 & > LANES	0.2	0.03	0.02	0.06	0.03	0.04	0.01	0	0
SIGN 1-3 LANES	0.29	0.04	0.03	0.08	0.02	0.07	0.01	0	0
SIGN 4 & > LANES	0.16	0.02	0.01	0.05	0.01	0.03	0	0	0
NO CONTROL ALL LANES	0.19	0.03	0.01	0.07	0.02	0.04	0.01	0	0
ON RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.17	0	0.01	0.12	0.01	0.01	0	0	0
MERGE W/ 2 LANES	0.03	0	0	0.01	0	0	0	0	0
MERGE W/ 3&> LANES	0.01	0	0	0.01	0	0	0	0	0
OFF RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.18	0.03	0	0.06	0.06	0.01	- -	- -	- -
MERGE W/ 2 LANES	0.04	0.01	- -	0.01	0.01	- -	- -	- -	- -
MERGE W/ 3&> LANES	0.02	0	- -	0.01	- -	- -	- -	- -	- -

Appendix D

Overall Plan and Intersection Plans



PREPARED AND RECOMMENDED BY:

DATE

McFarland Johnson
49 COURT ST
BINGHAMTON, NY 13902

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

MINI-ROUNDABOUT STUDY

CITY OF BINGHAMTON

COUNTY: BROOME

BRIDGES

CULVERTS

ALL DIMENSIONS IN FT-IN UNLESS OTHERWISE NOTED.
ALL ELEVATIONS ARE IN FEET.

LOCATION PLAN

PROJECT NUMBER

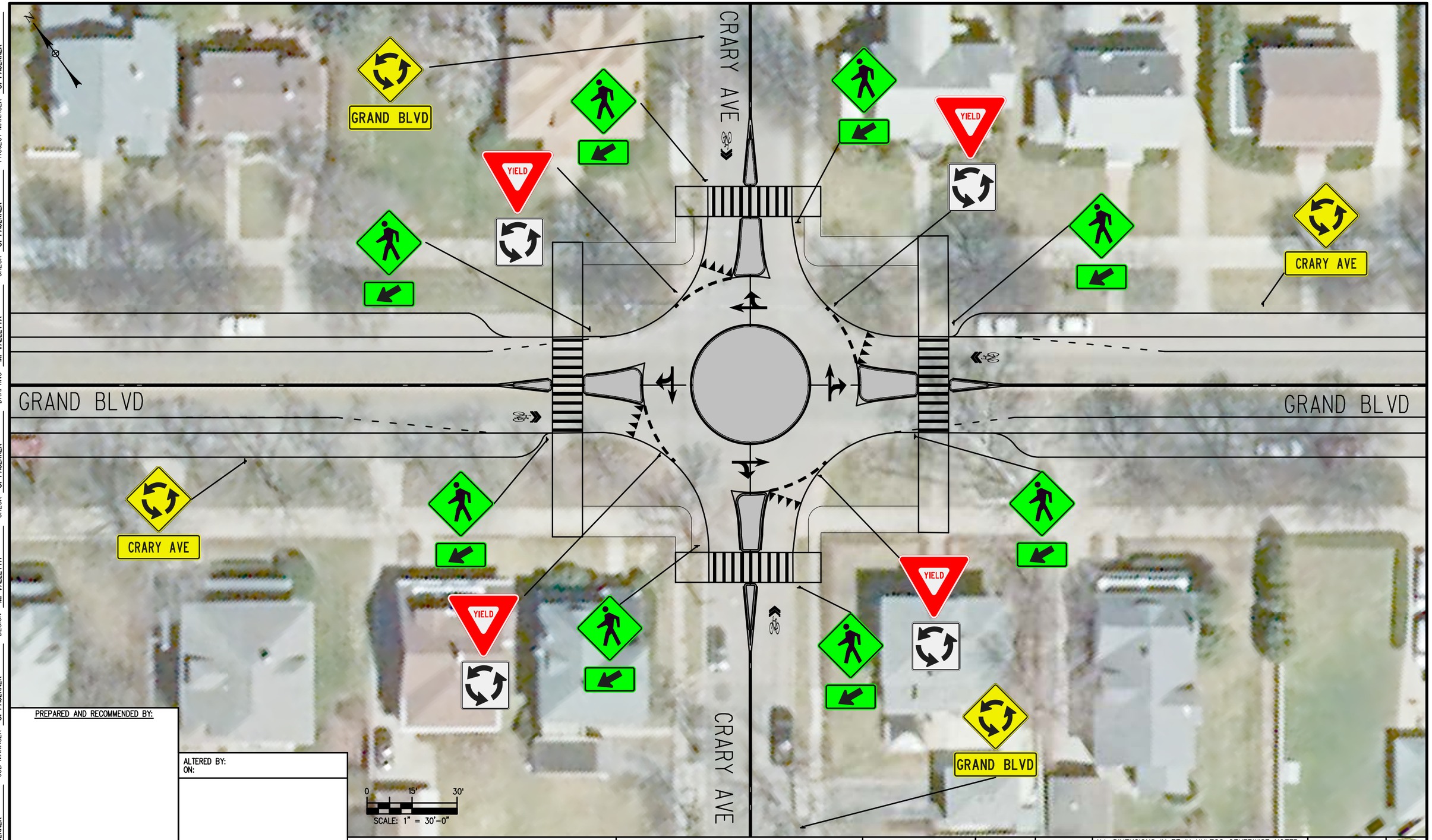
DRAWING NO. LCP- 1

SHEET NO. 1

DOCUMENT NAME: XXXXXX_CPH_PLAN_INDEX.DGN

DESIGN SUPERVISOR S. FAULKNER
JOB MANAGER S. FAULKNER
DESIGN
CHECK S. FAULKNER
PROJECT MANAGER S. FAULKNER
DRAFTING
CHECK S. FAULKNER

FILE NAME = M:\18336.66 BMTS MINI-ROUNDABOUT STUDY\DRAWINGS\SHEET FILES\XXXXXX_CPH_PLAN_INDEX.DGN
DATE/TIME = 1/20/2020 2:06:42 PM
USER = MVALLETTA



PREPARED AND RECOMMENDED BY:

DATE

McFarland Johnson
49 COURT ST
BINGHAMTON, NY 13902

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

MINI-ROUNDABOUT STUDY

CITY OF BINGHAMTON

COUNTY: BROOME

BRIDGES

CULVERTS

ALL DIMENSIONS IN FT-IN UNLESS OTHERWISE NOTED.
ALL ELEVATIONS ARE IN FEET.

GENERAL PLAN

PROJECT NUMBER

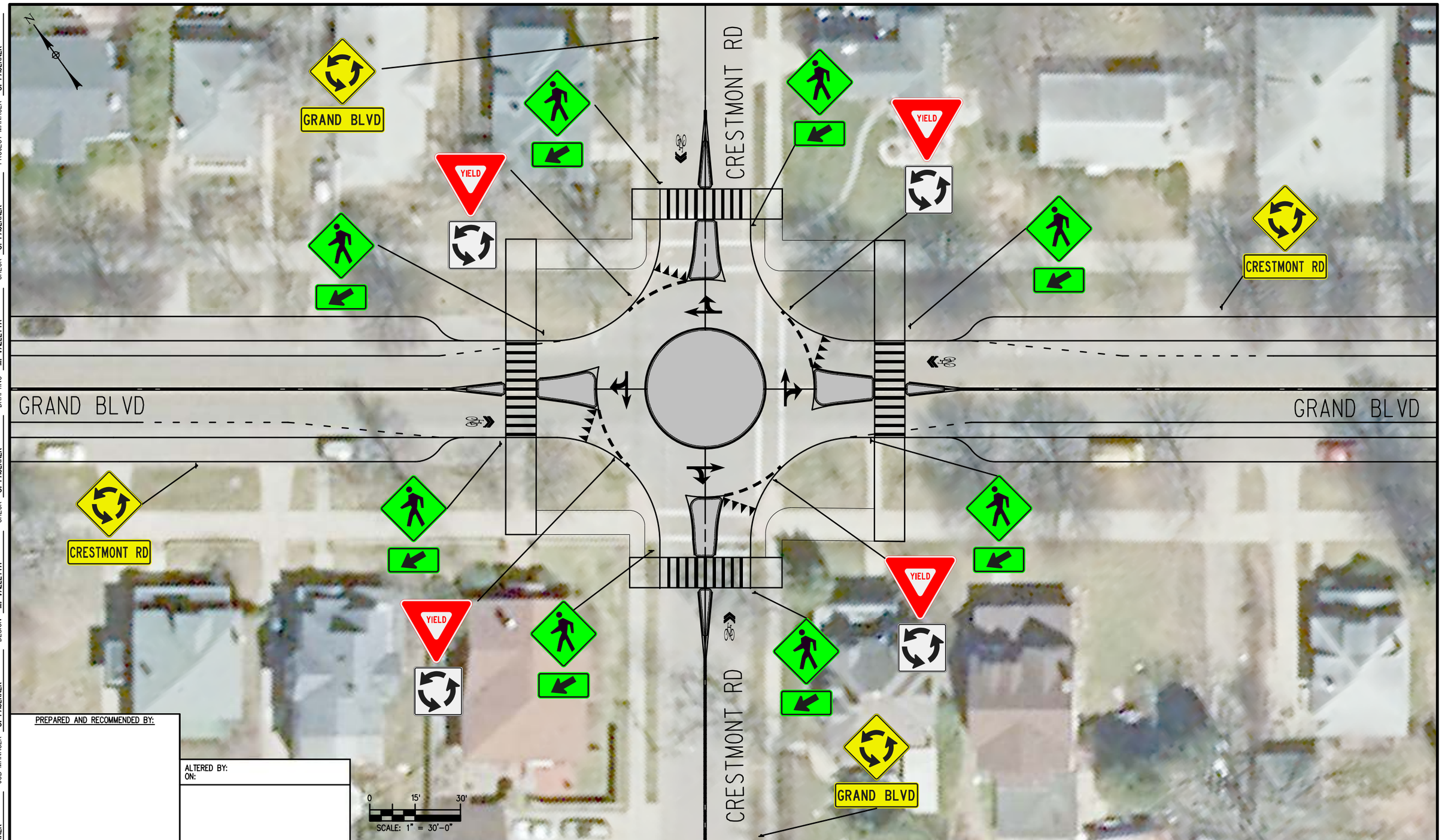
DRAWING NO. GNP- 1

SHEET NO. 2

DOCUMENT NAME: XXXXXX_CPH_PL-1.DGN

DESIGN SUPERVISOR S. FAULKNER | JOB MANAGER S. FAULKNER | DESIGN M. VALLETTA | CHECK S. FAULKNER | PROJECT MANAGER S. FAULKNER | CHECK M. VALLETTA | DRAFTING M. VALLETTA

FILE NAME = M:\18336.06 BMTS MINI-ROUNDABOUT STUDY\DRAWINGS\SHEET FILES\XXXXXX_CPH_PL-1.DGN
DATE/TIME = 1/20/2020 2:06:52 PM
USER = MVALLETTA



PREPARED AND RECOMMENDED BY:

DATE

McFarland Johnson
49 COURT ST
BINGHAMTON, NY 13902

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

MINI-ROUNDABOUT STUDY

CITY OF BINGHAMTON

COUNTY: BROOME

BRIDGES

CULVERTS

ALL DIMENSIONS IN FT-IN UNLESS OTHERWISE NOTED.
ALL ELEVATIONS ARE IN FEET.

GENERAL PLAN

PROJECT NUMBER

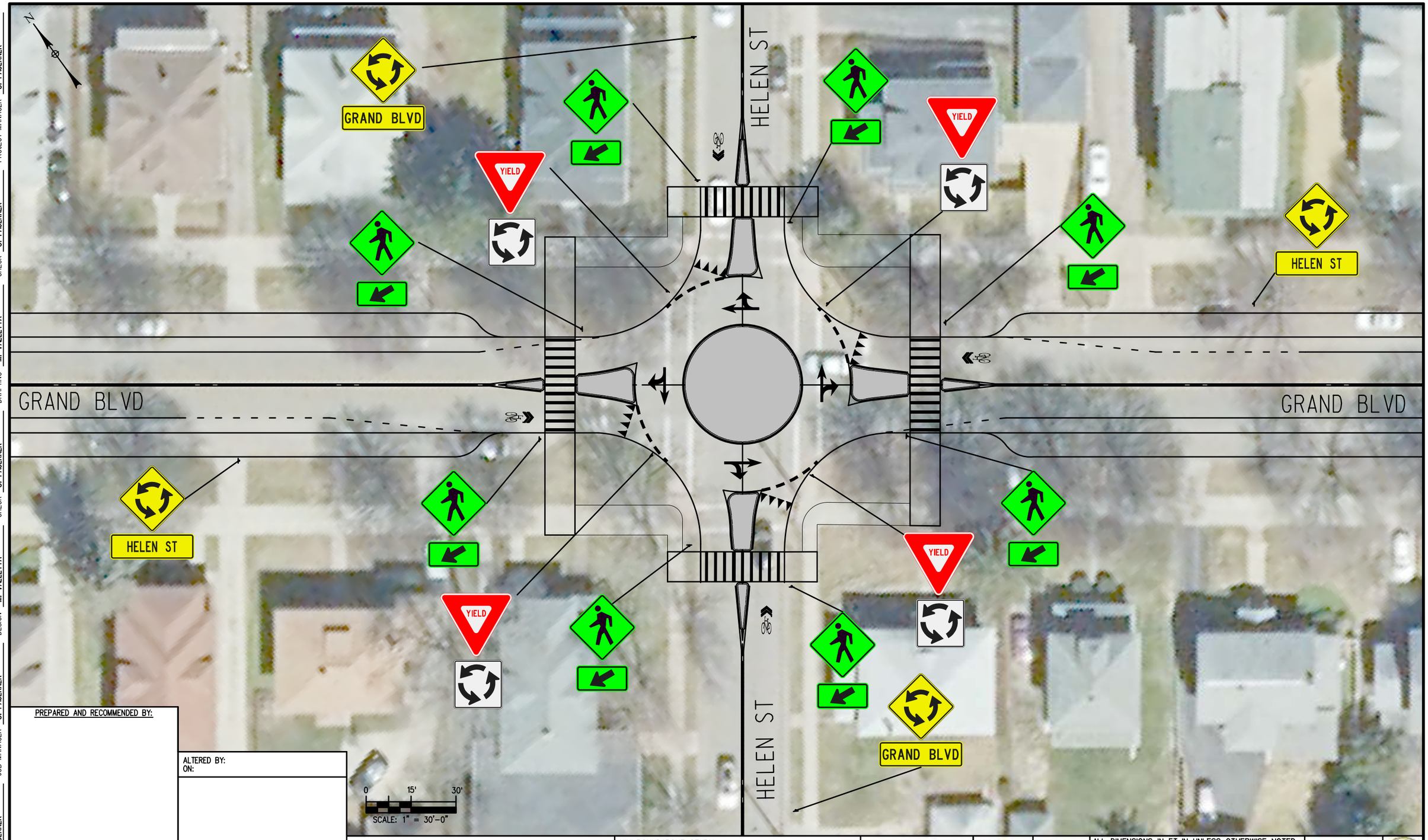
DRAWING NO. GNP- 2

SHEET NO. 3

DOCUMENT NAME: XXXXXX_CPH_PL-2.DGN

DESIGN SUPERVISOR S. FAULKNER
JOB MANAGER S. FAULKNER
DESIGN M. VALLETTA
CHECK S. FAULKNER
DRAFTING M. VALLETTA
PROJECT MANAGER S. FAULKNER

FILE NAME = \\CLIENT\M$\18336.06 BMTS MINI-ROUNDABOUT STUDY\DRAWINGS\SHEET FILES\XXXXXX_CPH_PL-2.DGN
DATE/TIME = 1/28/2020 2:06:57 PM
USER = MVALLETTA



PREPARED AND RECOMMENDED BY:

DATE

McFarland Johnson
49 COURT ST
BINGHAMTON, NY 13902

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

MINI-ROUNDABOUT STUDY

CITY OF BINGHAMTON

COUNTY: BROOME

BRIDGES

CULVERTS

ALL DIMENSIONS IN FT-IN UNLESS OTHERWISE NOTED.
ALL ELEVATIONS ARE IN FEET.

GENERAL PLAN

PROJECT NUMBER

DRAWING NO. GNP- 3

SHEET NO. 4

DOCUMENT NAME: XXXXXX_CPH_PL-3.DGN

DESIGN SUPERVISOR S. FAULKNER
JOB MANAGER S. FAULKNER
DESIGN M. VALLETTA
CHECK S. FAULKNER
DRAFTING M. VALLETTA
PROJECT MANAGER S. FAULKNER

FILE NAME = \\CLIENTS\M\18336.06 BMTS MINI-ROUNDABOUT STUDY\DRAWINGS\SHEET FILES\XXXXXX_CPH_PL-3.DGN
DATE/TIME = 1/20/2020 2:07:01 PM
USER = MVALLETTA

Appendix E

Construction Cost Estimate

CONSTRUCTION COST ESTIMATE FOR MINI-ROUNDABOUT

ITEM NUMBER	ITEM DESCRIPTION	UNITS	UNIT COST	QUANTITY	COST
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	$ 80.00	150	$ 12,000.00
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY	$ 85.00	100	$ 8,500.00
402.127203	12.5 F2 TOP COURSE HMA, 70 SERIES COMPACTION	TON	$ 100.00	140	$ 14,000.00
402.378903	37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION	TON	$ 180.00	60	$ 10,800.00
407.0102	DILUTED TACK COAT	GAL	$ 12.00	75	$ 900.00
490.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	$ 2.50	1100	$ 2,750.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	$ 800.00	15	$ 12,000.00
608.01020005	COLORED AND IMPRINTED PORTLAND CEMENT CONCRETE SIDEWALK	CY	$ 1,500.00	25	$ 37,500.00
609.0902	OPTIONAL CURB (PRECAST TYPE PM100 OR CAST-IN-PLACETYPE M100 OR GRANITE TYPE E100)	LF	$ 75.00	500	$ 37,500.00
610.1403	TOPSOIL - LAWNS	CY	$ 125.00	5	$ 625.00
610.1602	TURF ESTABLISHMENT - LAWNS	SY	$ 12.00	10	$ 120.00
627.50140008	CUTTING PAVEMENT	LF	$ 7.50	625	$ 4,687.50
645.5101	GROUND-MOUNTED SIGN PANELS WITHOUT Z-BARS	SF	$ 31.00	80	$ 2,480.00
645.5201	GROUND-MOUNTED SIGN PANELS WITHOUT Z-BARSHIGH- VISIBILITY SHEETING	SF	$ 40.00	70	$ 2,800.00
645.81	TYPE A SIGN POSTS	EACH	$ 185.00	21	$ 3,885.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	$ 2.00	2000	$ 4,000.00
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	$ 2.75	500	$ 1,375.00
685.14	WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	EACH	$ 165.00	25	$ 4,125.00
	SUBTOTAL				**$ 160,047.50**
	WORK ZONE TRAFFIC CONTROL (10%)	LS	$ 16,004.75	1	$ 16,004.75
	SURVEY (2%)	LS	$ 3,200.95	1	$ 3,200.95
	SUBTOTAL				**$ 179,253.20**
	CONTINGENCIES (20%)				$ 35,850.64
	SUBTOTAL				**$ 215,103.84**
	MOBILIZATION (4%)				$ 8,604.15
	TOTAL				**$ 223,707.99**
				SAY	**$ 250,000.00**