



CITY of NOVI CITY COUNCIL

Agenda Item F
August 24, 2015

SUBJECT: Approval of Traffic Control Order 15-18 to prohibit left turns from westbound Citygate Drive to southbound Beck Road between the hours of 7 AM and 7 PM.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BTC RFA*

CITY MANAGER APPROVAL: *WPA*

BACKGROUND INFORMATION:

Citygate Drive is a public street under the jurisdiction of the City. It was constructed as part of a Planned Rezoning Overlay (PRO) for not only the USA 2 Go development on the northeast corner of Beck and Citygate, but for eventual extension to the east with a connection back to Grand River Avenue. The extension of the street is set to occur once development occurs to the east as a condition of the development agreement.

The parcel at the southeast corner of Citygate and Beck Road was not part of the PRO, but has access to Citygate. A site plan has been submitted for that site to develop Citygate Marketplace, which would contain retail and restaurant uses. The City's traffic consultant, AECOM, requested information from the applicant regarding the existing and proposed traffic for the intersection of Citygate and Beck. In reviewing the existing conditions, AECOM noted that there are existing safety concerns with the operation of the Beck/Citygate intersection, even without the Citygate Marketplace development.

In the attached report, AECOM reviewed the traffic patterns and historical crash data for the Beck/Citygate intersection and is recommending a prohibition on left turns from westbound Citygate to southbound Beck between 7 AM and 7 PM. There are several crashes at the intersection related to left turns. The traffic consultant believes that this crash pattern may be mitigated by removing the left turn movement at this location. Additionally, the report notes that there are limited gaps in traffic to allow left turning vehicles to make the turn, which leads to desperate maneuvers and a higher crash rate.

Traffic control orders are required under the Uniform Traffic Code to enforce traffic control signs that have been installed on public streets. Therefore, staff has proposed the attached traffic control order based on the recommendation of the consultant for approval by City Council. Once approved, the appropriate signs will be installed.

RECOMMENDED ACTION: Approval of Traffic Control Order 15-18 to prohibit left turns from westbound Citygate Drive to southbound Beck Road between the hours of 7 AM and 7 PM.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Markham				

	1	2	Y	N
Council Member Mutch				
Council Member Poupard				
Council Member Wrobel				

Citygate/Beck Intersection

Location Map



Proposed Prohibited Left Turn Movement

Proposed No Left Turn Sign

USA 2 GO

Citygate Dr

Proposed Citygate Marketplace

Beck Rd

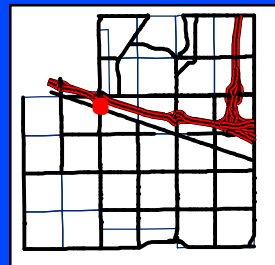
Grand River Ave

Map Author: Brian Coburn
Date: 8/17/15
Project:
Version #:

Amended By:
Date:
Department:

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 232 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



City of Novi

Engineering Division
Department of Public Services
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org

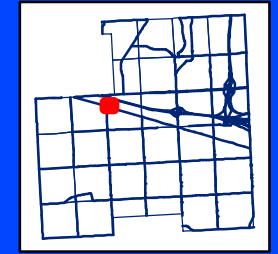
0 15 30 60 90
Feet

1 inch = 94 feet



Grand River Right Turn Lane Extension at Beck Road

Novi Mile Overlay



0 25 50 100 150 200
Feet
1 inch = 100 feet



City of Novi
Engineering Division
Department of Public Services
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org

Map Author: Croy
Date: 10/22/13
Project: Grand River Rt Trn Ln Ext
Version #: v1.0

MAP INTERPRETATION NOTICE

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**CITY OF NOVI
TRAFFIC CONTROL ORDER**

____ SPEED
____ PARKING
 X OTHER

DATE OF ORDER: 8/17/2015

CONTROL NUMBER: 15-18

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

CITYGATE

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE NO LEFT TURN SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

NO LEFT TURN FROM WESTBOUND CITYGATE TO SOUTHBOUND BECK BETWEEN 7 AM AND 7 PM



Brian Coburn, P.E. - Traffic Engineer

Dated: 8/17/2015

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER 15-18 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

NO LEFT TURN FROM WESTBOUND CITYGATE TO SOUTHBOUND BECK BETWEEN 7 AM AND 7 PM

ADOPTED AT THE REGULAR MEETING OF
CITY COUNCIL ON 8/24/2015.

By: _____
Robert J. Gatt, Mayor

By: _____
Maryanne Cornelius, Clerk

Memorandum

To	Brian Coburn, PE	Page	1
CC			
Subject	Citygate Drive and Beck Road Left Turn Operations Review		
From	Matt Klawon, PE Brandon Stakleff, PhD		
Date	August 12, 2015		

Introduction

The City of Novi requested AECOM to conduct a review of the existing left turn operations to determine whether the existing operations at the intersection may warrant the prohibition of the westbound left turn movement for safety and operational concerns based upon existing conditions. Citygate is a public roadway that provides access to existing businesses located east of Beck Road. The intersection of Citygate Drive and Beck Road lies north of Grand River Avenue and south of the single-point urban interchange (SPUI) serving Interstate-96 (I-96). In addition to the traffic present on Beck Road, a new development is proposed along Citygate Drive that will consist of three new businesses, including a coffee shop, fast-food restaurant, and retail space. A traffic impact assessment at the intersection of Citygate Drive and Beck Road was conducted by Fleis & Vandenbrink, which forecasted the anticipated increases in traffic related to the construction of the new development. The results of the traffic impact assessment indicate that the level of service (LOS) for westbound vehicles turning left from Citygate Drive to Beck Road will operate at the breakdown LOS F. At this breakdown level, vehicles may begin to queue and cause impatience among drivers; thus, enticing drivers to complete risky maneuvers. Queuing occurs when vehicles to wait behind one another for their turn to maneuver through the intersection. Any new development along Citygate Drive may further increase queuing and cause the westbound left turn movement at the intersection to be inadequately serviced, creating negative operational and safety related impacts for these vehicles. The site conditions examined within this review cover those prior to the construction of the new development.

Existing Conditions

Citygate Drive is a two-lane road, which connects to and creates a three-way intersection at Beck Road. Beck Road operates with two-lanes of traffic in both the north and southbound directions with a southbound left turning lane approaching the intersection. Currently, the intersection of Citygate Drive and Beck Road is a non-signalized intersection with westbound left and right turn movements from Citygate Drive controlled by a stop sign. The north and southbound movements traveling on Beck Road are free flowing and divided by a narrow raised concrete median. The narrow raised median does not provide a storage space for westbound left turn traffic and currently operates in a one-stage

movement by most drivers. For reference, a two-stage movement would allow westbound vehicle to seek refuge if needed in the median to complete their turn. As reported by Fleis & Vandenbrink, the existing concrete median is 24 feet wide and the minimum required width for a two-stage turn is 25 feet.

Data Collection and Field Observations

Vehicle Gap Study

Traffic patterns and movements at the intersection of Citygate Drive and Beck Road were collected by Traffic Data Collection Inc. (TDC) on March 31, 2015 for the Fleis & Vandenbrink study. The traffic study performed by TDC also included a vehicle gap study, which gathered the number of acceptable gaps between vehicles for those traveling northbound and southbound on Beck Road to support a westbound left turn movement. The frequency of times that an acceptable gap was present was determined based on five-minute intervals for both the peak AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) times. In order for a westbound left turn vehicle to travel through the intersection and cross the path of other vehicles', the westbound left turn driver must be provided an acceptable gap in traffic to complete the maneuver safely. The gap, or amount of time, that a driver needs to safely make the turning maneuver is defined as the critical headway. The critical headways for the southbound left turning movement and the westbound left and right turning movements are presented in Table 1 below.

Table 1. Beck Road and Citygate Drive Gap Study.

Intersection	Movement	Critical Headway	Number of Available Gaps			
			AM Peak		PM Peak	
			7:00 to 8:00	8:00 to 9:00	4:00 to 5:00	5:00 to 6:00
Beck Road & Citygate Drive	SB LT	4.1	72	73	71	83
	WB RT	6.9	53	48	43	50
	WB LT	6.8	20	11	14	2

Note: Table recreated from Fleis & Vandenbrink memo on April 3, 2015.

From Table 1, it should be noted that the critical headway for the southbound left turn is less than both westbound turning movements, which indicates that the time required to complete the southbound left turn movement is shorter than those necessary for the remaining studied turns. Even though the critical headway for the southbound turning movement requires less time to complete, the ultimate indication of vehicles being capable of completing their turning movement is in the number of available gaps that are greater than the critical headway. The critical headway identified in Table 1 for the westbound left turn is based on the execution of a one-stage turning movement. Due to the existing conditions described above, vehicles must maneuver through the intersection in one continuous motion, not stopping and seeking refuge within the median. In addition to having less number of gaps, the gaps for the westbound left turn were generally shorter and had no gaps with an interval of greater than 29 seconds. This is important because as gap length increases multiple drivers may be able to maneuver through the same gap.

The number of available gaps provides a good basis of how often vehicles may pass through traffic; however, the influence of the number of conflicting vehicles creating these gaps is also of importance.

There is a large difference in the presence of conflicting vehicles; for example, when there may be 10 available gaps and 100 versus 1,000 conflicting vehicles per hour. In this example, the same numbers of gaps are present for both situations. However, when only 100 conflicting vehicles are present, the gaps may generally be longer in time than when 1,000 conflicting vehicles are present. A greater grasp of the influence of conflicting traffic is presented in the following table.

Table 2. Beck Road Traffic Volumes

Intersection	Movement	Peak Hour Volume		Peak Hour Gaps	
		AM Peak	PM Peak	AM Peak	PM Peak
Beck Road & Citygate Drive	SB Thru	1186	1086	Free	Free
	SB Left	119	78	145	154
	NB Thru	1253	1469	Free	Free
	NB Right	124	86	Free	Free
	WB Left	37	20	31	16
	WB Right	181	126	101	93

Note: Traffic volumes obtained from Fleis & Vandenbrink memo July 24, 2015

The vehicles conflicting with both the southbound left turn and the westbound right turn are the northbound through traffic, relating to 1,253 and 1,469 vehicles during the peak AM and PM hours, respectively. The vehicles conflicting with the westbound left turn take into consideration both the Beck Road northbound through traffic and the southbound through traffic, relating to 2,682 and 2,719 vehicles during the peak AM and PM hours, respectively. Therefore, not only does the westbound left turn have a small number of available gaps, at 31, but the volume of traffic present is conducive to those gaps generally having a short time interval. During the peak AM and PM hours, there are 37 and 20 vehicles, respectively, attempting to complete the westbound left turn maneuver, which is greater than the number of available gaps. As described previously, not only are the number of gaps smaller but also the length of the gaps are shorter. For the southbound left and westbound right turning movements, this would alleviate queuing as multiple vehicles may maneuver through the same gap. For the westbound left turn, the lack of long gaps creates the need for each vehicle to maneuver through each gap individually. Overall, the number of vehicles attempting the turning movement is greater than the availability of gaps present. Thus, it may be assumed that there is not an adequate gap available for each vehicle and drivers are attempting risky maneuvers.

As a result of having a maximum of 20 adequately available gaps per hour, vehicles may be more likely to attempt the risky behavior of traveling through a gap that is less than the critical headway or completing two-stage movements using the narrow median. The delay in time that a vehicle may have to wait for an adequate gap to appear then relates to the LOS of the intersection and the respective turning movements. As the delay increases, the LOS decreases. The LOS at the intersection of Citygate Drive and Beck Road may be seen in the following table.

Table 3. Intersection Level of Service.

Intersection	Control	Movement	AM Peak		PM Peak	
			Delay (s/veh)	LOS	Delay (s/veh)	LOS
Beck Road & Citygate Drive	Stop (Minor)	SB LT	17.0	C	17.6	C
		WB RT	33.5	D	28.8	D
		WB LT	60.8	F	51.8	F

Note: Vehicle delay and intersection LOS obtained from Fleis & Vandenbrink memo July 24, 2015.

The LOS of each approach is generally acceptable, as they are not fully broken down based on high levels of delay. The worst LOS, present within the westbound left turn movement, is of greatest concern. Fleis & Vandenbrink identified the westbound left turn to operate at LOS F during both the AM and PM peak travel periods. The LOS F indicates that the turning movement is failing and providing too much delay to vehicles.

The traffic impact assessment conducted by Fleis & Vandenbrink examined the traffic patterns at the peak AM and PM hours, which allowed for the identification of the available gaps for vehicles to complete each of the studied turning movements. While these conditions are necessary to investigate and understand, the relationship of the peak hours of traffic compared to the remaining hours of the day must be examined. A full inspection of all 24 hours of vehicular counts may be seen in the following table.

Table 4. Beck Road 24-Hour Vehicle Counts.

Time	Southbound	Northbound	Time	Southbound	Northbound
	Hourly Count	Hourly Count		Hourly Count	Hourly Count
0:00-1:00	89	98	12:00-13:00	1,240	1,097
1:00-2:00	46	57	13:00-14:00	1,136	1,123
2:00-3:00	36	38	14:00-15:00	1,155	1,168
3:00-4:00	30	54	15:00-16:00	1,175	1,243
4:00-5:00	112	52	16:00-17:00	1,219	1,491
5:00-6:00	380	232	17:00-18:00	1,250	1,467
6:00-7:00	866	838	18:00-19:00	1,083	1,160
7:00-8:00	1,259	1,380	19:00-20:00	796	840
8:00-9:00	1,454	1,331	20:00-21:00	607	581
9:00-10:00	1,109	1,066	21:00-22:00	538	451
10:00-11:00	1,031	973	22:00-23:00	308	265
11:00-12:00	1,110	1,015	23:00-24:00	160	176

Note: 24-hour traffic volumes obtained from Southeast Michigan Council of Governments

The vehicle counts for the southbound traffic were recorded over a 24-hour period covering June 17, 2014 to June 18, 2014. The location of the southbound counts was at a site along Beck Road between the intersections of Beck Road/Citygate Drive and Beck Road/Grand River Avenue, which would account for vehicles passing south through the intersection of Beck Road and Citygate Drive. The vehicle counts for the northbound traffic were recorded over a 24-hour period covering July 14, 2014 to July 15, 2014. The location of the northbound counts was at a site along Beck Road between

the intersections of Beck Road/Citygate Drive and the I-96 SPUI, which would account for vehicles passing north through the intersection of Beck Road and Citygate Drive. It may be noted that the peak hours identified by Fleis & Vandenbrink are seen to contain the highest number of vehicles passing through both the north and southbound count locations; however, there is still a large influx of traffic from 7:00 AM through 7:00 PM. Even though these remaining times are not a part of the peak hours, the volume of vehicles on the roadway may influence the ability of vehicles to properly complete their respective turning movements.

Crash Data

AECOM gathered historic crash data along both Citygate Drive and Beck Road. The data was extracted from the Traffic Improvement Association's (TIA) Traffic Crash Analysis Tool (TCAT) for a three-year time period ranging from January 1, 2012 through December 31, 2014. During this time period, fifty-four crashes occurred along both roadways, with eight of the fifty-four being attributable to the intersection. Of these eight crashes, there was one incapacitating injury, one possible injury, and six property damage only crashes. Additionally, six of the eight crashes occurred in the year 2014 and five of the eight crashes occurred when a vehicle was attempting to make a westbound left-hand turn from Citygate Drive. A breakdown of the eight, attributable crashes may be seen in Table 5.

Table 5. Historical crashes near the intersection of Citygate Drive and Beck Road.

Crash ID	Crash Date	Crash Type	Comments
8350843	5/12/2012 3:52 PM	Angle	Vehicle 2 was northbound on Beck Road and had the right-of-way. Vehicle 1 was trying to make a left turn from the east side of Beck to southbound Beck Road and was struck by Vehicle 2.
8583398	2/22/2013 7:51 AM	Angle	Vehicle 2 was on northbound Beck when vehicle 1 pulled out of a gas station driveway, failing to yield the right-of-way to vehicle 2. Vehicle 1 brushed the right front of vehicle 2 and left the scene.
8873551	1/23/2014 7:30 AM	Sideswipe/ Same-direction	Driver 1 and Driver 2 both stated that they started eastbound on Citygate with the intention of turning left onto (southbound) Beck Road. Vehicles stopped in the center of Beck Road's median. Driver 1 said he thought vehicle 2 started turning (continued turning) on to Beck. Driver 1 started turning left and struck vehicle 2.
8879020	1/26/2014 9:47 AM	Rear-end	Vehicles 1 and 2 were northbound on Beck Road. Driver 2 was attempting to make a right turn onto Citygate Drive. Driver 1 was unable to stop within a safe distance. Vehicle 1 struck the rear of vehicle 2.
8940433	4/11/2014 2:48 PM	Rear-end	Unit 2 was in the left turn around from northbound Beck on to southbound Beck, North of Brand River. Unit 2 was sitting in the turn around waiting for traffic to clear. Unit 1 was coming out of the gas station. Unit 1 proceeded to the left turn around and failed to stop in assured and cleared distance. Unit 1 collided with unit 2.
9012903	7/17/2014 3:10 PM	Angle	Vehicle 2 was northbound on Beck. Vehicle 1 was on Citygate westbound attempting to make a left turn onto southbound Beck. Driver 1 failed to yield to vehicle 2. Vehicle 2 struck vehicle 1.
9060288	9/22/2014 12:44 PM	Angle	Driver 1 exited a driveway intending on turning southbound on Beck Road. Driver 2 was southbound on Beck with the right of way. Driver 1 crossed the center island and pulled into southbound traffic not seeing vehicle 2. Vehicle 1 struck vehicle 2 on the driver's side.
9070950	9/29/2014 9:00 AM	Rear-end	Unit 2 was stopped at a stop sign waiting for traffic to clear to make a right hand turn. Unit 2 did not yield to unit 2 and rear-ended unit 1.

Upon review of the crash data, it is observed that patterns are forming related to the availability of adequate gaps for vehicles to make a safe turning movement. There are two patterns emerging relative to the lack of adequate gaps, vehicles improperly judging the timing needed to pass through both the right-of-way of north or southbound traffic and the need for vehicles to seek refuge at the

median of Beck Road due to inadequate gaps in traffic.. The need to seek refuge may be seen within the crash that occurred on January 23, 2014, where one vehicle sought refuge and the following vehicle anticipated the initial vehicle to continue through the left turning movement. While the ability to seek refuge in the median may be an option for smaller vehicles, the physical design of the median does not support this use.

The second method for inadequate gap timing is related to vehicles violating the right-of-way of either north or southbound traffic. The interference of traffic in this manner may be seen within four different crashes. The vehicles in question attempted to judge the available gap timing properly, in order to complete the planned maneuver. However, the amount of time present within the gap was not satisfactory and the vehicle violated the right-of-way of the oncoming traffic, resulting in a crash.

Analysis and Recommendations

AECOM has reviewed the traffic patterns and historical crash data collected throughout this study and developed the suggestion of prohibiting the westbound left turning movement for consideration to improve the intersection of Citygate Drive and Beck Road. The prohibition of the left turn movement is suggested for the time periods of 7 AM to 7 PM. The duration of the prohibition is based upon the volume of traffic that is traveling along Beck Road during these time periods, times of when associated crashes are occurring and the similarities in traffic volumes during this time to those for which we have known gap data from the AM and PM peak periods.

The prohibition of the left turn would remove vehicles from conflicting with traffic; thus, nearly eliminating the occurrence of crashes related to this turning movement. The Federal Highway Safety Administration (FHWA) indicates, within publication FHWA-HRT-04-091, that the prohibition of a left turn may additionally reduce the number of rear-end collisions by an estimated 50%. Both rear-end collisions and crashes related to the westbound left turning movement are seen to have occurred at the intersection of Citygate Drive and Beck Road. By prohibiting the westbound turning movement, these types of crashes may be positively affected.

As development continues along Citygate Drive, a requirement to connect Citygate Drive to Grand River Avenue is in place that will impact future traffic patterns and provide an alternate route of egress to Beck Road and Grand River Avenue.

Appendix A

Beck Road and Citygate Drive Gap Study

(Obtained from Traffic Data Collection Inc. through Fleis &
Vandenbrink memo, July 24, 2015)

Traffic Data Collection, TDC
 7504 Sawgrass Drive, Washington, MI 48094 Ph. (586) 786-5407
Traffic Study Performed For:
Fleis & Vandenbrink



Project: Novi Gap Study
Location: Beck Road @ Citygate
Weather: Lt. Rain AM, Dry PM 30's
Count By: Board #23 MM

File Name : Novi_Beck AM_Gap Study_3-31-15
Site Code : AM Gap
Start Date : 3/31/2015
Page No : 1

Directions Printed: Combined

Start Time	Volume	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	>29	Int. Total	Average
07:00 AM	0	9	5	2	3	1	1	0	0	0	0	0	0	0	0	0	21	4-5
07:05 AM	0	11	4	2	1	1	0	0	0	0	0	0	0	0	0	0	19	2-3
07:10 AM	0	1	2	2	1	0	0	0	0	0	0	0	0	0	1	0	7	6-7
07:15 AM	0	8	1	2	2	0	0	1	0	0	0	0	0	0	0	0	14	2-3
07:20 AM	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	9	4-5
07:25 AM	0	11	4	2	1	0	1	0	0	0	0	0	0	0	0	0	19	2-3
07:30 AM	0	11	2	2	1	0	0	0	0	0	0	0	0	0	0	0	16	2-3
07:35 AM	0	7	6	0	1	0	0	0	0	0	0	0	0	0	0	0	14	4-5
07:40 AM	0	3	4	0	0	0	1	1	0	0	0	0	0	0	0	0	9	4-5
07:45 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	5	2-3
07:50 AM	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2-3
07:55 AM	0	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0	11	2-3
Total	0	84	36	13	12	2	3	2	0	0	0	0	0	0	1	0	153	2-3
08:00 AM	0	6	3	1	0	1	0	0	0	0	0	0	0	0	0	0	11	2-3
08:05 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	1	0	7	2-3
08:10 AM	0	8	2	1	0	0	0	0	0	0	0	0	0	0	0	0	11	2-3
08:15 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2-3
08:20 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2-3
08:25 AM	0	7	0	0	1	2	0	0	0	0	0	0	0	0	0	0	10	2-3
08:30 AM	0	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	9	2-3
08:35 AM	0	11	3	1	2	0	0	0	0	0	0	0	0	0	0	0	17	2-3
08:40 AM	0	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16	2-3
08:45 AM	14	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	5	6-7
08:50 AM	0	7	3	0	0	1	0	0	0	1	0	0	0	0	0	0	12	2-3
08:55 AM	0	6	4	3	0	0	0	1	0	0	0	0	0	0	0	0	14	4-5
Total	14	80	25	10	4	4	0	1	0	1	0	0	0	0	1	0	126	2-3
Grand Total	14	164	61	23	16	6	3	3	0	1	0	0	0	0	2	0	279	2-3
Total %		58.8	21.9	8.2	5.7	2.2	1.1	1.1	0.0	0.4	0.0	0.0	0.0	0.0	0.7	0.0		

Comments: 4 hour gap study conducted during weekday (Tuesday) from 7:00-9:00 AM morning & 4:00-6:00 PM afternoon peak hours. Beck Road SB gaps were terminated and not recorded when SB through traffic was queued northerly to Citygate from traffic signal at Grand River Road & also when SB Beck Road left turns were present at Citygate.

Peak Hour Analysis From 07:00 AM to 08:55 AM - Peak 1 of 1
 Peak Occurred: 07:50 AM
 Volume 14
 High Int. 08:45 AM
 Volume 14
 PHF 0.083

Traffic Data Collection, TDC
 7504 Sawgrass Drive, Washington, MI 48094 Ph. (586) 786-5407
Traffic Study Performed For:
Fleis & Vandenbrink



Project: Novi Gap Study
Location: Beck Road @ Citygate
Weather: Lt. Rain AM, Dry PM 30's
Count By: Board #23 MM

File Name : Novi_Beck_AM_Gap_Study_3-31-15
Site Code : AM Gap
Start Date : 3/31/2015
Page No : 1

Directions Printed: Northbound

Start Time	Volume	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	>29	Int. Total	Average
07:00 AM	0	6	2	1	0	3	0	1	0	0	0	0	0	0	0	2	15	4-5
07:05 AM	0	8	3	1	1	1	0	1	1	0	1	0	0	0	0	1	18	4-5
07:10 AM	0	10	3	1	3	0	0	0	0	0	0	0	0	0	1	1	19	2-3
07:15 AM	0	17	2	0	0	1	0	0	0	0	0	0	0	0	0	2	22	2-3
07:20 AM	0	6	6	1	1	0	1	0	0	0	1	0	0	1	0	1	18	4-5
07:25 AM	0	12	4	2	1	0	0	1	2	0	0	0	0	0	0	1	23	2-3
07:30 AM	0	16	4	4	0	1	0	0	1	0	0	0	0	0	1	1	28	2-3
07:35 AM	0	13	5	2	0	0	0	0	0	1	0	0	0	0	1	1	23	2-3
07:40 AM	0	15	4	4	0	0	1	0	0	0	1	0	0	0	0	1	26	2-3
07:45 AM	0	10	3	1	1	1	0	0	0	0	0	0	0	0	0	2	18	2-3
07:50 AM	0	10	4	1	1	1	0	0	0	0	1	0	0	0	0	1	19	2-3
07:55 AM	0	13	0	1	1	1	0	0	0	0	0	1	1	0	0	1	19	2-3
Total	0	136	40	19	9	9	2	3	4	1	4	1	1	1	3	15	248	2-3
08:00 AM	0	13	2	1	2	0	1	1	0	1	0	0	0	0	0	0	21	2-3
08:05 AM	0	6	3	2	1	0	1	0	0	1	0	0	0	0	1	0	15	4-5
08:10 AM	0	7	3	1	1	0	1	0	2	0	0	0	0	0	1	0	16	4-5
08:15 AM	0	4	3	2	2	0	0	0	0	0	0	0	0	1	0	1	13	4-5
08:20 AM	0	14	2	2	1	0	1	0	0	1	0	0	1	0	0	0	22	2-3
08:25 AM	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0	2	15	2-3
08:30 AM	0	15	4	2	0	1	0	0	0	0	0	0	1	1	0	0	24	2-3
08:35 AM	0	11	4	3	1	0	1	0	0	0	0	0	0	0	1	1	22	4-5
08:40 AM	0	5	3	4	0	0	0	1	1	0	0	1	0	0	0	1	16	6-7
08:45 AM	0	15	2	2	0	1	0	0	0	0	0	0	1	0	0	1	22	2-3
08:50 AM	0	9	5	3	1	0	0	1	0	0	0	0	0	0	0	3	22	4-5
08:55 AM	0	7	2	2	0	1	0	1	1	0	0	0	0	1	0	1	16	4-5
Total	0	118	33	25	9	3	5	4	4	3	0	1	3	3	3	10	224	2-3
Grand Total	0	254	73	44	18	12	7	7	8	4	4	2	4	4	6	25	472	2-3
Total %		53.8	15.5	9.3	3.8	2.5	1.5	1.5	1.7	0.8	0.8	0.4	0.8	0.8	1.3	5.3		

Comments: 4 hour gap study conducted during weekday (Tuesday) from 7:00-9:00 AM morning & 4:00-6:00 PM afternoon peak hours. Beck Road SB gaps were terminated and not recorded when SB through traffic was queued northerly to Citygate from traffic signal at Grand River Road & also when SB Beck Road left turns were present at Citygate.

Peak Data Not Available

Traffic Data Collection, TDC
 7504 Sawgrass Drive, Washington, MI 48094 Ph. (586) 786-5407
Traffic Study Performed For:
Fleis & Vandenbrink



Project: Novi Gap Study
Location: Beck Road @ Citygate
Weather: Lt. Rain AM, Dry PM 30's
Count By: Board #23 MM

File Name : Novi_Beck AM_Gap Study_3-31-15
Site Code : AM Gap
Start Date : 3/31/2015
Page No : 1

Directions Printed: Southbound

Start Time	Volume	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	>29	Int. Total	Average
07:00 AM	0	10	7	4	3	1	0	0	1	0	1	0	0	0	1	0	28	4-5
07:05 AM	0	14	5	0	3	1	0	0	0	0	0	1	0	0	0	0	24	2-3
07:10 AM	0	1	1	2	4	0	1	0	0	1	0	0	0	0	0	1	11	8-9
07:15 AM	0	9	0	4	1	0	0	2	1	0	0	0	0	0	0	0	17	2-3
07:20 AM	0	3	6	1	0	0	2	0	0	0	0	0	0	0	0	0	12	4-5
07:25 AM	0	11	5	4	3	1	2	0	1	0	0	0	0	0	0	0	27	4-5
07:30 AM	0	6	3	3	1	0	2	0	0	0	0	0	0	0	0	0	15	4-5
07:35 AM	0	8	4	1	1	1	0	0	0	0	0	0	0	0	0	0	15	2-3
07:40 AM	0	4	6	0	0	0	0	1	0	0	1	0	1	0	0	0	13	4-5
07:45 AM	0	5	1	0	2	0	0	0	0	0	0	0	0	0	0	0	8	2-3
07:50 AM	0	11	3	0	0	0	1	0	0	0	0	0	0	0	0	0	15	2-3
07:55 AM	0	9	2	1	1	0	0	0	0	0	0	0	0	0	0	0	13	2-3
Total	0	91	43	20	19	4	8	3	3	1	2	1	1	0	1	1	198	4-5
08:00 AM	0	6	4	2	1	0	0	1	1	0	1	0	0	0	0	0	16	4-5
08:05 AM	0	5	3	0	1	1	0	0	0	0	0	0	0	0	0	1	11	4-5
08:10 AM	0	10	4	1	0	0	0	0	1	0	0	0	1	0	0	0	17	2-3
08:15 AM	0	5	2	2	1	1	0	0	0	0	0	0	0	0	0	0	11	4-5
08:20 AM	0	8	1	0	1	0	0	0	0	0	0	0	0	0	0	0	10	2-3
08:25 AM	0	8	0	0	1	2	0	0	0	0	0	0	0	0	0	0	11	2-3
08:30 AM	0	5	4	0	0	2	0	0	0	0	0	0	0	1	0	0	12	4-5
08:35 AM	0	14	5	1	2	0	0	0	0	0	0	0	0	0	0	0	22	2-3
08:40 AM	0	11	5	1	1	0	0	0	0	0	0	1	0	0	0	0	19	2-3
08:45 AM	0	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0	8	6-7
08:50 AM	0	8	5	0	0	1	0	0	0	0	0	0	1	0	0	0	15	2-3
08:55 AM	0	9	4	4	0	0	0	1	0	0	0	0	0	0	0	0	18	4-5
Total	0	93	37	14	9	7	0	2	2	0	1	1	2	1	0	1	170	2-3
Grand Total	0	184	80	34	28	11	8	5	5	1	3	2	3	1	1	2	368	4-5
Total %		50.0	21.7	9.2	7.6	3.0	2.2	1.4	1.4	0.3	0.8	0.5	0.8	0.3	0.3	0.5		

Comments: 4 hour gap study conducted during weekday (Tuesday) from 7:00-9:00 AM morning & 4:00-6:00 PM afternoon peak hours. Beck Road SB gaps were terminated and not recorded when SB through traffic was queued northerly to Citygate from traffic signal at Grand River Road & also when SB Beck Road left turns were present at Citygate.

Peak Data Not Available

Traffic Data Collection, TDC
 7504 Sawgrass Drive, Washington, MI 48094 Ph. (586) 786-5407
Traffic Study Performed For:
Fleis & Vandenbrink



Project: Novi Gap Study
Location: Beck Road @ Citygate
Weather: Lt. Rain AM, Dry PM 30's
Count By: Board #23 MM

File Name : Novi_Beck_PM_Gap_Study_3-31-15
Site Code : PM Gap
Start Date : 3/31/2015
Page No : 1

Directions Printed: Combined

Start Time	Volume	2 - 3	4 - 5	6 - 7	8 - 9	10 - 11	12 - 13	14 - 15	16 - 17	18 - 19	20 - 21	22 - 23	24 - 25	26 - 27	28 - 29	>29	Int. Total	Average
04:00 PM	0	10	5	3	0	0	0	0	0	0	0	0	0	0	0	0	18	2-3
04:05 PM	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2-3
04:10 PM	0	9	2	2	1	0	0	0	1	0	0	0	0	0	0	0	15	2-3
04:15 PM	0	11	2	1	3	0	1	0	0	0	0	0	0	0	0	0	18	2-3
04:20 PM	0	10	2	1	0	1	0	1	0	0	0	0	0	0	0	0	15	2-3
04:25 PM	0	9	3	3	0	0	1	0	0	0	0	0	0	0	0	0	16	2-3
04:30 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2-3
04:35 PM	0	7	3	1	1	1	0	1	0	0	0	0	0	0	0	0	14	4-5
04:40 PM	0	13	2	1	0	1	0	0	0	0	0	0	0	0	0	0	17	2-3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
04:50 PM	0	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	8	2-3
04:55 PM	0	14	3	2	0	0	0	0	0	0	0	0	0	0	0	0	19	2-3
Total	0	106	24	14	6	3	2	2	1	0	0	0	0	0	0	0	158	2-3
05:00 PM	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	13	2-3
05:05 PM	0	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16	2-3
05:10 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2-3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
05:20 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	6-7
05:25 PM	0	13	2	3	1	0	0	0	0	0	0	0	0	0	0	0	19	2-3
05:30 PM	0	8	2	1	0	0	0	0	0	0	0	0	0	0	0	0	11	2-3
05:35 PM	0	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	19	2-3
05:40 PM	0	17	2	2	0	0	0	0	0	0	0	0	0	0	0	0	21	2-3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
05:50 PM	0	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	19	2-3
05:55 PM	0	16	0	1	1	0	0	0	0	0	0	0	0	0	0	0	18	2-3
Total	0	110	17	10	2	0	0	0	0	0	0	0	0	0	0	0	139	2-3
Grand Total	0	216	41	24	8	3	2	2	1	0	0	0	0	0	0	0	297	2-3
Total %		72.7	13.8	8.1	2.7	1.0	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Comments: 4 hour gap study conducted during weekday (Tuesday) from 7:00-9:00 AM morning & 4:00-6:00 PM afternoon peak hours. Beck Road SB gaps were terminated and not recorded when SB through traffic was queued at Citygate from traffic signal at Grand River Road & also when SB Beck Road left turns were present at Citygate.

Peak Data Not Available

Traffic Data Collection, TDC
 7504 Sawgrass Drive, Washington, MI 48094 Ph. (586) 786-5407
Traffic Study Performed For:
Fleis & Vandenbrink



Project: Novi Gap Study
Location: Beck Road @ Citygate
Weather: Lt. Rain AM, Dry PM 30's
Count By: Board #23 MM

File Name : Novi_Beck_PM_Gap_Study_3-31-15
Site Code : PM Gap
Start Date : 3/31/2015
Page No : 1

Directions Printed: Northbound

Start Time	Volume	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	>29	Int Total	Average
04:00 PM	0	23	3	5	2	0	1	0	0	1	0	0	0	0	0	0	35	2-3
04:05 PM	0	23	4	3	0	0	0	0	0	0	0	0	0	0	0	0	30	2-3
04:10 PM	0	18	4	2	0	3	0	0	0	0	0	0	0	0	0	1	28	2-3
04:15 PM	0	20	7	1	1	2	0	1	1	0	0	0	0	0	0	0	33	2-3
04:20 PM	0	19	6	4	1	0	1	1	0	0	0	1	0	0	0	0	33	2-3
04:25 PM	0	24	6	2	3	2	0	0	1	0	1	0	0	0	0	0	39	2-3
04:30 PM	0	27	6	0	0	0	0	0	0	1	0	0	0	0	0	0	34	2-3
04:35 PM	0	16	4	2	2	1	0	0	0	0	0	1	0	0	0	0	26	2-3
04:40 PM	0	21	9	5	0	1	0	1	0	0	0	0	0	0	0	0	37	2-3
04:45 PM	0	30	4	1	0	1	0	0	0	0	0	0	1	0	0	0	37	2-3
04:50 PM	0	25	5	0	4	1	1	1	0	0	0	0	0	0	0	1	38	2-3
04:55 PM	0	19	10	3	0	0	1	0	0	0	0	0	0	0	1	0	34	2-3
Total	0	265	68	28	13	11	4	4	2	2	1	2	1	0	1	2	404	2-3
05:00 PM	0	22	5	3	0	2	0	1	0	0	0	0	0	0	0	0	33	2-3
05:05 PM	0	22	8	4	2	0	0	0	0	0	0	0	0	0	0	0	36	2-3
05:10 PM	0	23	4	2	0	1	0	0	1	0	0	0	0	0	0	0	31	2-3
05:15 PM	0	18	7	3	0	1	0	1	0	0	1	0	0	0	0	0	31	2-3
05:20 PM	0	17	5	1	3	1	0	0	0	1	0	0	0	0	0	0	28	2-3
05:25 PM	0	20	5	5	2	1	0	0	1	0	0	0	0	0	0	0	34	2-3
05:30 PM	0	20	7	5	1	1	1	0	0	0	0	0	0	0	0	1	36	2-3
05:35 PM	0	15	6	4	1	2	0	0	0	0	0	0	0	0	0	0	28	2-3
05:40 PM	0	23	7	0	1	3	0	1	2	0	0	0	0	0	0	0	37	2-3
05:45 PM	0	19	7	1	0	2	0	0	0	0	0	0	0	0	0	1	30	2-3
05:50 PM	0	25	2	3	1	2	0	0	0	0	1	1	0	0	0	0	35	2-3
05:55 PM	0	18	5	2	3	2	1	2	0	0	0	1	0	0	0	0	34	2-3
Total	0	242	68	33	14	18	2	5	4	1	2	2	0	0	0	2	393	2-3
Grand Total	0	507	136	61	27	29	6	9	6	3	3	4	1	0	1	4	797	2-3
Total %		63.6	17.1	7.7	3.4	3.6	0.8	1.1	0.8	0.4	0.4	0.5	0.1	0.0	0.1	0.5		

Comments: 4 hour gap study conducted during weekday (Tuesday) from 7:00-9:00 AM morning & 4:00-6:00 PM afternoon peak hours. Beck Road SB gaps were terminated and not recorded when SB through traffic was queued at Citygate from traffic signal at Grand River Road & also when SB Beck Road left turns were present at Citygate.

Peak Data Not Available

Traffic Data Collection, TDC
 7504 Sawgrass Drive, Washington, MI 48094 Ph. (586) 786-5407
Traffic Study Performed For:
Fleis & Vandenbrink



Project: Novi Gap Study
Location: Beck Road @ Citygate
Weather: Lt. Rain AM, Dry PM 30's
Count By: Board #23 MM

File Name : Novi_Beck_PM_Gap_Study_3-31-15
Site Code : PM Gap
Start Date : 3/31/2015
Page No : 1

Directions Printed: Southbound

Start Time	Volume	2 - 3	4 - 5	6 - 7	8 - 9	10 - 11	12 - 13	14 - 15	16 - 17	18 - 19	20 - 21	22 - 23	24 - 25	26 - 27	28 - 29	>29	Int. Total	Average
04:00 PM	0	11	4	1	0	0	1	2	0	0	0	0	0	1	0	0	20	2-3
04:05 PM	0	11	2	0	1	0	3	0	0	0	0	0	0	0	0	1	18	2-3
04:10 PM	0	11	2	0	1	2	0	0	1	0	0	0	0	1	0	1	19	2-3
04:15 PM	0	11	5	1	3	1	1	1	0	0	0	0	0	1	0	0	24	4-5
04:20 PM	0	9	2	1	3	1	0	1	0	1	0	0	0	0	0	0	18	4-5
04:25 PM	0	7	3	0	3	1	1	0	0	0	1	0	0	0	0	0	16	4-5
04:30 PM	0	8	4	0	0	1	0	0	1	0	0	0	0	0	0	0	14	2-3
04:35 PM	0	4	3	1	0	2	0	1	0	0	1	0	0	0	0	0	12	4-5
04:40 PM	0	7	1	2	2	1	0	2	0	0	1	0	0	0	0	0	16	6-7
04:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2-3
04:50 PM	0	5	1	0	1	1	0	0	0	0	0	0	0	0	0	0	8	2-3
04:55 PM	0	6	2	0	2	1	2	0	0	1	0	0	0	1	0	0	15	4-5
Total	0	92	29	6	16	11	8	7	2	2	3	0	0	4	0	2	182	2-3
05:00 PM	0	12	3	2	0	2	0	0	0	0	0	0	0	0	0	0	19	2-3
05:05 PM	0	11	3	2	0	0	0	1	0	0	0	0	0	0	0	1	18	2-3
05:10 PM	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2-3
05:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2-3
05:20 PM	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	2-3
05:25 PM	0	10	2	4	2	1	0	0	1	1	0	0	0	0	0	0	21	4-5
05:30 PM	0	7	1	0	1	0	0	1	0	0	0	0	0	0	0	1	11	2-3
05:35 PM	0	10	4	1	2	0	1	0	0	0	0	0	1	0	0	1	20	4-5
05:40 PM	0	5	6	2	2	1	1	0	0	0	1	0	0	0	0	0	18	4-5
*** BREAK ***																		
05:50 PM	0	5	3	1	1	0	0	0	2	0	1	0	0	0	0	0	13	4-5
05:55 PM	0	27	1	1	1	0	0	0	1	0	0	0	0	0	0	0	31	2-3
Total	0	102	24	14	9	4	2	2	4	1	2	0	1	0	0	3	168	2-3
Grand Total	0	194	53	20	25	15	10	9	6	3	5	0	1	4	0	5	350	2-3
Total %		55.4	15.1	5.7	7.1	4.3	2.9	2.6	1.7	0.9	1.4	0.0	0.3	1.1	0.0	1.4		

Comments: 4 hour gap study conducted during weekday (Tuesday) from 7:00-9:00 AM morning & 4:00-6:00 PM afternoon peak hours. Beck Road SB gaps were terminated and not recorded when SB through traffic was queued at Citygate from traffic signal at Grand River Road & also when SB Beck Road left turns were present at Citygate.

Peak Data Not Available

Appendix B

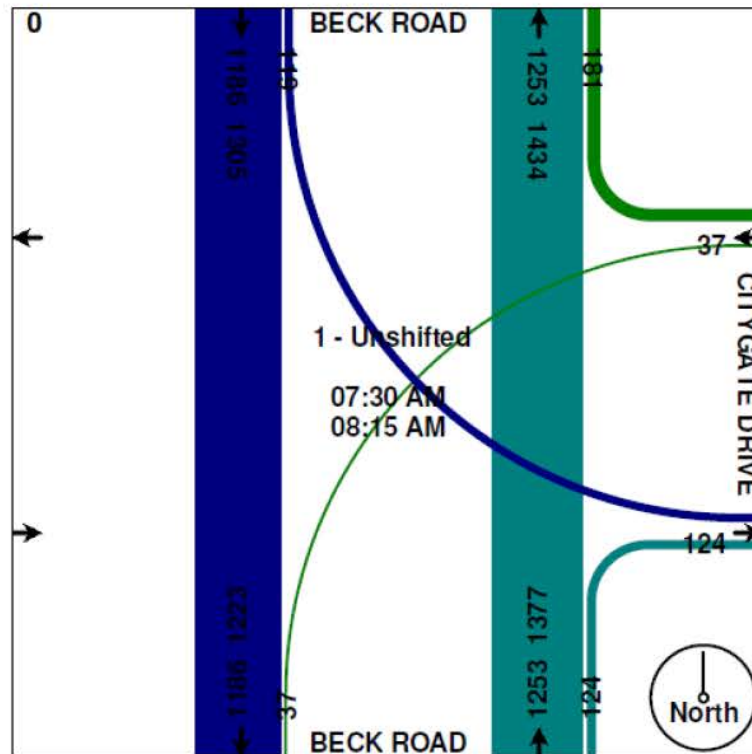
Beck Road and Citygate Drive Intersection Traffic Volumes
(Obtained through Fleis & Vandenbrink memo, July 24, 2015)

Fleis & VandenBrink Engineering, Inc.

27725 Stansbury Boulevard, Suite 150
Farmington Hills, MI 48334

File Name : Beck Road & Citygate Drive
Site Code : 00000000
Start Date : 12/3/2014
Page No : 3

Start Time	BECK ROAD Southbound					CITYGATE DRIVE Westbound					BECK ROAD Northbound					Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Intersection 07:30 AM																					
Volume	0	1186	119	0	1305	181	0	37	0	218	124	1253	0	0	1377	0	0	0	0	0	2900
Percent	0.0	90.9	9.1	0.0		83.0	0.0	17.0	0.0		9.0	91.0	0.0	0.0		0.0	0.0	0.0	0.0		
07:45 Volume	0	307	25	0	332	54	0	13	0	67	25	336	0	0	361	0	0	0	0	0	760
Peak Factor																					0.954
High Int.	07:30 AM					07:45 AM					07:45 AM					6:45:00 AM					
Volume	0	313	33	0	346	54	0	13	0	67	25	336	0	0	361						
Peak Factor					0.943					0.813					0.954						

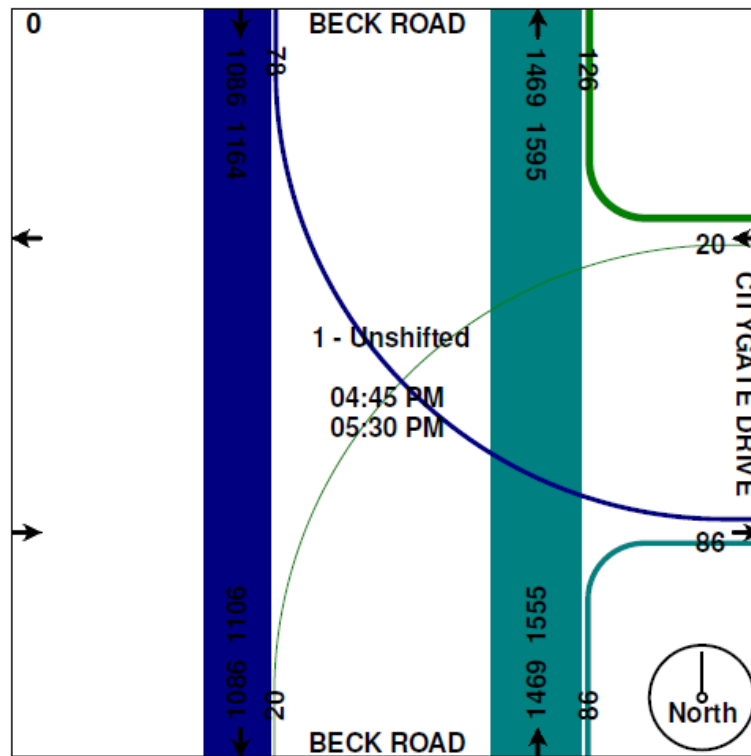


Fleis & VandenBrink Engineering, Inc.

27725 Stansbury Boulevard, Suite 150
Farmington Hills, MI 48334

File Name : Beck Road & Citygate Drive
Site Code : 00000000
Start Date : 12/3/2014
Page No : 4

Start Time	BECK ROAD Southbound					CITYGATE DRIVE Westbound					BECK ROAD Northbound					Eastbound					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																						
Intersection 04:45 PM																						
Volume	0	1086	78	0	1164	126	0	20	0	146	86	1469	0	0	1555	0	0	0	0	0	2865	
Percent	0.0	93.3	6.7	0.0		86.3	0.0	13.7	0.0		5.5	94.5	0.0	0.0		0.0	0.0	0.0	0.0			
Volume	0	287	25	0	312	29	0	3	0	32	20	379	0	0	399	0	0	0	0	0	743	
Peak Factor																					0.964	
High Int.	05:30 PM					05:15 PM					04:45 PM											
Volume	0	287	25	0	312	36	0	9	0	45	23	391	0	0	414							
Peak Factor					0.933					0.811					0.939							



Appendix C

Beck Road and Citygate Drive Intersection Level of Service
Assessment

(Obtained through Fleis and Vandenbrink memo, July 24,
2015)

HCM 2010 TWSC 1: Beck Road & Citygate Drive

Existing Conditions
AM Peak Hour

Intersection						
Int Delay, s/veh	3.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	37	181	1346	124	119	1321
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	250	0	-	-	250	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	95	95	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	223	1417	131	127	1405
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2297	774	0	0	1547	0
Stage 1	1482	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	46	341	-	-	425	-
Stage 1	172	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 32	341	-	-	425	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	172	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	38.1		0		1.4	
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	108 341	425	-	-
HCM Lane V/C Ratio	-	-	0.423 0.655	0.298	-	-
HCM Control Delay (s)	-	-	60.8 33.5	17	-	-
HCM Lane LOS	-	-	F D C	-	-	-
HCM 95th %tile Q(veh)	-	-	1.8 4.4	1.2	-	-

Notes

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

HCM 2010 TWSC
1: Beck Road & Citygate Drive

Existing Conditions
PM Peak Hour

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	126	1513	86	78	1260
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	250	0	-	-	250	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	94	94	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	156	1610	91	84	1355
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2365	851	0	0	1701	0
Stage 1	1655	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	42	303	-	-	370	-
Stage 1	139	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	32	303	-	-	370	-
Mov Cap-2 Maneuver	101	-	-	-	-	-
Stage 1	139	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	32		0		1	
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	101	303	370	-
HCM Lane V/C Ratio	-	-	0.244	0.513	0.227	-
HCM Control Delay (s)	-	-	51.8	28.8	17.6	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	0.9	2.8	0.9	-

Appendix D

24-Hour Traffic Counts

(Obtained from Southeast Michigan Council of Governments)

Road Commission for Oakland County 2005 Weekly Volume Report - Mon 07/14/2014 - Sun 07/20/2014

Location ID:	2005
Located On:	BECK
From Road:	GRAND RIVER
Direction:	NB
Community:	Novi
AADT:	16497

Type:	LINK
To Road:	12 MILE
Period:	Mon 07/14/2014 - Sun 07/20/2014

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM		98						98
1:00 AM		57						57
2:00 AM		38						38
3:00 AM		54						54
4:00 AM		52						52
5:00 AM		232						232
6:00 AM		838						838
7:00 AM		1380						1380
8:00 AM		1331						1331
9:00 AM		1066						1066
10:00 AM		973						973
11:00 AM	1015							1015
12:00 PM	1097							1097
1:00 PM	1123							1123
2:00 PM	1168							1168
3:00 PM	1243							1243
4:00 PM	1491							1491
5:00 PM	1467							1467
6:00 PM	1160							1160
7:00 PM	840							840
8:00 PM	581							581
9:00 PM	451							451
10:00 PM	265							265
11:00 PM	176							176
Total	12077	6119	0	0	0	0	0	
24HrTotal		18196						18196
AM Pk Hr								
AM Peak								0
PM Pk Hr								
PM Peak								0
% Peak Hr								
% Peak Hr		8.19%						8.19%

**Road Commission for Oakland County
7302 Weekly Volume Report - Mon 06/16/2014 - Sun 06/22/2014**

Location ID:	7302
Located On:	BECK
Direction:	SB
Community:	Novi
AADT:	16204

Type:	SPOT
AT:	GRAND RIVER
Period:	Mon 06/16/2014 - Sun 06/22/2014

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM			89					89
1:00 AM			46					46
2:00 AM			36					36
3:00 AM			30					30
4:00 AM			112					112
5:00 AM			380					380
6:00 AM			866					866
7:00 AM			1259					1259
8:00 AM			1454					1454
9:00 AM			1109					1109
10:00 AM			1031					1031
11:00 AM		1110						1110
12:00 PM		1240						1240
1:00 PM		1136						1136
2:00 PM		1155						1155
3:00 PM		1175						1175
4:00 PM		1219						1219
5:00 PM		1250						1250
6:00 PM		1083						1083
7:00 PM		796						796
8:00 PM		607						607
9:00 PM		538						538
10:00 PM		308						308
11:00 PM		160						160
Total	0	11777	6412	0	0	0	0	
24HrTotal			18189					18189
AM Pk Hr								
AM Peak								0
PM Pk Hr								
PM Peak								0
% Peak Hr								
% Peak Hr			6.87%					6.87%

Appendix E

Historical Crash Data

(Obtained from Traffic Improvement Association of Michigan's
Traffic Crash Analysis Tool)

SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED

Unit Number 02	Unit Known Yes	State MI	Driver License Number #####	Date of Birth (Age) 01/04/1963 (49)	License Type Operator Chaulfer Moped	Endorsements Cycle Farm Recreation	Sex F	Total Occupants 01	Hazardous Action 00 - None
Unit Type MV	Driver Information ##### BIRMINGHAM, MI 48009-6888 (###) ###-####			Injury O	Position 01	Restraint 04	Hospital NONE		
Driver Condition 1 O2 O3 O4 O5 O6 O7 O8 O9 O99				Interlock No	Ejected	Trapped	Airbag Deployed No	Ambulance NONE	
Alcohol Test Type: Field O RBT O Breath O Blood O Urine				Drugs Test Type: No O Yes	Test Results		Citation Issued Hazardous O Private O Other		
Vehicle Registration #####			State MI	Insurance / Policy # #####		Towed To/By #####	Special Vehicles 0	Private Trailer Type	Vehicle Defect
VIN #####		Vehicle Description CADILLAC	Make	Model SRX	Color RED	Year 2011	Vehicle Type Passenger Car		
Location of Greatest Damage 01	First Impact 01	Extent of Damage 4	Driveable No	Vehicle Direction N	Vehicle Use 01 - Private	Action Prior 01 - Going Straight Ahead			
Sequence of Events First: 17 - Motor veh in transport				Second	Third	Fourth			

PASSENGERS						
Passenger Information	Date of Birth (Age)	Sex	Position	Restraint	Hospital	

TRUCK/BUS							
Carrier Information				Carrier Source GVWR	ICCMC	USDOT	MFSC
Driver's CDL Type				Endorsements H O P O T N O S O X		CDL Exempt Farm O Other	CDL Restrictions 28 O 29 O 30 O 35 O 36
Interstate/Intrastate	Vehicle Type	Type & Axle Per Unit First Second Third Fourth		Cargo Body Type	Medical Card	Hazardous Material Placard O Cargo Spill	ID # Class #

OWNERS	
Owner Information	Owner Information
WITNESSES	
Witness Information	Witness Information

Investigated at Scene Yes	Reported Date (Time) ##### (###)###	1st Investigator Name (Badge) ##### (#####)	2nd Investigator Name (Badge) ##### (#####)	Photos By #####
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Narrative

VEHICLE 2 WAS N/B ON BECK ROAD AND HAD THE RIGHT-OF-WAY. VEHICLE 1 WAS TRYING TO MAKE A LEFT TURN FROM THE EAST SIDE OF BECK TO S/B BECK ROAD AND WAS STUCK BY VEHICLE 2. 181

Diagram

SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED

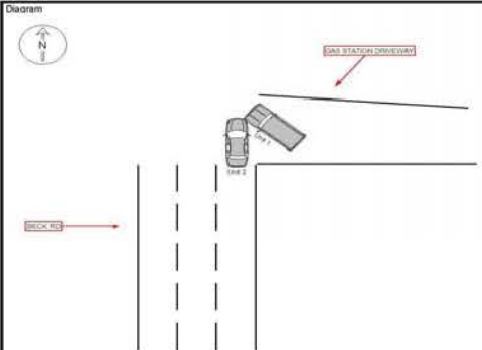
Unit Number 02	Unit Known Yes	State Driver License Number MI #####		Date of Birth (Age) 10/06/1978 (34)	License Type <input checked="" type="radio"/> Operator <input type="radio"/> Cycle <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements <input type="radio"/> Farm <input type="radio"/> Recreation	Sex F	Total Occupants 01	Hazardous Action 00 - None
Unit Type MV	Driver Information ##### HOWELL, MI 48843-8372 (###) ###-####				Injury O	Position 01	Restraint 04	Hospital NONE	
Driver Condition <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99				Interlock No	Ejected	Trapped	Airbag Deployed No	Ambulance NONE	
Alcohol <input type="radio"/> Yes <input type="radio"/> No	Refused <input type="radio"/> Refused	Test Type <input type="radio"/> Field <input type="radio"/> PBT	Breath <input type="radio"/> Breath	Blood <input type="radio"/> Blood	Urine <input type="radio"/> Urine	Test Results	Drugs <input type="radio"/> Yes <input type="radio"/> No	Test Type <input type="radio"/> Blood <input type="radio"/> Urine	Test Results
Vehicle Registration #####	State MI	Insurance / Policy # #####	Towed To/By #####	Special Vehicles 0	Private Trailer Type	Vehicle Defect			
Unit #####	Vehicle Description FORD	Make TAURUS	Model	Color BLACK	Year 2010	Vehicle Type Passenger Car			
Location of Greatest Damage 02	First Impact 02	Extent of Damage 0	Driveable Yes	Vehicle Direction N	Vehicle Use 01 - Private	Action Prior 01 - Going Straight Ahead			
Sequence of Events ● indicates MOST harmful event	First ● 17 - Motor veh in transport	Second	Third	Fourth					

PASSENGERS	Passenger Information					
	Date of Birth (Age)		Sex	Position	Restraint	Hospital
	Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
	Passenger Information					
	Date of Birth (Age)		Sex	Position	Restraint	Hospital
	Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
Passenger Information						
Date of Birth (Age)		Sex	Position	Restraint	Hospital	
Injury	Airbag Deployed	Ejected	Trapped	Ambulance		
Passenger Information						
Date of Birth (Age)		Sex	Position	Restraint	Hospital	
Injury	Airbag Deployed	Ejected	Trapped	Ambulance		
Passenger Information						
Date of Birth (Age)		Sex	Position	Restraint	Hospital	
Injury	Airbag Deployed	Ejected	Trapped	Ambulance		

Carrier Information				Carrier Source	GVWR	ICCMC	USDOT	MPSC
Driver's CDL Type	Endorsements <input type="radio"/> H <input type="radio"/> P <input type="radio"/> T <input type="radio"/> N <input type="radio"/> S <input type="radio"/> X	CDL Exempt <input type="radio"/> Farm <input type="radio"/> Other	CDL Restrictions <input type="radio"/> 28 <input type="radio"/> 29 <input type="radio"/> 30 <input type="radio"/> 35 <input type="radio"/> 36					
Interstate/Intrastate	Vehicle Type	Type & Axle Per Unit First Second Third Fourth	Cargo Body Type	Medical Card	Hazardous Material <input type="radio"/> Placard <input type="radio"/> Cargo Spill	ID #	Class #	

Owner Information	Owner Information
Witness Information	Witness Information

Investigated at Scene	Yes	Reported Date (Time) ###/###/### (##:##)	1st Investigator Name (Badge) ##### (#####)	2nd Investigator Name (Badge) ##### (#####)	Photos By #####
-----------------------	-----	---	--	--	--------------------

Narrative VEH 2 WAS ON NORTHBOUND BECK WHEN VEH 1 PULLED OUT OF A GAS STATION DRIVEWAY, FAILING TO YIELD THE RIGHT OF WAY TO VEH 2. VEH 1 BRUSHED THE RIGHT FRONT OF VEH 2 AND LEFT THE SCENE. PLATE THAT WAS GIVEN WAS NOT A GOOD PLATE. HEAVY SNOW FALLING AND ROADS WERE COVERED. UNABLE TO SEE ANY DAMAGE TO VEH 2.	Diagram 
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SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED

Authority: 1949 PA 300, Sec. 257.622 Compliance Required MSP 103-10E Penalty \$100 and/or 90 days (Rev. 11/2006)		External # 0422555		Crash ID 8873551		Page 01 of 01 Incident # 140003361 File Class C3145			
STATE OF MICHIGAN TRAFFIC CRASH REPORT						Incident Disposition Closed			
GRI MI 6362700		Department Name Novi Police Department		Reviewer PORTER (00822)					
Crash Date 01/23/2014		Crash Time 07:30	No. of Units 02	Crash Type Sideswipe-Same	Special Circumstances <input type="checkbox"/> School Bus <input checked="" type="checkbox"/> None <input type="checkbox"/> Hit and Run <input type="checkbox"/> Deer <input type="checkbox"/> Fleeing Police		Special Checks <input type="checkbox"/> Fatal <input type="checkbox"/> Non-Traffic Area <input type="checkbox"/> ORV/Snowmobile		
County 63 - Oakland		Traffic Control Stop sign		Relation to Roadway On Road	Special Study		Weather Cloudy		
City/Twp 62 - Novi		Construction Zone (if applicable) Type		Lane Closed	Activity	Light Dawn	Road Condition Snowy		
		Total Lanes 04	Speed Limit 45	Posted Yes					
Prefix BECK		Road Name		Road Type RD		Suffix	Divided Roadway S		
Distance 500 Feet N		Traffic Way 02 - Divided Hwy w/barrier			Access Control 03 - Other, partial control				
Prefix GRAND RIVER		Intersecting Road		Road Type AVE		Suffix	Divided Roadway		
Unit Number 01	Unit Known Yes	State MI	Driver License Number #####	Date of Birth (Age) ##/##/#### (52)	License Type <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Cycle <input type="checkbox"/> Farm <input type="checkbox"/> Recreational	Endorsements <input type="checkbox"/> Operator <input type="checkbox"/> Chauffeur <input type="checkbox"/> Mixed	Sex M	Total Occupants 02	Hazardous Action 13 - Other
Unit Type MV	Driver Information ##### PLYMOUTH, MI 48170-5250 (###) ###-####			Injury O	Position 01	Restraint 04	Hospital NONE		
Driver Condition <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99			Interlock No	Ejected	Trapped	Airbag Deployed No	Ambulance NONE		
Alcohol <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> Not offered <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine			Test Results		Drugs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Blood <input type="checkbox"/> Urine		Test Results		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other
Vehicle Registration #####		State MI	Insurance / Policy # #####		Towed To/By		Special Vehicles 0	Private Trailer Type	Vehicle Defect 0
VIN #####	Vehicle Description CHEVROLET	Make	Model K15	Color BLACK		Year 2009	Vehicle Type Passenger Car		
Location of Greatest Damage 07		First Impact	Extent of Damage 2	Diversee Yes	Vehicle Direction W	Vehicle Use 01 - Private		Action Prior 02 - Turning left	
Sequence of Events <input checked="" type="checkbox"/> 17 - Motor veh in transport		First	Second		Third	Fourth			
Passenger Information ##### PLYMOUTH, MI 48170-5250 (###) ###-####				Date of Birth (Age) ##/##/#### (12)	Sex M	Position 03	Restraint 04	Hospital NONE	
				Injury O	Airbag Deployed Not Equipped	Ejected	Trapped	Ambulance NONE	
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	Hospital	
				Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	Hospital	
				Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	Hospital	
				Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	Hospital	
				Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	Hospital	
				Injury	Airbag Deployed	Ejected	Trapped	Ambulance	
Camper Information				Camper Source GVWR		ICCMC	USDOT	MPSC	
				Driver's CDL Type		Endorsements <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> T <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> X		CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other	
						CDL Restrictions <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 35 <input type="checkbox"/> 36			
Interstate/Intrastate	Vehicle Type	Type & Axle Per Unit First Second Third Fourth	Cargo Body Type	Medical Card	Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill	ID #	Class #		
Owner Information ##### ##### #####				Owner Information					
Person Advised of Damaged Traffic Control Contact Name: Contact Date: Contact Time:				Damaged Property Owner & Phone:		Public			

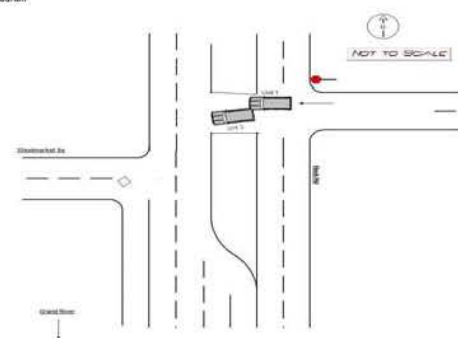
SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED SANITIZED

Unit Number	Unit Known	State	Driver License Number	Date of Birth (Age)	License Type	Endorsements	Sex	Total Occupants	Hazardous Action
02	Yes	MI	#####	##### (64)	<input checked="" type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	<input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	M	01	13 - Other
Unit Type	Driver Information				Injury	Position	Restraint	Hospital	
MV	##### NORTHVILLE, MI 48167-1729 (###) ###-####				<input type="radio"/> O	01	04	NONE	
Driver Condition			Interlock		Ejected	Trapped	Airbag Deployed	Ambulance	
<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99			No		<input type="radio"/>	<input type="radio"/>	No	NONE	
Alcohol			Test Results			Drugs		Citation Issued	
<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Refused <input type="radio"/> Not offered			<input type="radio"/> Field <input type="radio"/> PST <input type="radio"/> Breath <input type="radio"/> Blood <input type="radio"/> Urine			<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Blood <input type="radio"/> Urine		<input type="radio"/> Hazardous <input type="radio"/> Other	
Vehicle Registration		State	Insurance / Policy #		Towed Tolly		Special Vehicles	Private Trailer Type	Vehicle Defect
#####		MI	#####				0		
VIN	Vehicle Description			Make	Model	Color	Year	Vehicle Type	
#####	HONDA			CR-V		BLACK	2010	Passenger Car	
Location of Greatest Damage		First Impact	Extent of Damage	Drivable	Vehicle Direction	Vehicle Use		Action Prior	
02		02	2	Yes	W	01 - Private		04 - Stopped on roadway	
Sequence of Events			First		Second	Third	Fourth		
<input checked="" type="radio"/> 17 - Motor veh in transport									
Passenger Information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
					Injury	Airbag Deployed	Ejected	Trapped	Ambulance
Passenger Information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
					Injury	Airbag Deployed	Ejected	Trapped	Ambulance
Passenger Information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
					Injury	Airbag Deployed	Ejected	Trapped	Ambulance
Passenger Information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
					Injury	Airbag Deployed	Ejected	Trapped	Ambulance
Passenger Information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
					Injury	Airbag Deployed	Ejected	Trapped	Ambulance
Passenger Information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
					Injury	Airbag Deployed	Ejected	Trapped	Ambulance
Carrier Information					Carrier Source	GWR	ICCMC	US DOT	MPS
					Driver's CDL Type	Endorsements		CDL Exempt	CDL Restrictions
						<input type="radio"/> H <input type="radio"/> P <input type="radio"/> T <input type="radio"/> N <input type="radio"/> S <input type="radio"/> X	<input type="radio"/> Farm <input type="radio"/> Other	<input type="radio"/> 28 <input type="radio"/> 29 <input type="radio"/> 30 <input type="radio"/> 35 <input type="radio"/> 36	
Interstate/Intrastate	Vehicle Type	Type & Axle Per Unit			Cargo Body Type	Medical Card	Hazardous Material	ID #	Class #
		First	Second	Third	Fourth		<input type="radio"/> Pliscard <input type="radio"/> Cargo Spill		
Owner Information					Owner Information				
Witness Information					Witness Information				
Investigated at Scene	Reported Date (Time)	1st Investigator Name (Badge)			2nd Investigator Name (Badge)			Photos By	
Yes	01/23/2014 (07:36)	J. BRANDON (216)							
Narrative					Diagram				
DRIVER #1 AND DRIVER #2 BOTH STATED THAT THEY STARTED EASTBOUND ON CITYGATE WITH THE INTENTION OF TURNING LEFT ONTO (SOUTHBOUND) BECK RD. VEHICLES STOPPED IN THE CENTER OF BECK RD'S MEDIAN. DRIVER #1 SAID HE THOUGHT VEHICLE #2 STARTED TURNING (CONTINUED TURNING) ONTO BECK. DRIVER #1 STARTED TURNING LEFT AND STRUCK VEHICLE #2.									

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Authority: 1949 PA 300, Sec. 257.622 Compliance Required: MSP 110-10E Penalty: \$100 and/or 90 days (Rev. 11/2005)		External # 0423821		Crash ID 8879020		Page 01 of 01 Incident #: 140003801 File Class C3155																																																																																					
STATE OF MICHIGAN TRAFFIC CRASH REPORT																																																																																											
ORI MI 6362700		Department Name Novi Police Department				Incident Disposition Closed																																																																																					
Crash Date 01/26/2014		Crash Time 09:47		No. of Units 02		Crash Type Rear End																																																																																					
County 63 - Oakland		Traffic Control None		Relation to Roadway On Road		Special Circumstances <input type="checkbox"/> School Bus <input checked="" type="checkbox"/> None <input type="checkbox"/> Deer <input type="checkbox"/> Fleeing Police <input type="checkbox"/> Hit and Run <input type="checkbox"/> Special Study																																																																																					
City/Twp 62 - Novi		Construction Zone (if applicable) Type		Lane Closed		Activity Daylight																																																																																					
Weather Snow/Blowing Snow		Road Condition Snowy		Total Lanes 02		Speed Limit 45																																																																																					
Area 10 - NON-FRWY Straight roadway		Posted Yes																																																																																									
LOCATION Prefix: BECK Road Name: RD Road Type: RD Suffix: Divided Roadway Distance: 7 Feet E Traffic Way: 03 - Divided Hwy with barrier Access Control: 02 - Full access control Prefix: CITYGATE Road Type: Suffix: Divided Roadway																																																																																											
Unit Number 01		Unit Known Yes		State MI		Driver License Number #####																																																																																					
				Date of Birth (Age) ##/##/#### (36)		License Type <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Cycle <input type="checkbox"/> Farm <input type="checkbox"/> Recreational <input type="checkbox"/> Chauffeur <input type="checkbox"/> Mixed																																																																																					
Endorsements M		Sex M		Total Occupants 01		Hazardous Action 12 - Unable to stop																																																																																					
Unit Type MV		Driver Information ##### NEW HUDSON, MI 48165-9547 (###) ###-####		Injury <input type="checkbox"/> None		Position 01																																																																																					
				Restraint 04		Hospital NONE																																																																																					
Driver Condition <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99		Interlock No		Ejected <input type="checkbox"/> No		Trapped <input type="checkbox"/> No																																																																																					
Airbag Deployed <input type="checkbox"/> No		Ambulance NONE																																																																																									
Alcohol <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> PBT <input type="checkbox"/> Not offered <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine		Test Results		Drugs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> None <input type="checkbox"/> Blood <input type="checkbox"/> Urine		Test Results																																																																																					
Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other																																																																																											
Vehicle Registration #####		State MI		Insurance / Policy # #####		Towed To By																																																																																					
Special Vehicles 0		Private Trailer Type 0		Vehicle Defect																																																																																							
VIN #####		Vehicle Description FORD		Make Model		Color GRAY																																																																																					
				Year 2011		Vehicle Type Pickup truck																																																																																					
Location of Greatest Damage 01		First Impact 01		Extent of Damage 1		Drive/Steer Yes																																																																																					
				Vehicle Direction N		Vehicle Use 01 - Private																																																																																					
				Action Prior 01 - Going Straight Ahead																																																																																							
Sequence of Events <input checked="" type="checkbox"/> 17 - Motor veh in transport																																																																																											
PASSENGERS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Passenger Information</td> <td>Date of Birth (Age)</td> <td>Sex</td> <td>Position</td> <td>Restraint</td> <td>Hospital</td> </tr> <tr> <td colspan="2">Injury</td> <td>Airbag Deployed</td> <td>Ejected</td> <td>Trapped</td> <td>Ambulance</td> <td></td> </tr> <tr> <td colspan="2">Passenger Information</td> <td>Date of Birth (Age)</td> <td>Sex</td> <td>Position</td> <td>Restraint</td> <td>Hospital</td> </tr> <tr> <td colspan="2">Injury</td> <td>Airbag Deployed</td> <td>Ejected</td> <td>Trapped</td> <td>Ambulance</td> <td></td> </tr> <tr> <td colspan="2">Passenger Information</td> <td>Date of Birth (Age)</td> <td>Sex</td> <td>Position</td> <td>Restraint</td> <td>Hospital</td> </tr> <tr> <td colspan="2">Injury</td> <td>Airbag Deployed</td> <td>Ejected</td> <td>Trapped</td> <td>Ambulance</td> <td></td> </tr> <tr> <td colspan="2">Passenger Information</td> <td>Date of Birth (Age)</td> <td>Sex</td> <td>Position</td> <td>Restraint</td> <td>Hospital</td> </tr> <tr> <td colspan="2">Injury</td> <td>Airbag Deployed</td> <td>Ejected</td> <td>Trapped</td> <td>Ambulance</td> <td></td> </tr> <tr> <td colspan="2">Passenger Information</td> <td>Date of Birth (Age)</td> <td>Sex</td> <td>Position</td> <td>Restraint</td> <td>Hospital</td> </tr> <tr> <td colspan="2">Injury</td> <td>Airbag Deployed</td> <td>Ejected</td> <td>Trapped</td> <td>Ambulance</td> <td></td> </tr> <tr> <td colspan="2">Passenger Information</td> <td>Date of Birth (Age)</td> <td>Sex</td> <td>Position</td> <td>Restraint</td> <td>Hospital</td> </tr> <tr> <td colspan="2">Injury</td> <td>Airbag Deployed</td> <td>Ejected</td> <td>Trapped</td> <td>Ambulance</td> <td></td> </tr> </table>								Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital	Injury		Airbag Deployed	Ejected	Trapped	Ambulance		Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital	Injury		Airbag Deployed	Ejected	Trapped	Ambulance		Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital	Injury		Airbag Deployed	Ejected	Trapped	Ambulance		Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital	Injury		Airbag Deployed	Ejected	Trapped	Ambulance		Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital	Injury		Airbag Deployed	Ejected	Trapped	Ambulance		Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital	Injury		Airbag Deployed	Ejected	Trapped	Ambulance	
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital																																																																																					
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Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital																																																																																					
Injury		Airbag Deployed	Ejected	Trapped	Ambulance																																																																																						
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital																																																																																					
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Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital																																																																																					
Injury		Airbag Deployed	Ejected	Trapped	Ambulance																																																																																						
TRUCK/BUS Carrier Information: Carrier Source (GVWR, ICCMC, USDOT, MPSC) Driver's CDL Type: Endorsements (O H, O P, O T, O N, O S, O X), CDL Exempt (Farm, Other), CDL Restrictions (28, 29, 30, 35, 36) Interstabiltrate, Vehicle Type, Type & Axle Per Unit (First, Second, Third, Fourth), Cargo Body Type, Medical Card, Hazardous Material (Placard, Cargo Spill), ID #, Class #																																																																																											
OWNERS Owner Information: Person Advised of Damaged Traffic Control (Contact Name, Contact Date, Contact Time), Damaged Property, Public, Owner & Phone																																																																																											

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UNIT DRIVER										
Unit Number 02	Unit Known Yes	State MI	Driver License Number #####	Date of Birth (Age) ##### (46)	License Type ● Operator ○ Chauffeur ○ Moped	Endorsements ○ Cycle ○ Farm ○ Recreation	Sex F	Total Occupants 01	Hazardous Action 00 - None	
Unit Type MV	Driver Information ##### NOVI, MI 48374-4304 (###) ###-####				Injury ○	Position 01	Restraint 04	Hospital NONE		
Driver Condition ● 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 99			Interlock No		Ejected	Trapped	Airbag Deployed No	Ambulance NONE		
Alcohol ○ Yes ● No		○ Refused ● Not offered		Test Results		Drugs ○ Yes ● No		Test Results		
Test Type ○ Field ○ PBT ○ Breath ○ Blood ○ Urine		Citation Issued ○ Hazardous ○ Other		Towed To/By			Special Vehicles ○	Private Trailer Type	Vehicle Defect	
Vehicle Registration #####		State MI	Insurance / Policy # #####		Year 2009	Vehicle Type Passenger Car				
VIN #####		Vehicle Description HONDA		Make CR-V	Model	Color	Action Prior 04 - Stopped on roadway			
Location of Greatest Damage 04	First Impact 04	Extent of Damage 1	Driveable Yes	Vehicle Direction W	Vehicle Use 01 - Private		Sequence of Events ● 17 - Motor veh in transport			
Second		Third		Fourth						
PASSENGERS										
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital				
		Injury	Airbag Deployed	Ejected	Trapped	Ambulance				
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital				
		Injury	Airbag Deployed	Ejected	Trapped	Ambulance				
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital				
		Injury	Airbag Deployed	Ejected	Trapped	Ambulance				
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital				
		Injury	Airbag Deployed	Ejected	Trapped	Ambulance				
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital				
		Injury	Airbag Deployed	Ejected	Trapped	Ambulance				
Passenger Information		Date of Birth (Age)	Sex	Position	Restraint	Hospital				
		Injury	Airbag Deployed	Ejected	Trapped	Ambulance				
TRUCK/BUS										
Carrier Information			Carrier Source GVWR	ICCMC	USDOT	MFSC				
Driver's CDL Type		Endorsements ○ H ○ P ○ T ○ N ○ S ○ X		CDL Exempt ○ Farm ○ Other	CDL Restrictions ○ 28 ○ 29 ○ 30 ○ 35 ○ 36					
Interstate/Intrastate	Vehicle Type	Type & Axle Per Unit First Second Third Fourth	Cargo Body Type	Medical Card	Hazardous Material ○ Placard ○ Cargo Spill	ID #	Class #			
OWNERS										
Owner Information				Owner Information						
WITNESSES										
Witness Information						Witness Information				
Investigated at Scene Yes	Reported Date (Time) 04/11/2014 (14:48)	1st Investigator Name (Badge) CORDERJ (271)			2nd Investigator Name (Badge)			Photos By		
Narrative UNIT 2 WAS IN THE LEFT TURN AROUND FROM NORTHBOUND BECK ON TO SOUTHBOUND BECK NORTH OF GRANDDRIVER. UNIT 2 WAS SITTING IN THE TURN AROUND WAITING FOR TRAFFIC TO CLEAR. UNIT 1 WAS COMING OUT OF THE GAS STATION. UNIT 1 PROCEEDED TO THE LEFT TURN AROUND AND FAILED TO STOP IN ASSURED AND CLEARED DISTANCE. UNIT 1 COLLIDED WITH UNIT 2. A CITATION WAS ISSUED TO UNIT 1. NO MEDICAL ATTENTION NEEDED.					Diagram 					

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<small>Authority: 1949 PA 300, Sec. 257.622 Compliance Required MSP 110-10E Penalty \$100 and/or 90 days (Rev. 11/2006)</small>		External # 0472456		Crash ID 9012903		Page 01 of 01 Incident # 140034952 File Class C0155		
STATE OF MICHIGAN TRAFFIC CRASH REPORT								
City MI 6362700		Department Name Novi Police Department				Incident Disposition Closed		
Crash Date 07/17/2014		Crash Time 15:10	No. of Units 02	Crash Type Angle	Special Circumstances <input type="checkbox"/> School Bus <input type="checkbox"/> None <input type="checkbox"/> Hit and Run <input type="checkbox"/> Deer <input type="checkbox"/> Dier <input type="checkbox"/> Fleeing Police		Special Checks <input type="checkbox"/> Fatal <input type="checkbox"/> Non-Traffic Area <input type="checkbox"/> ORV/Snowmobile	
County 63 - Oakland		Traffic Control Stop sign	Relation to Roadway On Road		Special Study Cloudy		Area 07 - NON-FRWY in Intersection	
City/Twp 62 - Novi		Construction Zone (if applicable) Type			Lane Closed Activity	Light Daylight	Road Condition Dry	
		Total Lanes 06	Speed Limit 50	Posted Yes				
LOCATION								
Prefix CITYGATE		Road Name RD		Road Type RD		Suffix Divided Roadway		
Distance 2 Feet N		Traffic Way 04 - One-way traffic		Access Control 02 - Full access control				
Prefix BECK		Intersecting Road AVE		Road Type AVE		Suffix Divided Roadway		
UNIT / DRIVER								
Unit Number 01	Unit Known Yes	State MI		Driver License Number #####	Date of Birth (Age) ##/##/#### (25)	License Type <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Cycle <input type="checkbox"/> Farm <input type="checkbox"/> Chauffeur <input type="checkbox"/> Recreational		
Endorsements M	Sex M	Total Occupants 01	Hazardous Action 03 - Failed to yield					
Unit Type MV	Driver Information ##### ##### LAKE ORION, MI 48362-2675 (###) ###-####					Injury O	Position 01	
				Restraint 04		Hospital NONE		
Driver Condition <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 99			Interlock No	Ejected No	Trapped No	Airbag Deployed No	Ambulance NONE	
Alcohol <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Test Type <input type="checkbox"/> Field <input type="checkbox"/> Refused <input checked="" type="checkbox"/> PBT <input type="checkbox"/> Not offered			Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine	Test Results			Drugs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Test Type <input type="checkbox"/> Blood <input type="checkbox"/> Urine	Test Results <input type="checkbox"/> Hazardous <input type="checkbox"/> Other
Vehicle Registration #####		State MI	Insurance / Policy # #####		Towed To By		Special Vehicles 0	
Private Trailer Type 0	Vehicle Defect 0							
VIN #####	Vehicle Description FORD		Make Make	Model LGT CONVTL 'F'	Color WHITE	Year 2008	Vehicle Type Pickup truck	
Location of Greatest Damage 07		First Impact 07	Extent of Damage 4	Drive/steer No	Vehicle Direction W	Vehicle Use 02 - Commercial(business)	Action Prior 01 - Going Straight Ahead	
Sequence of Events <input checked="" type="checkbox"/> 17 - Motor veh in transport <input type="checkbox"/> indicates MOST harmful event								
PASSENGERS								
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	
				Injury	Airbag Deployed	Ejected	Hospital	
				Trapped	Ambulance			
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	
				Injury	Airbag Deployed	Ejected	Hospital	
				Trapped	Ambulance			
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	
				Injury	Airbag Deployed	Ejected	Hospital	
				Trapped	Ambulance			
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	
				Injury	Airbag Deployed	Ejected	Hospital	
				Trapped	Ambulance			
Passenger Information				Date of Birth (Age)	Sex	Position	Restraint	
				Injury	Airbag Deployed	Ejected	Hospital	
				Trapped	Ambulance			
TRUCK/BUS								
Camper Information				Camper Source GVWR	ICCMC	USDOT	MPSC	
				Driver's CDL Type O H O N	Endorsements P S O T O X	CDL Exempt Farm Other	CDL Restrictions 28 29 30 35 36	
Interstabiltrastate		Vehicle Type	Type & Axle Per Unit First Second Third Fourth	Cargo Body Type	Medical Card	Hazardous Material Placard Cargo Spill	ID # Class #	
Owner Information				Owner Information				
Person Advised of Damaged Traffic Control Contact Name Contact Date Contact Time				Damaged Property		Public		
				Owner & Phone				

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Unit Number	02	Unit Known	Yes	State	MI	Driver License Number	#####		Date of Birth (Age)	##### (46)		License Type	<input checked="" type="radio"/> Operator <input type="radio"/> Cycle <input type="radio"/> Moped <input type="radio"/> Farm <input type="radio"/> Recreation		Endorsements	<input type="radio"/> M <input type="radio"/> F		Sex	M	Total Occupants	01		Hazardous Action	00 - None	
Unit Type	MV		Driver Information		#####		#####		Injury	A	Position	01	Restraint	04	Hospital PROVIDENCE HOSP & MEDICAL CENTERS-PROVIDENCE PARK										
Driver Condition	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99		Inhaler/lock	No		Ejected			Trapped			Airbag Deployed	Yes		Ambulance COMMUNITY EMS INC										
Alcohol	<input type="radio"/> Yes <input checked="" type="radio"/> No		<input type="radio"/> Refused <input checked="" type="radio"/> Not offered		<input type="radio"/> Breath <input type="radio"/> Blood <input type="radio"/> Urine	Test Results		<input type="radio"/> Yes <input checked="" type="radio"/> No		<input type="radio"/> Blood <input type="radio"/> Urine		Test Results		Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other											
Vehicle Registration	#####		State	MI		Insurance / Policy #		#####		Towed To/By				Special Vehicle	0		Private Trailer Type			Vehicle Defect					
Vin	#####		Vehicle Description	FORD		Make	FOCUS		Color	SILVER		Year	2008		Vehicle Type Passenger Car										
Location of Greatest Damage	01		First Impact	01		Extent of Damage	5		Driveable	No		Vehicle Direction	N		Vehicle Use	01 - Private		Action Prior	01 - Going Straight Ahead						
Sequence of Events	First		<input checked="" type="radio"/> 17 - Motor veh in transport		Second		Third		Fourth																
PASSENGERS										Date of Birth (Age)		Sex	Position	Restraint	Hospital										
										Injury		Airbag Deployed	Ejected	Trapped	Ambulance										
										Date of Birth (Age)		Sex	Position	Restraint	Hospital										
										Injury		Airbag Deployed	Ejected	Trapped	Ambulance										
										Date of Birth (Age)		Sex	Position	Restraint	Hospital										
										Injury		Airbag Deployed	Ejected	Trapped	Ambulance										
TRUCK/BUS										Carrier Information		Carrier Source	G.VWR	ICCMC	USDOT	MSPC									
										Driver's CDL Type		Endorsements		CDL Exempt	CDL Restrictions										
Interstate/Intrastate	Vehicle Type		Type & Axle Per Unit		First	Second	Third	Fourth	Cargo Body Type	Medical Card	Hazardous Material		ID #	Class #											
OWNERS										Owner Information		Owner Information													
										WITNESSES										Witness Information		Witness Information			
Investigated at Scene	No	Reported Date (Time)	07/17/2014 (15:10)		1st Investigator Name (Badge)		K. HEANEY (00193)		2nd Investigator Name (Badge)											Photos By					
Narrative										Diagram															
<p>VEHICLE #2 WAS N/B BECK. VEHICLE #1 WAS ON CITYGATE W/B ATTEMPTING TO MAKE A LEFT TURN ONTO S/B BECK. DRIVER #1 FAILED TO YIELD TO VEHICLE #2. VEHICLE #2 STRUCK VEHICLE #1.</p>																									

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Authority: 1949 PA 300, Sec. 257.622 Compliance Required: MSP 110-10E Penalty: \$100 and/or 90 days (Rev. 11/2008)		External # 0490403		Crash ID 9060288		Page 01 of 01 Incident #: 140045731 File Class C3145	
STATE OF MICHIGAN TRAFFIC CRASH REPORT							
City MI 6362700				Department Name Novi Police Department			
Crash Date 09/22/2014		Crash Time 12:44		No. of Units 02		Crash Type Angle	
County 63 - Oakland		Traffic Control Stop sign		Relation to Roadway On Road		Special Circumstances <input type="checkbox"/> School Bus <input checked="" type="checkbox"/> None <input type="checkbox"/> Hit and Run <input type="checkbox"/> Deer <input type="checkbox"/> Fleeing Police	
City/Twp 62 - Novi		Construction Zone (if applicable) Type: Lane Closed Activity: Daylight		Road Condition Dry		Special Checks <input type="checkbox"/> Fatal <input type="checkbox"/> Non-Traffic Area <input type="checkbox"/> ORV/Snowmobile	
Area 08 - Intersection Driveway				Total Lanes 05		Speed Limit 45	
Posted Yes							
LOCATION							
Prefix S		Road Name BECK		Road Type AVE		Suffix	
Distance 300 Feet N		Traffic Way 01 - Not physically divided		Access Control 01 - No access control			
Prefix 		Intersecting Road GRAND RIVER		Road Type RD		Suffix	
UNIT/DRIVER							
Unit Number 01		Unit Known Yes		State Driver License Number MI #####		Date of Birth (Age) ###/###/#### (49)	
Unit Type MV		Driver Information ##### NORTHVILLE, MI 48167-8511 (###)###-####		Injury O		Position 01	
Driver Condition 1		Interlock No		Ejected No		Trapped No	
Airbag Deployed No		Ambulance NONE		License Type 04		Endorsements NONE	
Alcohol Test Type Field		Test Results None		Drugs Test Type None		Test Results None	
Vehicle Registration #####		State MI		Insurance / Policy # #####		Towed To/By	
VIN #####		Vehicle Description FORD		Model EXPEDITION		Color SILVER	
Year 2014		Vehicle Type Passenger Car		Action Prior 02 - Turning left		Special Vehicles 0	
Private Trailer Type		Vehicle Defect		Sequace of Events 17 - Motor veh in transport		First Second Third Fourth	
PASSENGERS							
Passenger Information				Date of Birth (Age) Sex Position Restraint Hospital			
Injury Airbag Deployed Ejected Trapped Ambulance							
Passenger Information				Date of Birth (Age) Sex Position Restraint Hospital			
Injury Airbag Deployed Ejected Trapped Ambulance							
Passenger Information				Date of Birth (Age) Sex Position Restraint Hospital			
Injury Airbag Deployed Ejected Trapped Ambulance							
Passenger Information				Date of Birth (Age) Sex Position Restraint Hospital			
Injury Airbag Deployed Ejected Trapped Ambulance							
Passenger Information				Date of Birth (Age) Sex Position Restraint Hospital			
Injury Airbag Deployed Ejected Trapped Ambulance							
TRUCK/BUS							
Carrier Information				Carrier Source GVWR ICCMC USDOT MPSC			
Driver's CDL Type Endorsements O H O P O T O N O S O X				CDL Exempt O Farm O Other			
CDL Restrictions O 28 O 29 O 30 O 35 O 36				Hazardous Material O Placard O Cargo Spill			
Interstate/Intrastate		Vehicle Type		Type & Axle Per Unit First Second Third Fourth		Cargo Body Type	
Medical Card		Hazardous Material		ID #		Class #	
OWNERS							
Owner Information				Owner Information			
Person Advised of Damaged Traffic Control Contact Name Contact Date Contact Time				Damaged Property Owner & Phone			

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UNIT DELIVER	Unit Number 02	Unit Known Yes	State MI	Driver License Number #####	Date of Birth (Age) ##/##/#### (54)	License Type <input checked="" type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements <input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	Sex M	Total Occupants 01	Hazardous Action 00 - None
	Unit Type MV	Driver information ##### ##### WESTLAND, MI 48185-2716 (###)###-####			Injury 0	Position 01	Restraint 04	Hospital NONE		
	Driver Condition <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99			Intoxlock No		Ejected <input type="radio"/>	Trapped <input type="radio"/>	Airbag Deployed No	Ambulance NONE	
	Alcohol <input type="radio"/> Yes Test Type <input type="radio"/> Field <input type="radio"/> PBT <input type="radio"/> Breath <input type="radio"/> Blood <input type="radio"/> Urine			Test Results		Drugs <input type="radio"/> Yes <input checked="" type="radio"/> No Test Type <input type="radio"/> Blood <input type="radio"/> Urine			Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other	
	Vehicle Registration #####	State MI	Insurance / Policy # #####	Towed To/By		Special Vehicles 0	Private Trailer Type	Vehicle Defect		
	VIN #####	Vehicle Description FORD	Make ECONOLINE VAN	Model	Color WHITE	Year 2008	Vehicle Type Van, motor home			
	Location of Greatest Damage 07		First Impact 07	Extent of Damage 1	Driveable Yes	Vehicle Direction S	Vehicle Use 01 - Private	Action Prior 01 - Going Straight Ahead		
	Sequence of Events ● 17 - Motor veh in transport									
	PASSENGERS									
	Passenger information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
	Passenger information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
	Passenger information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
	Passenger information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
	Passenger information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
	Passenger information					Date of Birth (Age)	Sex	Position	Restraint	Hospital
	CARRIER/BUSS/TRUCK									
	Carrier information					Carrier Source	GVWR	ICCMC	USDOT	MPS
	Driver's CDL Type					Endorsements <input type="radio"/> H <input type="radio"/> P <input type="radio"/> T <input checked="" type="radio"/> N <input type="radio"/> S <input type="radio"/> X		CDL Exempt <input type="radio"/> Farm <input type="radio"/> Other	CDL Restrictions <input type="radio"/> 28 <input type="radio"/> 29 <input type="radio"/> 30 <input type="radio"/> 35 <input type="radio"/> 36	
	Interstate/Intrastate	Vehicle Type	Type & Axle Per Unit First Second Third Fourth		Cargo Body Type	Medical Card	Hazardous Material <input type="radio"/> Placard <input type="radio"/> Cargo Spill		ID #	Class #
	OWNERS					Owner information				
	WITNESSES					Witness information				
	Investigated at Scene Yes	Reported Date (Time) 09/22/2014 (12:44)	1st Investigator Name (Badge) T. FARRELL (00244)		2nd Investigator Name (Badge)		Photos By			
	Narrative DRIVER #1 EXITED A DRIVEWAY INTENDING ON TURNING SOUTHBOUND ON BECK ROAD. DRIVER #2 WAS SOUTHBOUND ON BECK WITH THE RIGHT OF WAY. DRIVER #1 CROSSED THE CENTER ISLAND AND PULLED INTO SOUTHBOUND TRAFFIC NOT SEEING VEHICLE #2. VEHICLE #1 STRUCK VEHICLE #2 ON THE DRIVER'S SIDE.					Diagram 				

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Authority: 1949 PA 300, Sec. 257.622 Compliance Required MSP 103-10E Penalty: \$100 and/or 90 days (Rev 11/2006)		External # 0492503		Crash ID 9070950		Page 01 of 01 Incident # 140046790 File Class C3145									
STATE OF MICHIGAN TRAFFIC CRASH REPORT															
City MI 6362700		Department Name Novi Police Department				Incident Disposition Closed		Reviewer HAYES (00820)							
Crash Date 09/29/2014		Crash Time 09:00		No. of Units 02		Crash Type Rear End		Special Circumstances <input type="checkbox"/> School Bus <input type="checkbox"/> None <input type="checkbox"/> Hit and Run <input type="checkbox"/> Deer <input type="checkbox"/> Fleeing Police							
County 63 - Oakland		Traffic Control Stop sign		Relation to Roadway On Road		Special Study Weather Other/Unknown		Special Checks <input type="checkbox"/> Fatal <input type="checkbox"/> Non-Traffic Area <input type="checkbox"/> ORV/Snowmobile							
City/Twp 62 - Novi		Construction Zone (if applicable) Type		Lane Closed		Activity Light Other/Unknown		Road Condition Other/Unknown							
Total Lanes 03		Speed Limit 25		Posted No		Area 09 - Intersection related-othr									
LOCATION															
Prefix CITYGATE		Road Name CITYGATE		Road Type		Suffix		Divided Roadway							
Distance 5 Feet E		Traffic Way 01 - Not physically divided				Access Control 02 - Full access control									
Prefix BECK RD		Intersecting Road		Road Type		Suffix		Divided Roadway							
DRIVER															
Unit Number 01		Unit Known Yes		State MI		Driver License Number #####		Date of Birth (Age) ##/##/#### (47)							
License Type <input checked="" type="radio"/> Operator <input type="radio"/> Cycle <input type="radio"/> Chauffeur <input type="radio"/> Mixed		Endorsements <input type="checkbox"/> Farm <input type="checkbox"/> Recreational		Sex F		Total Occupants 02		Hazardous Action 00 - None							
Unit Type MV		Driver Information ##### ##### BELLEVILLE, MI 48111-2900 (###) ### ####		Injury <input type="radio"/> O		Position 01		Restraint 04							
Hospital NONE		Driver Condition <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 99		Interlock No		Ejected <input type="checkbox"/>		Trapped <input type="checkbox"/>							
Airbag Deployed No		Ambulance NONE		Alcohol <input type="radio"/> Yes <input checked="" type="radio"/> No		Refused <input type="radio"/> Refused <input type="radio"/> Not offered		Test Results <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine							
Vehicle Registration #####		State MI		Insurance / Policy # #####		Towed To/By		Citation Issued <input type="checkbox"/> Hazardous <input type="checkbox"/> Other							
VIN #####		Vehicle Description TOYOTA		Make PRIUS C		Color Year 2013		Vehicle Type Passenger Car							
Location of Greatest Damage 06		First Impact 06		Extent of Damage 1		Drive/steer Yes		Vehicle Direction W							
Vehicle Use 01 - Private		Action Prior 03 - Turning right		Sequence of Events First <input checked="" type="radio"/> 17 - Motor veh in transport		Second Third Fourth									
PASSENGERS															
Passenger Information				Date of Birth (Age)		Sex		Position		Restraint		Hospital			
Injury				Airbag Deployed		Ejected		Trapped		Ambulance					
(Additional passenger information rows follow similar structure)															
TRUCK/BUS															
Camper Information				Camper Source <input type="checkbox"/> GVWR <input type="checkbox"/> ICCMC <input type="checkbox"/> USDOT <input type="checkbox"/> MPSC		Driver's CDL Type		Endorsements <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> T <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> X		CDL Exempt <input type="checkbox"/> Farm <input type="checkbox"/> Other		CDL Restrictions <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 35 <input type="checkbox"/> 36			
Interstabiltrate		Vehicle Type		Type & Axle Per Unit First Second Third Fourth		Cargo Body Type		Medical Card		Hazardous Material <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill		ID #		Class #	
OWNERS															
Owner Information					Owner Information										
Person Advised of Damaged Traffic Control Contact Name: Contact Date: Contact Time:					Damaged Property			Public							
Owner & Phone															

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UNIT DRIVER											
Unit Number 02	Unit Known Yes	State Driver License Number MI #####	Date of Birth (Age) ##### (34)	License Type Operator Cyclist Moped	Endorsements Cyclist Farm Recreation	Sex F	Total Occupants 01	Hazardous Action 03 - Failed to yield			
Unit Type MV	Driver Information ##### WIXOM, MI 48393-1140 (###) ###-####			Injury O	Position 01	Restraint 04	Hospital NONE				
Driver Condition ● 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 39				Interlock No	Ejected	Trapped	Airbag Deployed No	Ambulance NONE			
Alcohol Test Type: ● Yes ○ No ○ Refused ○ Not offered ○ Field ○ PBT ○ Death ○ Blood ○ Urine				Test Results		Drugs Test Type: ● Yes ○ No ○ Blood ○ Urine		Citation Issued ○ Hazardous ○ Other			
Vehicle Registration #####		State MI	Insurance / Policy # #####		Towed Tolly		Special Vehicles 0	Private Trailer Type	Vehicle Defect		
VIN #####	Vehicle Description BMW		Make X5	Model	Color	Year 2013	Vehicle Type Passenger Car				
Location of Greatest Damage 02	First Impact 02	Extent of Damage 1	Driveable Yes	Vehicle Direction W	Vehicle Use 01 - Private	Action Prior 01 - Going Straight Ahead					
Sequence of Events ● 17 - Motor veh in transport				Second	Third	Fourth					
PASSENGERS				Date of Birth (Age)		Sex	Position	Restraint	Hospital		
Passenger Information				Injury		Airbag Deployed	Ejected	Trapped	Ambulance		
Passenger Information				Date of Birth (Age)		Sex	Position	Restraint	Hospital		
Passenger Information				Injury		Airbag Deployed	Ejected	Trapped	Ambulance		
Passenger Information				Date of Birth (Age)		Sex	Position	Restraint	Hospital		
Passenger Information				Injury		Airbag Deployed	Ejected	Trapped	Ambulance		
Passenger Information				Date of Birth (Age)		Sex	Position	Restraint	Hospital		
Passenger Information				Injury		Airbag Deployed	Ejected	Trapped	Ambulance		
Passenger Information				Date of Birth (Age)		Sex	Position	Restraint	Hospital		
Passenger Information				Injury		Airbag Deployed	Ejected	Trapped	Ambulance		
TRUCK/BUS				Carrier Information		Carrier Source		GUVWR	ICCMC	USDOT	MPSIC
				Driver's CDL Type		Endorsements		CDL Exempt		CDL Restrictions	
Interstate/Intrastate				Vehicle Type		Type & Axle Per Unit		Cargo Body Type		Medical Card	
				First		Second		Third		Fourth	
				Hazardous Material		ID #		Class #			
				Placard		Cargo Spill					
OWNERS				Owner Information		Owner Information					
WITNESS				Witness Information		Witness Information					
Investigated at Scene No	Reported Date (Time) 09/29/2014 (09:30)	1st Investigator Name (Badge) CADET LANG (2030)		2nd Investigator Name (Badge)		Photos By					
Narrative UNIT 1 WAS STOPPED AT A STOP SIGN WAITING FOR TRAFFIC TO CLEAR TO MAKE A RIGHT HAND TURN. UNIT 2 DID NOT YIELD TO UNIT 1 AND REAR ENDED UNIT 1.				Diagram 