REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: Wednesday, May 15, 2013

SUBJECT: Continued Discussion on Rezoning Application #R-2013-01-C

PRESENTER: Parker Sloan, Planner

ATTACHMENTS: 1. Staff Memo

2. Letter from NCDOT

3. Traffic Impact Analysis – Executive Summary

4. Traffic Impact Analysis Report

SUMMARY OF REQUEST:

On April 1, 2013, the Board of Commissioners held a public hearing on rezoning application #R-2013-01-C to rezone 1.71 acres (PIN: 9539-98-3442) from a Residential Two Rural (R2R) zoning district to a Community Commercial Conditional (CC-CD) zoning district. After hearing resident's concerns, the Board requested the applicant, the Broadway Group, complete a traffic impact analysis (TIA) for the proposed retail sales and service use to determine if any improvements were needed.

The Broadway Group hired J.M. Teague Engineering, PLLC, located in Waynesville, NC, to conduct the TIA. On May 2, 2013, planning staff met with the engineer and NCDOT representatives to discuss the TIA findings. NCDOT concurs with the TIA findings and requests J.M. Teague Engineering provide a plan for traffic signal timing and optimization. NCDOT will also require the developer pay for clearing of vegetation for site visibility if the rezoning request is approved (See Attachment 2).

BOARD ACTION REQUESTED:

The Board of Commissioners may approve, approve with modifications, or deny the application to rezone the Subject Area to a Community Commercial Conditional (CC-CD) zoning district. State law requires the Board adopt a written statement of consistency with the County Comprehensive Plan (CCP).

Suggested Motion:

I move that the Board adopt a resolution regarding the consistency with the CCP.

I move that the Board adopt the proposed map amendment with conditions as discussed.



Planning Department

100 North King Street Hendersonville, NC 28792

MEMORANDUM

TO: Henderson County Board of Commissioners

FROM: Parker Sloan, Planner

DATE: May 7, 2013

SUBJECT: Proposed Conditions for Rezoning Application #R-2013-01-C

On December 28, 2012, the Broadway Group LLC, submitted rezoning application #R-2013-01-C, to rezone 1.71 acres from a Residential Two Rural (R2R) zoning district to a Community Commercial Conditional (CC-CD) zoning district.

Conditional zoning district decisions are a legislative process subject to the same procedures as traditional zoning districts. Conditional zoning districts are created for the purpose of providing an optional rezoning choice where the owner of property proposes to rezone property and (in order to, among other reasons, carry out the purposes of the Comprehensive Plan) proposes to impose special limitations and conditions on the use of the property proposed for rezoning.

Planning staff suggested the applicant request a conditional rezoning to address potential concerns from adjacent property owners and to limit the commercial uses on the subject area to retail sales and services based on a proposed site plan approval. Staff suggests the following conditions be imposed on the Subject Area:

- (1) Site Plan. Major *Site Plan* required in accordance with §200A-299 (Major Site Plan Review).
- (2) Lighting. *Adequate lighting* shall be placed in areas used for vehicular/pedestrian access including, but not limited to: stairs, sidewalks, crosswalks, intersections, or changes in grade. *Lighting mitigation* required.
- (3) Building Orientation: The building may be located within 35 feet from the edge of the ROW. The main entrance of the building should face the street and all of the parking should be located on the side and rear of the building.
- (4) Hydrant: A fire hydrant must be located within 400 of any part of the building. This needs to be indicated on the site plan and confirmed.
- (5) Water Supply Watershed: The subject property is located within a WS-IV-PA and allows a maximum built upon limit of 70% under the high density option. Engineered storm water controls as prescribed in the County LDC is required.
- (6) Buffer: The County LDC requires a B1 buffer (20 feet) along each side of the property that is adjacent to a residential district.

Phone: 828.697.4819 www.hcplanning.org

- (7) All required parking spaces must meet the design requirements of the Land Development Code §200A-161-165. The proposed parking spaces shall comply with the landscape design standards and off street parking provisions as outlined in the Land Development Code (LDC Article V and VI). It appears the applicant is proposing more than the required parking spaces and the spaces shown on the site plan meet the requirements of the Land Development Code.
- (8) Etowah-Horse Shoe Community Plan Recommendations. All three of the following recommendations were agreed to by the applicant on March 19, 2013:
 - a. Design Standards: The Etowah-Horse Shoe Community Plan recommended design standards for noresidentail uses (Goal CCD1, Objective CCD1.1). Design standards should prohibit unfinished steel or aluminum roofing and aluminum siding material and vinyl siding, and require at least 30% masonry fronts which includes stone or brick (log or timber materials may be acceptable). Where buildings are visible from the side, appropriate evergreen plantings shall be used to obscure the view from adjoining streets. The site plan should indicate compliance.
 - b. Signs: The Etowah-Horse Shoe Community Plan recommended new sign requirements (Goal CCD1, Objective CCD1.3). Restrict sign height for commercially zoned areas to a maximum of eight (8) feet. Require adequate landscaping around signs to improve aesthetics of signage. The proposed sign on the subject property shall be a monument sign (sign base shall be wider than the sign). The site plan should indicate compliance.
 - c. Lighting: The Etowah-Horse Shoe Community Plan recommended standards to limit light pollution (Goal CCD1, Objective CCD1.3). Incorporate standards that require semi-cutoff or full-cutoff lighting for major subdivisions and commercial developments within the Planning Area. The site plan should indicate compliance.
- (9) Any signs used on site must meet current standards of Article VII of the LDC.
- (10) If the applicant has plans for future expansion of the existing business, all potential modification or expansions should be noted on the site plan.
- (11) TIA and other identified traffic improvements as requested by NCDOT. Refer to NCDOT letter from Steve Cannon dated May 3, 2013.



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PATRICK L. MCCRORY
GOVERNOR

ANTHONY J. TATA SECRETARY

May 3, 2013

Henderson County Planning Department C/o Mrs. Autumn Radcliff, Interim Planning Director 100 North King Street Hendersonville, NC 28792

Re: NCDOT Review of TIA for proposed Dollar Store on US 64W in Horse Shoe, NC

Dear Mrs. Radcliff,

Thank you and your staff for meeting with Mr. Stokes (J.M. Teague Engineering), Mr. Ownbey, and myself to review the TIA for the proposed Dollar Store on US 64W in Horse Shoe, NC.

NCDOT staff, to include Mr. Cook, Mr. Ownbey, and myself, has reviewed the TIA prepared by J.M. Teague Engineering on April 18, 2013 and concur with the findings within.

NCDOT has requested J.M. Teague Engineering provide additional information as follows:

Traffic signal timing and optimization to address the eastbound left turning queue during the AM
peak hour.

Additionally if the rezoning request is approved NCDOT will require the developer to fund, by means of reimbursable agreement with NCDOT, additional clearing of vegetation with the Right of Way of US 64W to provide optimal sight distance to the west from the proposed entrance. With this clearing adequate sight distance can be obtained.

If you have any questions please contact me at (828) 891-7911 or by email at slcannon@ncdot.gov

Sincerely,

Steve Cannon, PE

toteve (snow

Fax: (828) 891-5026

NCDOT

District Engineer

SLC/slc Att (1)

Cc:

Mr. Scott Cook, NCDOT Division Traffic Engineer

Mr. Carl Ownbey, NCDOT Eng Tech

Mr. Wesley Stokes, El J.M. Teague Traffic Engineering

File



EXECUTIVE SUMMARY

For

DISCOUNT RETAIL STORE

LOCATED IN HORSESHOE NORTH CAROLINA

Prepared For: Melissa Ballard The Broadway Group 132 Holmes Avenue Huntsville, AL 35801

Prepared By: J. M. Teague Engineering, PLLC 525 North Main Street Waynesville, North Carolina 28786

May 2013

JMT Project 0214 Client 0310-3-10-0214

EXECUTIVE SUMMARY

The purpose of the Traffic Impact Analysis report was to analyze the traffic impact of a proposed discount retail store near the intersection of US 64 (Brevard Road) and Banner Farm Road (SR 1314). Existing turning movement volumes were obtained at this intersection and adjusted to account for the proposed site generated traffic. This data was then distributed on to the roadway network and analyzed to determine the level of service, delay, volume to capacity ratio and queue lengths (backup).

After analyzing the intersections of US 64 @ Banner Farm Road and US 64 @ Proposed Site Access at full build-out conditions, it was determined that the resulting level of service, delay, volume to capacity ratio, and queue lengths (backup) for each intersection were only minimally increased and within acceptable levels. This is due to the low volume of trips generated during the peak hours. No geometric changes are recommended at these intersections to accommodate traffic generated by the site.

A 10-year (03/01/2003 – 02/28/2013) crash analysis summary for US 64, between Cummings Road and S. Rugby Road, was provided by the North Carolina Department of Transportation (NCDOT). However, only the reported crashes near the intersection of US 64 @ Banner Farm Road, the area impacted by the site, were analyzed. There was one (1) reported crash near the proposed site access. Because no access currently exists at the site, this crash was likely an anomaly and does not represent any particular crash pattern.

However, eastbound queuing from the signal may occur past the site access and impact driver gap acceptance. Eastbound signal queues could also block site traffic wishing to turn left into the site, creating a westbound traffic queue through the signal. The anticipated eastbound queuing is only expected to occur past the site during the AM peak hour. Because of the relatively short traffic signal cycle length and low entering site traffic, these situations should only occur at minimum, and can be further reduced with appropriate and routine traffic signal timing.

During the maximum queue, driver gap acceptance may decrease and drivers may be inclined to enter US 64, even when not safe. Again, this should be a minimal occurrence and with appropriate and routine traffic signal timing optimizations can be further reduced. During non-peak hours, eastbound traffic is not expected to queue past the site.



TRAFFIC IMPACT ANALYSIS

For

DISCOUNT RETAIL STORE

LOCATED IN HORSESHOE NORTH CAROLINA

Prepared For: Melissa Ballard The Broadway Group 132 Holmes Avenue Huntsville, AL 35801

Prepared By: J. M. Teague Engineering, PLLC 525 North Main Street Waynesville, North Carolina 28786 SEAL 022948

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April 2013

JMT Project 0214 Client 0310-3-10-0214

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INTRODUCTION AND BACKGROUND

The purpose of this report is to analyze the traffic impact of a proposed discount retail store near the intersection of US 64 (Brevard Road) and Banner Farm Road (SR 1314). Preliminary development plans call for a 9,100 square foot retail space connected by a single access point onto US 64. The purpose of this study is to determine the impact of the anticipated traffic associated with this development including trip generation, trip distribution, intersection delay, vehicle queue, and intersection capacity. Each of these aspects will be analyzed to determine any potential adverse traffic impacts on the adjacent roadway network from the proposed development. The site is located in the southwest quadrant of the intersection of US 64 (Brevard Road) and Banner Farm Road. (Figure 1)

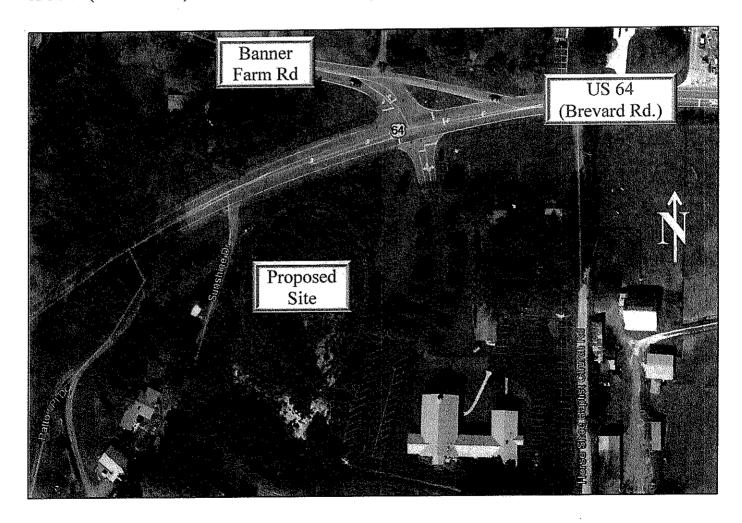


FIGURE 1 - SITE LOCATION

PROPOSED SITE USE AND ACCESS

The site plan includes a 9,100 square foot Free Standing Discount-Store (*ITE Land Use Code 815*). The facility will have a full movement access onto US 64 (Brevard Rd.) just west of the intersection of US 64 @ Banner Farm Road. (*Figure 2*)

PARAMETERS AND STUDY AREA

As determined through engineering judgment the study area of this TIA includes:

- US 64 (Brevard Rd.) @ Banner Farm Rd. (SR 1314)
- Site Access Point @ US 64 (Brevard Rd.)

Other parameters include:

- Assumed 17% pass-by trips for PM Peak Hour
- Assumed 2% heavy trucks

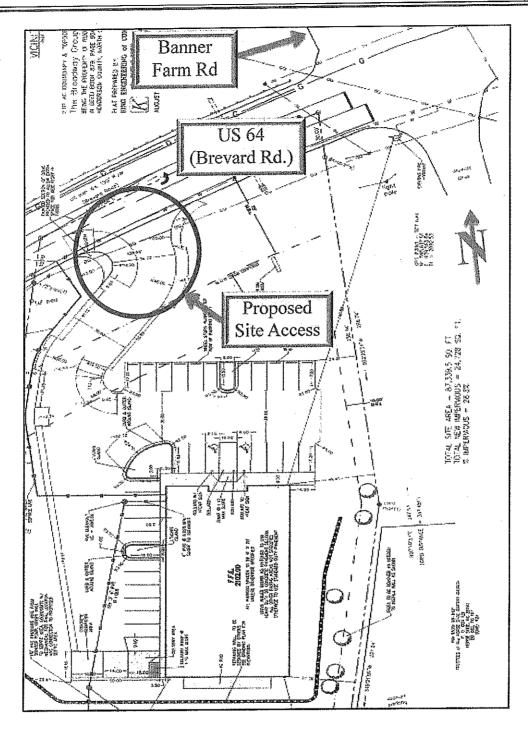


FIGURE 2 - SITE PLAN

SURROUNDING ROADWAYS

US 64 is a primary east-west arterial route that connects Hendersonville to Brevard and points east and west. The posted speed limit is 45 mph east of the intersection of US 64 @ Banner Farm Road and 55 mph west of this intersection. However, due to the proximity of the signal and the built-up area of Horseshoe, 45 mph is more of a representative speed for the section of roadway leading up to the signal.

Banner Farm Road is a secondary route that connects the Mills River community to the Horseshoe community. This road often serves as an alternate route for drivers wanting to bypass Hendersonville.

EXISTING TRAFFIC

Existing traffic is defined as the volume of traffic on the roadway network that is present at the time of traffic impact study preparation. This is known as the Existing Traffic Year. Existing peak hour turning movement volumes were obtained at the intersection of US 64 (Brevard Road) @ Banner Farm Road. The turning movement counts were conducted during the AM peak period (7:00AM – 9:00AM) and the PM peak period (4:00PM – 6:00PM). (Appendix A) The AM and PM peak hours were identified and the existing peak hour volumes are shown in Figure 3. The complete turning movement counts can be found in Appendix A.

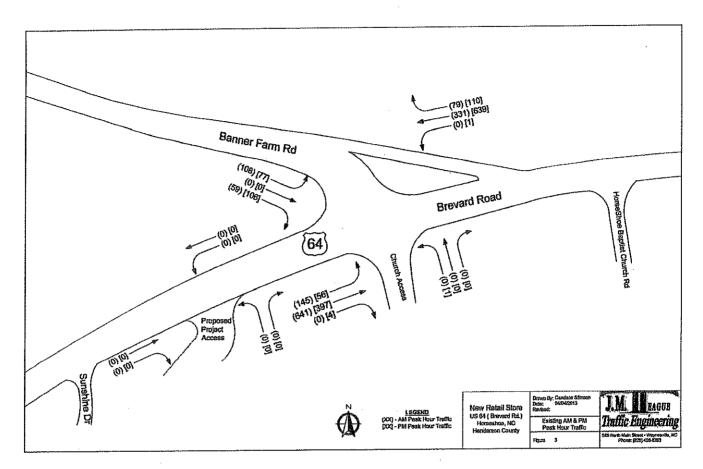


FIGURE 3 – EXISTING AM/PM PEAK HOUR TRAFFIC

BACKGROUND TRAFFIC

Background traffic is defined as the traffic that would be at the studied intersections at the time of anticipated project completion (build-out), with or without the proposed development. This is known as the Background Traffic Year. Background traffic is comprised of existing traffic and any increase or decrease in volumes which might occur from general growth trends in the surrounding area or from nearby specific developments.

Although there are several methods in determining the background traffic and the corresponding growth rate; the generally accepted method is to use 2% annual growth unless other information is available. The anticipated project completion year (build-out) is 2013. Because project completion is expected to be during the same year as the Existing Traffic Year, background traffic is not a factor with this particular study.

TRIP GENERATION

The trip generation data was compiled from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition. The studied land use and the associated typical weekday trip generation spreadsheet and calculations are shown in *Table 1*. According to ITE Trip Generation Manual, 8th edition, the definition a *trip* is "a single or one-direction vehicle movement with either the origin or the destination (ingress or egress) inside a study site." In accordance with ITE guidelines, the "rate" method was used in lieu of the "equation" method. The corresponding trip generation data from the ITE Trip Generation Software by Microtrans can be found in *Appendix B*.

CONSIDERATION OF PASS-BY TRIPS

The method of determining pass-by trips was also obtained from the ITE Trip Generation Manual. Pass-by trips are a subset of trip generation that applies to commercial / retail developments. They are defined as trips to and from the site that occur from vehicles that are *already* on the studied roadway for other purposes. For Land Use Code 815, ITE allows 17% pass-by trips for the PM peak hour. The 17% reduction for the PM peak hour is reflected in *Table 1*.

Typical Weekday Trip Generation

	1000	a company of the construction of the construct		AM	Peak	PM Peak	
Land Use (ITE Code)	Size	Unit of Measure	ADT (vpd)	(v	ph)	(v	ph)
		171045420	(1,00)	IN	OUT	IN	OUT
Free Standing Discount Store (815)	9.1	Th. Sq. Ft	521	7	3	23	23
Anticipated Total Site Trips	<u></u>		521	7	3	23	23
Total Peak Hour Pass-By Trips (17%)			0	0	0	4	4
Total Peak Hour Volume to Adjacent Streets			521	7	3	19	19

<TABLE 1>

TRIP DISTRIBUTION AND SITE TRIPS

The trip distribution for this development was estimated from the existing traffic volume patterns within the surrounding roadway network, the surrounding population densities, and engineering judgment. The proposed trip distribution percentages are shown in *Figure 4*. Anticipated site trips are shown in *Figure 5*.

BUILD-OUT TRAFFIC

Build-out traffic is defined as the total traffic volume that will be present on the surrounding roadway network at the time of project completion and full occupancy. This time is assumed to be 2013. Build-out traffic was calculated by adding the existing traffic and anticipated site traffic. *Figure 6* shows the anticipated build-out AM & PM Peak Hour traffic.

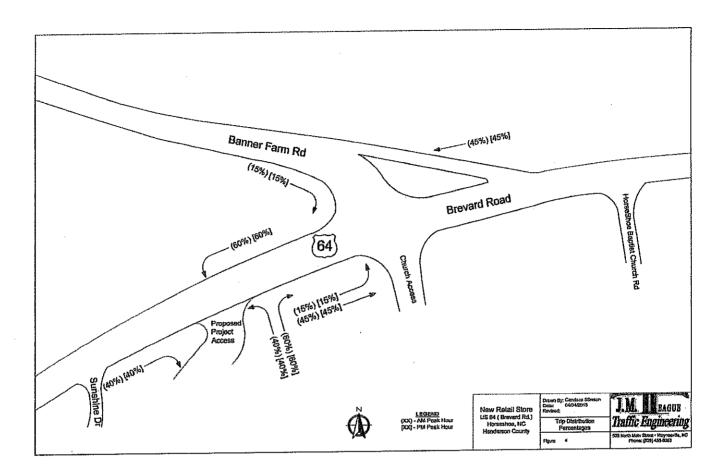


FIGURE 4 – TRIP DISTRIBUTION PERCENTAGE AM AND PM PEAK HOUR INGRESS & EGRESS

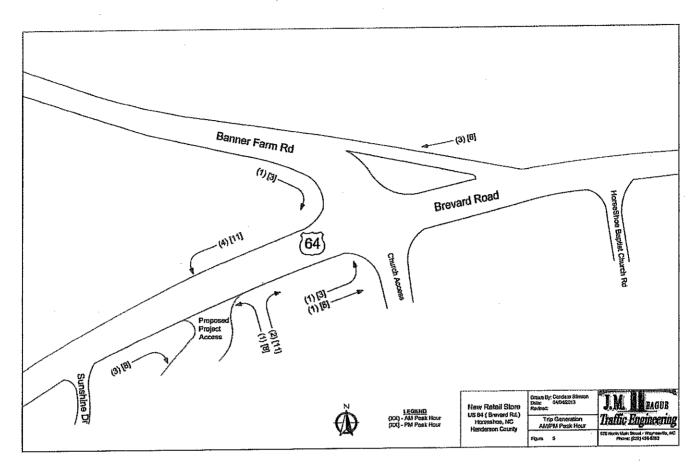


FIGURE 5 – TRIP GENERATION AM AND PM PEAK HOUR INGRESS AND EGRESS

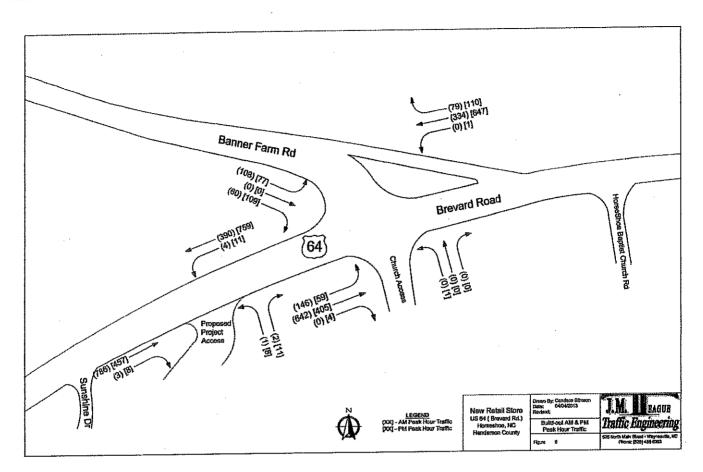


FIGURE 6 – BUILD-OUT AM AND PM PEAK HOUR TRAFFIC

CRASH ANALYSIS SUMMARY

A 10-year (03/01/2003 – 02/28/2013) crash analysis summary for US 64, between Cummings Road and S. Rugby Road, was provided by the North Carolina Department of Transportation (NCDOT). Only the reported crashes near the intersection of US 64 @ Banner Farm Road, the area impacted by the site, were analyzed. (*Figure 7*) Other reported crashes captured by the NCDOT summary were beyond the area of influence by this proposed site.

As can be seen in *Figure 5*, 11 vehicles egress the site during the PM peak hour and pass through the signalized intersection of US 64 @ Banner Farm Road. During the same peak hour, 11 vehicles pass through the signal before ingressing the site. Subsequently, during the AM peak hour 2 egress vehicles and 4 ingress vehicles pass through the signal. These site generated volumes correspond to between 0.5% and 2% of the total approach volume. This represents a very small increase in traffic volume through the signal and will likely be insignificant to future increased crash rates at this intersection.

Figure 7 also shows one (1) reported crash near the proposed site access. Because no access currently exists at the site, this crash was likely an anomaly and does not represent any particular crash pattern.

However, due to the close proximity of the proposed site access to the signal, eastbound queuing from the signal may occur past the site access. Vehicle queuing past an access point can impact driver gap acceptance. Driver gap acceptance is the available gap between approaching vehicles that a driver is willing to accept in order to enter the roadway from the side street. This value typically decreases for drivers as their wait time to enter the roadway increases.

The anticipated eastbound queuing is only expected to occur past the site during the AM peak hour. This value can be seen in *Table 5*. Because of the relatively short traffic signal cycle length and low entering site traffic, this situation should only occur at minimum.

During the maximum queue, driver gap acceptance may decrease and drivers may be inclined to enter US 64, even when not safe. Eastbound signal queues could also block site traffic wishing to turn left into the site, creating a westbound traffic queue through the signal. Again, this should be a minimal occurrence and with appropriate and routine traffic signal timing revisions and optimization can be further reduced. During non-peak hours, eastbound traffic is not expected to queue past the site.

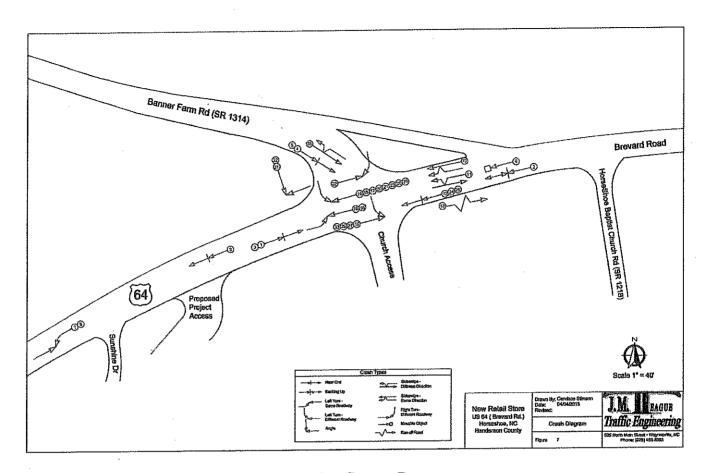


FIGURE 7 - CRASH DIAGRAM

METHOD OF ANALYSIS

The studied intersection was analyzed using Synchro. Synchro is a complex software package that allows the user to model intersections and roadway networks to determine levels of service (LOS), based on the thresholds specified in the Highway Capacity Manual (HCM) published by the Transportation Research Board. Synchro also provides analysis of capacity, vehicle delay, volume to capacity ratio (v/c), queue lengths, traffic signal timing, and vehicle flow rate.

The HCM defines capacity as "the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point during a given time period under prevailing roadway, traffic, and control conditions". LOS is a term used to represent different driving conditions, primarily with respect to traffic congestion. It is defined as a "qualitative measure describing operational and perceptional conditions within a traffic stream". LOS "A" represents free flow traffic conditions with no congestion. LOS "F" represents severely impacted traffic flow due to vehicle congestion. LOS is generally determined by the total "Control Delay" experienced by drivers. Control delay is vehicle delay that is ultimately caused by the traffic control device. This includes deceleration delay, queue move-up time delay, stopped delay, and acceleration delay. (*Table 2*)

HIGHWAY CAPACITY MANUAL LEVEL OF SERVICE AND DELAY

Un-signalize	D INTERSECTION	SIGNALIZED INTERSECTION						
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (Seconds)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (Seconds)					
A	0-10	A	0-10					
В	10-15	В	10-20					
. C	15-25	C	20-35					
D	25-35	D	35-55					
E	35-50	E	55-80					
F	> 50	F	> 80					

<Table 2>

Usually, at a signalized intersection LOS "D" is considered the lowest acceptable LOS. However, it is not unusual for a side street or private driveway at an un-signalized intersection to experience LOS "F" during a peak hour. The analysis for un-signalized intersections can project very high delays on the side street, thus it is recommended to use LOS measurements as a comparative tool rather than a design tool. The volume to capacity ratio can sometimes be an indication of roadway LOS. (Table 3)

LEVEL OF SERVICE	V/C Ratio	PERCENT OF FREE FLOW SPEED (PEAK HOUR)
A	0.50 AND BELOW	90% or greater
В	0.60 то 0.69	70% TO 90%
C	0.70 то 0.79	50%
D	0.80 то 0.89	40%
E	0.90 то 0.99	33%
F	1.00 and Above	25% or less

<Table 3>

It can be seen as the v/c ratio approaches 1.0 (the point where volume equals capacity), the LOS deteriorates dramatically.

The 95th Queue is defined to be the vehicle queue (back-up) that has only a 5% probability of being exceeded during the analysis period. At un-signalized intersections, p0 is the probability of a queue free state.

ANALYSIS OF EXISTING CONDITIONS

In order to estimate the current 95th queue length, LOS and delay, and v/c ratios at the study intersections, the existing traffic volumes were analyzed using existing lane configurations and traffic control conditions. (Table 4) The capacity analysis (Synchro Reports) for the existing conditions can be found in Appendix C. The estimated delay was field verified and found to generally coincide with the Synchro calculations.

US 64 (BREVARD RD) @ BANNER FARM RD ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

	AM	PEAK HOUI	R	PM PEAK HOUR						
APPROACH	95 th Queue Length (feet)	LOS and Delay (sec)	V/C Ratio	95 th Queue Length (feet)	LOS and Delay (sec)	V/C Ratio				
EB Left Turn	66	A 7.9	0.54	38	A 8.7	0.53				
EB Thru & Right	294	В 13.4	0.82	137	A 5.3	0.44				
WB Left Turn	2	A 4.5	0.00	2	A 3.6	0.00				
WB Thru & Right	160	A 7.1	0.55	377	В 14.8	0.86				
NB Left Turn	4	В 16.7	0.01	5	C 22.5	0.01				
NB Thru & Right	5	В 16.7	0.01	7	C 22.6	0.01				
SB Left Turn	. 88	C 23.4	0.62	92	C 27.6	0.56				
SB Thru & Right	41	В 17.5	0.27	93	C 28.1	0.60				

<TABLE 4>

ANALYSIS OF BUILD-OUT TRAFFIC CONDITIONS

In order to estimate the build-out 95th queue length, LOS and delay, and v/c ratios at the study intersections, the existing traffic volumes were analyzed using existing lane configurations and traffic control conditions *Tables 5 & 6*. The capacity analysis (Synchro Reports) for the existing conditions can be found in *Appendix C*. The estimated delay was field verified and found to generally coincide with the Synchro calculations.

US 64 (Brevard Rd) @ Banner Farm Rd Analysis of Build-out AM/PM Peak Hour Traffic Conditions

	AMI	PEAK HOU	R	PMI	PEAK HOUI	2
APPROACH	95 th Queue	LOS and	V/C	95 th Queue	LOS and	V/C
	Length (feet)	Delay (sec)	Ratio	Length (feet)	Delay (sec)	Ratio
EB Left Turn	67	A 8.0	0.55	42	B 10.6	0.57
EB Thru & Right	296	В 13.5	0.82	142	A 5.4	0.45
WB Left Turn	2	A 4.5	0.00	2	A 3.6	0.00
WB Thru & Right	162	A 7.2	0.55	386	В 15.1	0.87
NB Left Turn	4	В 16.7	0.01	5	C 23.0	0.01
NB Thru & Right	5	В 16.7	0.01	7	C 23.0	0.01
SB Left Turn	88	C 23.4	0.62	92	C 28.0	0.56
SB Thru & Right	41	В 17.6	0.27	95	C 29.0	0.61

<Table 5>

US 64 (Brevard Rd) @ Proposed Site Access Analysis of Build-out AM/PM Peak Hour Traffic Conditions

	AM	PEAK HOU	R	PM PEAK HOUR						
APPROACH	Percent Queue Free (%)	LOS and Delay (sec)	V/C Ratio	Percent Queue Free (%)	LOS and Delay (sec)	V/C Ratio				
Eastbound	NA	A 0.0	0.50	NA	A 0.0	0.30				
Westbound	99	A 0.2	0.01	99	A 0.3	0.01				
Northbound	99	C 18.6	0.01	95	C 18.9	0.07				

<Table 6>

COMPARISON OF EXISTING AND BUILD-OUT CONDITIONS

A comparison of the existing and build-out 95th queue length, LOS and delay, and v/c ratios at the intersection of US 64 (Brevard Road) @ Banner Farm Road is shown in *Tables 7 & 8*.

US 64 (BREVARD RD) @ BANNER FARM RD
COMPARISON OF EXISTING AND BUILD-OUT AM PEAK HOUR TRAFFIC CONDITIONS

	F	XISTING		BUILD-OUT						
APPROACH	95 th Queue Length (feet)	AM Peak Hour LOS & Delay (s)	V/C Ratio	95 th Queue Length (feet)	AM Peak Hour LOS & Delay (s)	V/C Ratio				
EB Left Turn	66	A 7.9	0.54	67	A 8.0	0.55				
EB Thru & Right	294	В 13.4	0.82	296	В 13.5	0.82				
WB Left Turn	2	A 4.5	0.00	2	A 4.5	0.00				
WB Thru & Right	160	A 7.1	0.55	162	A 7.2	0.55				
NB Left Turn	4	В 16.7	0.01	4	В 16.7	0.01				
NB Thru & Right	5	B 16.7	0.01	5	В 16.7	0.01				
SB Left Turn	88	C 23.4	0.62	88	C 23.4	0.62				
SB Thru & Right	41	В 17.5	0.27	41	В 17.6	0.27				

US 64 (Brevard Rd) @ Banner Farm Rd Comparison of Background and Build-out **PM** Peak Hour Traffic Conditions

	E	XISTING		Build-out					
APPROACH	95 th Queue Length (feet)	PM Peak Hour LOS & Delay (s)	V/C Ratio	95 th Queue Length (feet)	PM Peak Hour LOS & Delay (s)	V/C Ratio			
EB Left Turn	38	A 8.7	0.53	42	В 10.6	0.57			
EB Thru & Right	137	A 5.3	0.44	142	A 5.4	0.45			
WB Left Turn	2	A 3.6	0.00	2	A 3.6	0.00			
WB Thru & Right	377	В 14.8	0.86	386	В 15.1	0.87			
NB Left Turn	5	C 22.5	0.01	5	C 23.0	0.01			
NB Thru & Right	7	C 22.6	0.01	7	C 23.0	0.01			
SB Left Turn	92	C 27.6	0.56	92	C 28.0	0.56			
SB Thru & Right	93	C 28.1	0.60	95	C 29.0	0.61			

<Table 8>

CONCLUSIONS AND RECOMMENDATIONS

US 64 (Brevard Road) @ Banner Farm Road:

As can be seen in *Tables 7 & 8*, the difference in LOS, Delay, v/c ratio, and Queue between existing traffic and the anticipated trips generated by the project is only minimally increased. The resulting LOS, delay, v/c ratio, and queue are within acceptable levels. However, even though the eastbound queue is within acceptable levels, it is expected to occasionally queue past the proposed site access during the AM peak hour. This was previously referenced in the Crash Analysis Summary section of the report.

This should be a minimal occurrence and with appropriate and routine traffic signal timing revisions and optimization can be further reduced. It is recommended and expected that the NCDOT will routinely optimize the traffic signal at this intersection to ensure proper timing with respect to adjacent intersections and measured traffic volumes.

No geometric changes are recommended at this intersection to accommodate traffic generated by the site. The addition of site generated traffic is not anticipated to degrade general roadway or driver safety at this intersection.

Site Access Point @ US 64 (Brevard Road):

As can be seen in *Tables 6*, the build-out LOS, delay, v/c ratio, and percent queue free are within acceptable levels and no geometric changes are recommended at this intersection to accommodate traffic generated by the site. The addition of site generated traffic is not anticipated to degrade general roadway operation at this intersection.

However, as referenced in the Crash Analysis Summary section of the report, eastbound queuing from the signal may occur past the site access and impact driver gap acceptance. Eastbound signal queues could also block site traffic wishing to turn left into the site, creating a westbound traffic queue through the signal. Because of the relatively short traffic signal cycle length and low entering site traffic, these situations should only occur at minimum, and can be further reduced with appropriate and routine traffic signal timing.

Another potential challenge to site access safety is the available sight distance to the west. It is recommended that the site access provide at least 500 feet of intersection sight distance per the 2011 American Association of State and Highway Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Structures" manual. Conversations with NCDOT have indicated a willingness to assist in achieving this sight distance at areas beyond the site property. If this assistance is desired, the property owner will need to contact NCDOT directly at the Mills River office in Henderson County.

Appendix A

TURNING MOVEMENT COUNTS

J. M. Teague Engineering, PLLC 525 North Main Street

Waynesville, NC 28786

Serial Number : TU-0416 Count By : RCS Weather : 60's School In Session

File Name: US 64 @ Banner Farm AM Existing Site Code: 41020131 Start Date: 4/10/2013 Page No: 1

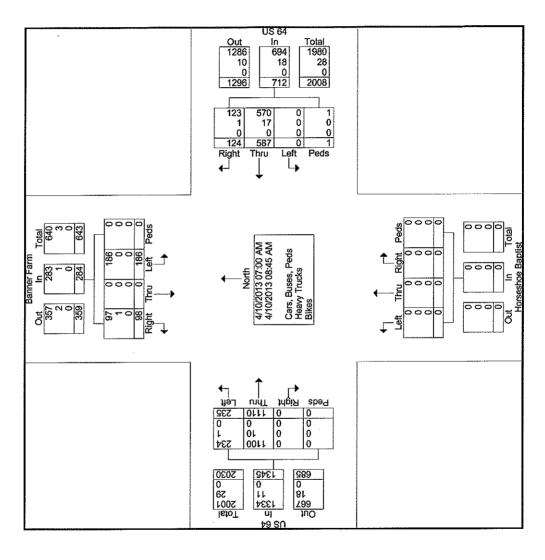
			Int. Total	236	299	417	360	1312	288	260	231	250	1029	2341			2311	98.7	30	1.3	0	0
			App. Total	154	190	267	98	779	161	152	115	138	566	1345		57.5	1334	99.2	-	0.8	0	0
		_	Peds /	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	US 64	Eastbound	Left	31	4	22	22	151	25	24	18	17	84	235	17.5	10	234	966	_	0.4	0	0
		Ш	Thru	123	149	210	146	628	136	128	97	121	482	1110	82.5	47.4	1100	99.1	10	6.0	0	0
			Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			App. Total	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
	ptist	Q	Peds /	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
s - Bikes	Horseshoe Baptist	Northbound	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
wy Truck	Horse	Ž	Thru	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
eds - Hea			Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ted- Cars, Buses, Peds - Heavy Trucks - Bikes		·	App. Total	09	73	102	141	376	95	75	82	8	336	712		30.4	694	97.5	18	2.5	0	0
d- Cars,		٥	Peds	0	0	_	0	τ-	0	0	0	0	0	_	0.1	0	-	100	0	0	0	0
Groups Printe	US 64	Westbound	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grou		^	Thru	51	09	84	110	305	77	62	69	74	282	587	82.4	25.1	570	97.1	17	2.9	0	0
			Right	6	13	17	31	20	18	13	16	7	54		17.4	5.3	123	99.2	_	0.8	0	0
			App. Total	22	36	48	51	157	32	ဗ္ဗ	33	31	127	284		12.1	283	966	-	0.4	0	0
	Ë.	اع	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Banner Farm	Southbound	Left	16	24	36	31	107	17	2	19	22	49	186	65.5	7.9	186	100	0	0	0	0
	m '	ּיַס	Thru	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Right	9	12	12	20	20	15	12	12	တ	48	88	34.5	4.2	97	66	_	_	0	0
			Start Time	07:00 AM	07:15 AM	07:30 AM	07:45 AM	Total	08:00 AM	08:15 AM	08:30 AM	08:45 AM	Total	Grand Total	Apprch %	Total %	Cars, Buses, Peds	% Cars, Buses, Peds	Heavy Trucks	% Heavy Trucks	Bikes	% Bikes

J. M. Teague Engineering, PLLC 525 North Main Street Waynesville, NC 28786

Serial Number: TU-0416

Sount By: RCS
Neather: 60's
School In Session

File Name: US 64 @ Banner Farm AM Existing Site Code: 41020131 Start Date: 4/10/2013 Page No: 2



J. M. Teague Engineering, PLLC 525 North Main Street Waynesville, NC 28786

Serial Number : TU-0416 Count By : RCS Weather : 60's School In Session

File Name: US 64 @ Banner Farm AM Existing Site Code: 41020131 Start Date: 4/10/2013

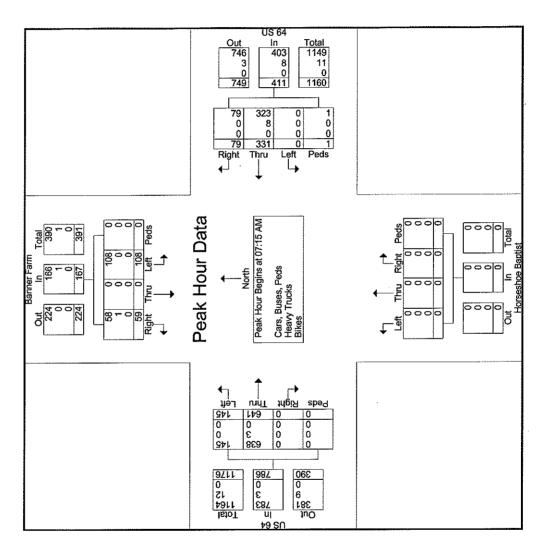
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2	2
מ כ ת))

		Int. Total			299	417	360	288	1364		.818	1352	99.1	12	0.9	0	0
		App. Total			190	267	168	161					9.66	ო	4.0	0	0
	_	Peds			0	0	0	0	0	0	000	0	0	0	0	0	0
US 64	Eastbound	Left			4	27	22	22	145	18.4	.636	145	9	0	0	0	0
	Ш	Thru			149	210	146	136	641	81.6	.763	638	99.5	က	0.5	0	0
		Right	***************************************		0	0	0	0	0	0	000.	0	0	0	0	0	0
		App. Total			0	0	0	0	0		000.	0	0	0	0	0	0
tist		Peds A			0	0	0	0	0	0	000.	0	0	0	0	0	0
Horseshoe Baptist	Northbound	Left			0	0	0	0	0	0	000.	0	0	0	0	0	0
Horse	NO	Thru			0	0	0	0	0	0	000.	0	0	0	0	0	0
		Right			0	0	0	0	0	0	000.	0	0	0	0	0	0
		App. Total			73	102	141	8	411		.729	403	98.1	∞	<u>ر.</u> ون	0	0
		Peds Ap			0	_	0	0	_	0.2	.250	-	9	0	0	0	0
US 64	westbound	Left			0	0	0	0	0	0	.000	0	0	0	0	0	0
1	ΛΛE	Thru			09	84	110	77	331	80.5	.752	323	97.6	ထ	2.4	0	0
		Right			13	17	34	8	6/	19.2	.637	79	100	0	0	0	0
		p. Total	1 of 1		36	48	5	32	167		819	166	99.4	•	9.0	0	0
		Peds App. Total	M - Peak	15 AM	0	0	0	0	0	0	.000	0	0	0	0	0	0
Banner Farm	soumoound	Left	08:45 A	ns at 07:	24	36	33	17	108	64.7	.750	108	100	0	0	0	0
Ban	200	Thru	:00 AM tc	tion Begi	0	0	0	0	0	0	000	0	0	0	0	0	0
		Right	From 07	e Intersec	12	12	20	3	29	35.3	.738	28	98.3		1.7	0	0
		Start Time	Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1	Peak Hour for Entire Intersection Begins at 07:15 AM	07:15 AM	07:30 AM	07:45 AM	08:00 AM	Total Volume	% App. Total	PHF	Cars, Buses, Peds	% Cars, Buses, Peds	Heavy Trucks	% Heavy Trucks	Bikes	% Bikes

J. M. Teague Engineering, PLLC Waynesville, NC 28786 525 North Main Street

Serial Number: TU-0416 Sount By: RCS Neather: 60's School In Session

File Name: US 64 @ Banner Farm AM Existing Site Code: 41020131 Start Date: 4/10/2013 Page No: 4



J. M. Teague Engineering, PLLC

Waynesville, NC 28786 525 North Main Street

Serial Number: TU-0416

Sount By: RCS Veather: 70's

School In Session

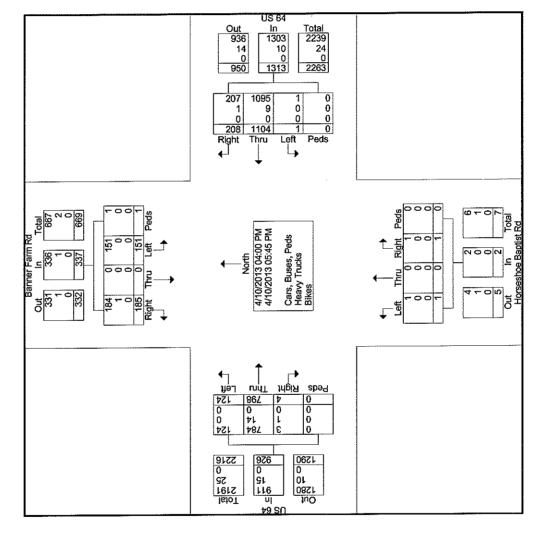
File Name: us 64 @ banner farm pm existing Site Code: 41020132 Start Date: 4/10/2013 Page No: 1

	Int. Total	290	333	280	337	1240	323	380	352	283	1338	2578			2552	66	56	~	0	0
	App. Total	4-	144	119	125	490	105	110	117	104	436	926	*****	35.9	911	98.4	15	9.	0	0
	Peds A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
US 64 Fastbollod		0	0	0	7	2	_	0		0	2	4	0.4	0.2	က	75	τ	22	0	0
 	Thru	4	124	97	109	422	85	66	104	88	376	798	86.2	31	784	98.2	14	<u>~</u>	0	0
	Left	10	8	22	14	99	19	7	12	16	58	124	13.4	4.8	124	100	0	0	0	0
	App. Total	0	0	0	-	-	0	0	0	_	-	2		0.1	2	9	0	0	0	0
it Rd	Peds Ap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/ Trucks - Bikes Horseshoe Baptist Rd Northbound	Right F	0	0	0	0	0	0	0	0	-	-	~	20	0	_	8	0	0	0	0
y Trucks Horsesh	Thru	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
s - Heav	Left	0	0	0	_	Ļ	0	0	0	0	0	-	20	0	-	9	0	0	0	0
Groups Printed- Cars, Buses, Peds - Heavy Trucks - Bikes US 64 Westholind Northbolind	App. Total	144	159	125	159	282	175	232	184	135	726	1313		50.9	1303	99.2	10	8.0	0	0
Cars, Bu	Peds Ap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ups Printed- US 64 Westbound)	20	34	24	33	109	26	33	20	20	66	208	15.8	8.	207	99.5	Ψ-	0.5	0	0
Groups	Thru	124	125	101	128	478	149	199	163	115	929	1104	84.1	42.8	1095	99.2	ග	8.0	0	0
	Left	0	0	0	0	0	0	0	_	0	1	~	0.1	0	τ-	100	0	0	0	0
-	p. Total	44	ဓ	36	25	162	43	38	એ	43	175	337		13.1	336	99.7		0.3	0	0
g	Peds App. Total	0	0	0	0	0	0	-	0	0	-	-	0.3	0	Ψ-	100	0	0	0	0
Banner Farm Rd Southbound	Right		20	15	23	83	29	20	34	19	102	185	54.9	7.2	184	99.5	τ	0.5	0	0
Banne	Thru	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left	19	9	21	58	62	4	17	17	24	72	151	8.4	5.9	151	100	0	0	0	0
	Start Time	04:00 PM	04:15 PM	04:30 PM	04:45 PM	Total	05:00 PM	05:15 PM	05:30 PM	05:45 PM	Total	Grand Total	Apprch %	Total %	Cars, Buses, Peds	% Cars, Buses, Peds	Heavy Trucks	% Heavy Trucks	Bikes	% Bikes

J. M. Teague Engineering, PLLC Waynesville, NC 28786 525 North Main Street

Serial Number: TU-0416 Count By: RCS Weather: 70's School In Session

File Name: us 64 @ banner farm pm existing Site Code: 41020132 Start Date: 4/10/2013 Page No: 2



J. M. Teague Engineering, PLLC

Waynesville, NC 28786 525 North Main Street

Serial Number: TU-0416

Count By: RCS

Weather: 70's

School In Session

: us 64 @ banner farm pm existing : 41020132 File Name : Site Code : Start Date : Page No :

: 4/10/2013 : 3

	발											٠,				
	App. Total			125	105	110	117	457		.914	451	98.7	9	£.	0	0
	Peds			0	0	0	0	0	0	000	0	0	0	0	0	0
US 64 Eastbound	Right			8	Ψ-	0	•	4	6.0	.500	က	75.0	-	25.0	0	0
Ш	Thru			109	82	66	104	397	86.9	.911	392	98.7	ហ	ل ن	0	0
	Left			4	19	7	5	56	12.3	737	26	9	0	0	0	0
	App. Total			_	0	0	0	-		.250	-	100	0	0	0	0
itist Rd	Peds			0	0	0	0	0	0	00. 00.	0	0	0	0	0	0
Horseshoe Baptist Rd Northbound	Right			0	0	0	0	0	0	000.	0	0	0	0	0	0
Horses	Thru			0	0	0	0	0	0	000	0	0	0	0	0	0
	Left			~	0	0	0	_	100	.250	-	5	o	0	0	0
	App. Total			159	175	232	184	750		808.		98.9	∞	7:	0	0
ō	Peds			0	0	0	0	0	0	000.	0	0	0	0	0	0
US 64 /estbound	Right									.833	109	99.1	_	6.0	0	0
>	Thru			128	149	199	163	639	85.2	.803	632	98.9	7	-	0	0
	Left			0	0	0	-	Ļ	0.1	.250	τ-	100	0	0	0	0
	Peds App. Total	eak 1 of 1	_	25	43	38	57	184		.885	183	99.2	~	0.5	0	0
n Rd nd	Peds	S PM - Pe	34:45 PIV	0	0	_	0	-	0.5	.250	_	190	0	0	0	0
Banner Farm Rd Southbound	Right	to 05:46	gins at (23	58	20	34	106	57.6	.779	105	99.1	~~	0.0	0	0
Ban St	Thr	14:00 PM	ection Be	0	0	0	0	0	0	99.	0	0	0	0	0	0
	Left	is From (ire Inters	59	4	17	17	7.7	41.8	.664	77	100	0	0	0	0
	Start Time	⁵ eak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1	eak Hour for Entire Intersection Begins at 04:45 PM	04:45 PM	05:00 PM	05:15 PM	05:30 PM	Total Volume	% App. Total	품	Cars, Buses, Peds	% Cars, Buses, Peds	Heavy Trucks	% Heavy Trucks	Bikes	% Bikes

Total

337 323 380 352 1392

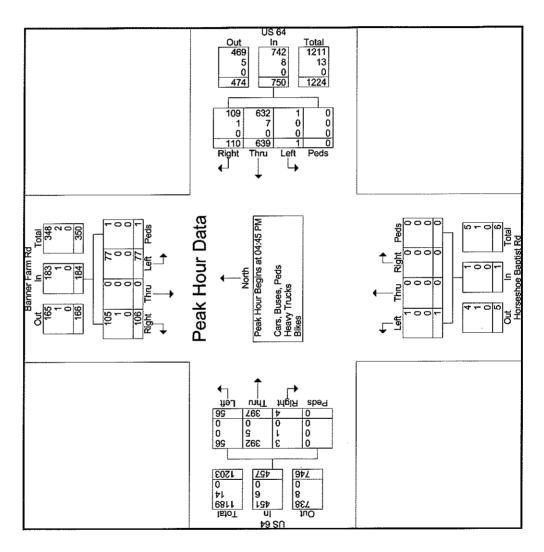
.916 1377 1877 15 1.1 0

J. M. Teague Engineering, PLLC 525 North Main Street Waynesville, NC 28786

Serial Number: TU-0416

Sount By: RCS
Neather: 70's
School In Session

File Name: us 64 @ banner farm pm existing Site Code: 41020132 Start Date: 4/10/2013 Page No: 4



Appendix B

TRIP GENERATION

Summary of Trip Generation Calculation For 9.1 Th.Sq.Ft. GFA of Free-Standing Discount Store April 18, 2013

	Average Rate		Adjustment Factor	-
Avg. Weekday 2-Way Volume	57.24	19.54	1.00	521
7-9 AM Peak Hour Enter	0.72	0.00	1.00	7
7-9 AM Peak Hour Exit	0.34	0.00	1.00	3
7-9 AM Peak Hour Total	1.06	1.22	1.00	10
4-6 PM Peak Hour Enter	2.50	0.00	1.00	23
4-6 PM Peak Hour Exit	2.50	0.00	1.00	23
4-6 PM Peak Hour Total	5.00	2.60	1.00	46
Saturday 2-Way Volume	71.07	15.44	1.00	647
Saturday Peak Hour Enter	3.77	0.00	1.00	34
Saturday Peak Hour Exit	3.62	0.00	1.00	33
Saturday Peak Hour Total	7.39	3.10	1.00	67

Note: A zero indicates no data available. Source: Institute of Transportation Engineers Trip Generation, 8th Edition, 2008.

TRIP GENERATION BY MICROTRANS

Appendix C

INTERSECTION ANALYSIS REPORTS

Existing Aivi	<u> </u>				4-	Ą	•	4		<i></i>		ار
**************************************		>		₹	•				<i>/</i> *		*	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL *	NBT ₽	NBR	SBL +	SBT ₄î	SBI
Lane Configurations	ሻ	þ	Karabatan Ping	ሻ	}			P	4	108	1	5
Volume (vph)	145	641	1	1	331	79	4000	4000	1900	1900	1900	190
deal Flow (vphpl)	1900	1900	1900	1900 12	1900 12	1900 14	1900 9	1900 9	1900	1900	1900	190
ane Width	11	11	12	12	12 0%	14	9	-4%	14	12	9%	1
Grade (%)		-2%		6.6	6.6	description (accept	6.0	6.0	a care residenti i re	Svette servin	5.5	5
Fotal Lost time (s)	6.6	6.6		1.00	1.00		1.00	1.00			1.00	1.C
ane Util. Factor	1.00 1.00	1.00 1.00		1.00	0.97		1.00	0.93			1.00	3.0
in Destroyed	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.0
Fit Protected	0.95 1728	1818		1770	1802		1624	1582			1695	166
Satd: Flow (prot) Flt Permitted	0.41	1.00		0.20	1.00		0.66	1.00			0.73	1.0
Satd. Flow (perm)	737	1818		372	1802		1137	1582			1293	166
Peak-hour factor, PHF	0.64	0.76	0.92	0.92	0.75	0.64	0.92	0.92	0.92	0.75	0.92	0.7
	0.64 227	843	U.9Z	0.92	441	123	0.32	1	1	144	1	9.1
Adj. Flow (vph)	survivioral designation of Manager of Disa	043 0	0	0	771 0	1 <u>29</u> 0	0	0	0	0	0	
RTOR Reduction (vph)	0 227	844	0	1	564	0	1	2	0	0	145	{
ane Group Flow (vph)		044	<u> </u>	Perm	904	•	Perm		V	Perm		Per
urn Type Protected Phases	Perm	2		reiiii	6		L GIIII	4		1 (1111	- 8	I GI
Permitted Phases	2	Z		6	U		4			8	Kinyari Serbaga	DIVERSOR
Actuated Green, G (s)	27,5	27.5		27.5	27.5		8.2	8.2			8.7	8
Effective Green, g (s)	27.5 27.5	27.5		27.5	27.5		8.2	8.2			8.7	8
Actuated g/C Ratio	0.57	0.57		0.57	0.57		0.17	0.17			0.18	0,1
Clearance Time (s)	6.6	6.6		6.6	6.6		6.0	6.0	en deligio de place de meste d	pilitati ili tetti ketti direkti ketti ketti	5.5	5
/ehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3
ane Grp Cap (vph)	420	1035	ENTROPIES CONTRACTOR	212	1026	A Maria Comment of the Comment of th	193	269		1 200	233	30
/s Ratio Prot	ALTECTOR OF THE CONTROL	c0.46			0.31			0.00				
//s Ratio Perm	0.31	MATERIAL SACRA		0.00	ATRIC CONTRACTOR	240547878857887	0.00	Alia (Angert State (Sec.)	er etter statet og skalet	BESCHOOLSE CARSON SEC	c0.11	0.0
//c Ratio	0.54	0.82		0.00	0.55		0.01	0.01			0.62	0.2
Jniform Delay, d1	6.5	8.4	es dependent en en entre a	4.5	6.5	Sample of State of St	16.7	16.7			18.3	17
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.0
ncremental Delay, d2	1.4	5.0	2011/06/2014 02:04:09:04:0	0.0	0.6	An Charles Hellich Charles Thank	0.0	0.0	10.00000		5.1	0
Delay (s)	7,9	13.4		4.5	7.1		16.7	16.7			23.4	17
evel of Service	Α	В		Α	Α		В	В	or transfer and a second	na James Nesson madema digarkaden J. et e We bed	C	lank namerietä sä
Approach Delay (s)		12.2			7.1			16.7			21.3	
Approach LOS		В			Α			В			С	
ntersection Summary				1						7		7
ICM Average Control Dela	v	* · · · · · · · · · · · · · · · · · · ·	11.8	H	CM Level	of Servic	e		В			
HCM Volume to Capacity ra			0.77	An inches	JIVI LUVGI	OI COI VIO			<u>-</u>			
Actuated Cycle Length (s)	w y		48.3	Sı	ım of lost	time (s)	PARTY OF THE PARTY		12.1	n in state de la company	en militaria de la marca d	ropideWYKEBF
ntersection Capacity Utiliza	ition		73.7%		U Level o				D			uraliyas.
Analysis Period (min)	mAn.		15					WEELEN STATES	energe (cu an to cape an	Optopolis (Aleksonija)		rpyrigiddidd
Critical Lane Group				i e s e							diana	
· onlicartaile Gloup		KEELVANIJESAN	gvatovskisti.				es savies (E	28/H-50:01547(S)	octor Pottson	de constituit (sport and with

US 64 @ Banner Farm Existing AM

	۶	→	•	—	4	†	ļ	4	
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR	
Lane Group Flow (vph)	227	844	1	564	1	2	145	80	
v/c Ratio	0.48	0.73	0.00	0.49	0.00	0.01	0,45	0.19	
Control Delay	13.2	16.0	7.0	9.8	18.0	18.5	23.6	18.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	13.2	16.0	7.0	9.8	18.0	18.5	23.6	18.6	
Queue Length 50th (ft)	40	190	0	99	- 0	- 1	43	22	
Queue Length 95th (ft)	66	294	2	160	4	5	88	41	
Internal Link Dist (ft)		740		755		506	419		
Turn Bay Length (ft)	150	. v a .co. A. evolvá, electrolási, i fr	100	Love (1 mm Sets Pelled Side)		HANGADAR ON BURGAR STATE		50	
Base Capacity (vph)	489	1206	247	1194	445	619	522	671	
Starvation Cap Reductn	0	O	0	O	0	0	0	0	
Spillback Cap Reductn	0	- 0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.46	0.70	0.00	0.47	0.00	0.00	0.28	0.12	
Intersection Summary				- (F)	F 7 F 7 F 8		- 1	- F	

LAISUIG I W	.	→	*	•	←	4	1	†	*	-	 	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	4î		ሻ	Ą	A second	ሻ	ቕ	a annoch o mileo i Merikaniski	other company and the second	4	* ***********************************
Volume (vph)	56	397	1	1	639	110	1	- 1	1	77	1	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	12	12	14	9	9	12	12	12	15
Grade (%)	and the second of the second o	-2%	lan latini ikawa kata sa kata sa	er numeroome Levelscohel, velscohel	0%	naperatus de finiciar descriptor	n i hevretik kunak (Colona	-4%	sa topesworest apraiso aut.		9%	novices (D. Novieto Alicea
Total Lost time (s)	6.6	6.6		6.6	6.6		6.0	6.0			5.5	5.5
Lane Util. Factor	1.00	1.00	erandra video da el comercicio	1.00	1.00		1.00	1.00	ALLEN ALINETTE ÉTRANSES	SERVICEO POR DEPORTANTO	1.00	1.00
Frt	1.00	1.00		1.00	0.97		1.00	0.93			1.00	0.85
Fit Protected	0.95	1.00	sangan kangan sa bala	0.95	1.00	5,000,000,000,000,000,000	0.95	1.00	awkanakan Abat	SECENTRICES	0.95	1.00
Satd. Flow (prot)	1728	1818		1770	1816		1624	1582			1695	1663
Flt Permitted	0.14	1.00	erneemeesen valmas	0.45	1.00	Secondo de Maria de Carlos de Carl	0.69	1.00	lavintan tain kanalus	PRINCH PARAGRAMEN	0.73	1.00
Satd. Flow (perm)	253	1818		833	1816		1180	1582	e jalen jalen		1294	1663
Peak-hour factor, PHF	0.64	0.76	0.92	0.92	0.75	0.64	0.92	0.92	0.92	0.75	0.92	0.74
Adj. Flow (vph)	88	522	1	1	852	172	1	1	1	103	1	143
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	88	523	0	1	1024	0	1	2	- 0	0	104	143
Turn Type	Perm	o no entre social admissi soci	n vocamental order 470.1100	Perm	and managed admirerate	44 (1984) 10. (1984) 10. (1984) 10. (1984)	Perm	.este : 1428[25] (252e) 1880	on under verselleringste	Perm	nodewyddi oddi <u>s</u> oledd	Perm
Protected Phases		2			6 6			4			8 -	
Permitted Phases	2	nosco <u>iesis</u> eathoisea	000000000000000000000000000000000000000	6		FANCSI COLLEGE SESSONE	4		11745 N. 1286 M. 1686 N. 1	8		8
Actuated Green, G (s)	39.5	39.5		39,5	39.5		8.2	8.2			8.7	8.7
Effective Green, g (s)	39.5	39.5		39.5	39.5		8.2	8.2			8.7 0.14	8.7
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.14	0.14			5.5	0.14 5.5
Clearance Time (s)	6.6	6.6		6.6	6.6		6.0	6.0	trakeraga (885)		3.0	3.0
Vehicle Extension (s)	3,0	3.0		3.0	3.0		3.0	3.0	4.90 SENSO	ik asil Asilini	to perfect the process	240
Lane Grp Cap (vph)	166	1191	\$150967A65018967E	546	1190	Selagija (1985).	160	215		asydaliside (VI	187	240
v/s Ratio Prot		0.29	66 (W. 15)	0.00	c0.56		0.00	0.00	and a Company		0.08	c0.09
v/s Ratio Perm	0.35	A 74		0.00	0.00		0.00	0.01		Salenda wek	0.56	0,60
v/c Ratio	0.53	0.44		0.00	0.86		0.01 22.5	22.5			24.0	24.2
Uniform Delay, d1	5.5	5.0	1444450cisi(3.6	8.2 1,00	ktori virilari	1.00	1.00	ontrous seco	ur - 1267 v 5 su 766 V	1.00	1.00
Progression Factor	1.00 3.2	1.00 0.3		1.00 0.0	6.6		0.0	0.0		e ar sinte	3.6	3.9
Incremental Delay, d2	3.2 8.7	5.3		3.6	14.8		22.5	22.6	17461 AN ASAN		27.6	28.1
Delay (s)	о <i>.т</i> А	J.3 A		ی. A	<u>14.0</u> В		- 22,9 C	0 C			21.0 C	20.1 C
Level of Service	,	5.8	wile in the section	Α	14.8		U	22.5	ergentergatis Gazza arrondisco		27.9	
Approach Delay (s) Approach LOS		7.0 A			14.0 B			22.0 C			د C	RATA SERVICE
**************************************			14594 10000 17450 1747		U		THE THEOLOGY STATES	<u> </u>			U	LISTORNI SERVIN
Intersection Summary			6- # J			4, 6			_			100
HCM Average Control Delay	and the state of the state of the state of	to medical residence	13.6	H(CM Level	of Service			В	adagen karendara	nesanio cessiti	ő (Gestrissiones
HCM Volume to Capacity rat	io - 0		0.81									
Actuated Cycle Length (s)	ซ้ากต่องกระจากกระบบเกรา	4.1-(c)(c)(c)(d)(c)(d)(c)(d)	60.3	and the state of t	m of lost	District to Action and Palameter (NA	9609820144934503	ijaz telkikatokinska	12.1	igana kantakan	4550 98 A 857 8W	608866000
Intersection Capacity Utilizat	ion		67.8%	IC.	U Level o	t Service			C		ng, do py a	
Analysis Period (min)	sinësi i kandidare të		15			a mer mar mar ma			taken siyan ikaas	TANGULET AV		
c Critical Lane Group			e negoverán vegyt v coje sovovanom					AATRITUUM OO VAN	7 (53 VA) (57 VA) 7 (7 (5) (5)	economicantill		

- ""	٠		•	4	1	†	ļ	4		
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR		
Lane Group Flow (vph)	88	523	1	1024	1	2	104	143		
v/c Ratio	0.49	0.41	0.00	0.80	0.01	0.01	0.40	0.43		
Control Delay	19.9	7.1	5.0	16.2	28.0	27.5	31.7	30.9	and the great state of the stat	era est vastas eras
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	19.9	7.1	5.0	16.2	28.0	27.5	31.7	30.9	tronzano (n.), nico, h., a. (m.) zave (ten como ancialido (1,0), (electro)	enconnector als
Queue Length 50th (ft)	16	- 88	0	283	0	. 1	37	51		
Queue Length 95th (ft)	38	137	2	377	5	7	92	93	nanarina orazi na Amara mishi na Ambiri Makila da Karada da Makila	Permoditation de tradition de la constant de la con
Internal Link Dist (ft)		740		755		506	419			
Turn Bay Length (ft)	150		100		engrantis i veltoresinsi i de la cita	as common harmonismos regime in con-	rasa na amin'ny faratronina na	50		ale-ministri beli
Base Capacity (vph)	208	1493	684	1491	370	495	418	537		
Starvation Cap Reductn	0	0	0	0	0	0	0		en werd in Norwe Var dere ber der Produkt Nordalius Grene (1 bilder)	Andrew Tuesday
Spillback Cap Reductn	0.0	0	0	0	0	0	0	0	60.00 (60.00 (60.00.00)	iga ja de la de
Storage Cap Reductn	0	0	0	0	0	0	0	0		countistai
Reduced v/c Ratio	0.42	0.35	0.00	0.69	0,00	0.00	0.25	0.27		
Intersection Summary		ii ii						75. 216.		16

Build-out Aivi	•			_	—	•	•	†	<i>></i>	\	Ţ	4
levement	EBL	EBT	EBR	- WBL	Wet	WBR	NBL .	NBT	NBR	SBL	SBT	SB
ane Configurations	*	4		*	\$		ካ	Ъ			4	
olume (vph)	146	642	1	1	334	79	1	1	1	108	1	- 6
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
ane Width	111	11	12	12	12	14	9	9	12	12	12	1
Grade (%)	111	-2%	1 fr		0%			-4%		1610/04/19/06/19/06	9%	0009999
otal Lost time (s)	6.6	6.6		6.6	6.6		6.0	6.0			5.5	- 5
ane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	20000249084949540	150000000000000000000000000000000000000	1.00).1
ane oui. i actor rt	1,00	1.00		1,00	0.97		1.00	0.93			1.00	0.8
It Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.1
atd: Flow (prot)	1728	1818		1770	1802		1624	1582			1695	166
atu now (prot) It Permitted	0.40	1.00		0.20	1.00		0.66	1.00			0.73	1.0
atd, Flow (perm)	731	1818		369	1802		1137	1582			1293	160
	0.64	0.76	0.92	0.92	0.75	0.64	0.92	0.92	0.92	0.75	0.92	0.7
eak-hour factor, PHF	228	845	0.9Z 1	0.92 1	445	123	1	1	1	144	1	J.
dj. Flow (vph)	or and or much extend developments and	Update has declared federalistics	SEAN SHORT LINES OF EACH ON	SECRETARIOS SERVIDAS PROPERTOR	449 0	∘ i∠∪ 0	0	0	0	0	0	
TOR Reduction (vph)	0	0	0	0 1	568	0	1	2	0	0	145	
ane Group Flow (vph)	228	846	0	rediction appropriate	J00	U .			U	- SEATING SECTION SECTION OF THE	140	
urn Type	Perm		layotoja saaanayoyd	Perm			Perm	4		Perm	8	Pe
rotected Phases		. 2			6		10 (A)	(#) (#) (# . 1		152.00 Mil. 00 A	0	angara
ermitted Phases	2		ROBROWNSON WHOM	6 07 F	07.5	TAYOTTA SANAT VEET S	4	0.0		8	8.7	8
ctuated Green, G (s)	27.5	27.5		27.5	27.5		8.2	8.2			9. <i>1</i> 8.7	8
ffective Green, g (s)	27.5	27.5		27.5	27.5		8.2	8.2				
ctuated g/C Ratio	0,57	0.57		0.57	0.57		0.17	0,17			0.18 5.5	0. 5
learance Time (s)	6.6	6.6		6.6	6.6		6.0	6.0 3.0			3.0	9
ehicle Extension (s)	3.0	3.0		3,0	3.0		3.0				A COLUMN TO SERVICE STATE OF THE PARTY OF TH	
ane Grp Cap (vph)	416	1035	urtseenotestrovaas	210	1026	Proposition de la company	193	269	naureministis (who)	low new works to be a	233	3
s Ratio Prot		c0.47			0.32			0.00				
/s Ratio Perm	0.31	e diesi kan dalam		0.00			0.00				c0.11	0.
/c Ratio	0.55	0.82		0.00	0.55		0.01	0.01			0.62	0.
niform Delay, d1	6.5	8.4	elektronoma energyilettisia	4.5	6.5		16.7	16.7			18.3	17
rogression Factor	1,00	1.00	0.004 Mil. 42	1.00	1.00		1.00	1.00			1.00	1,
cremental Delay, d2	1.5	5.1	1480a@minex.8scus	0.0	0.7		0.0	0.0	Satisfaction (Section)		5.1)
elay (s)	8.0	13,5		4.5	7.2		16.7	16.7			23,4	17
evel of Service	A	В		Α	A	nasata valta tata	В	B			C	900000000
pproach Delay (s)		12.3			7.2			16.7			21,3	
pproach LOS		В			Α			В			С	
tersection Summary						4.4						
CM Average Control Delay			11.8	Н	CM Level	of Servic	A		В			
CM Volume to Capacity rat			0.77	. 1			-		_			
ctuated Cycle Length (s)			48.3	Sı	ım of lost	time (s)		01 10 10 10 10 10 10 10 10 10 10 10 10 1	12.1	.05/1955/55/765/7	nesatolysis ittelesyllel	
			on the second and the				1500000150.000150.00	000 WW. 2015	Normania de Calendar y especial de Calendar	201000000000000000000000000000000000000		
itersection (Janacity Littilizat		A STATE OF THE STA	The state of the s		iji evel n	i Service						Statement of the
itersection Capacity Utilizat nalysis Period (min)	MI		73.8% 15	نا	u Levei c	f Service			D	te speciel in	CB1155 (NO.) 33	K SAT

US 64 @ Banner Farm Build-out AM

	٠	→	•	←	4	†	ļ	4
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	228	846	1	568	1	2	145	81
v/c Ratio	0.49	0.73	0.00	0.49	0,00	0.01	0.45	0.19
Control Delay	13.4	16.1	7.0	9.8	18.0	18.5	23.6	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fotal Delay	13.4	16.1	7.0	9.8	18.0	18.5	23.6	18.6
Queue Length 50th (ft)	40	191	0	100	0	1	43	22
Queue Length 95th (ft)	67	296	2	162	4	5	88	41
iternal Link Dist (ft)		740		755		506	419	
urn Bay Length (ft)	150		100			eries, manual terminalizations, co	0200-0-10000000000000	50
ase Capacity (vph)	485	1206	245	1195	445	619	522	671
tarvation Cap Reductn	0	0	0	0	0	O	0	0
pillback Cap Reductn	0	0	0	0	0	0	. 0	0
torage Cap Reductn	0	0	0	0	0	0	0	0
educed v/c Ratio	0.47	0.70	0.00	0.48	0.00	0.00	0.28	0.12
ntersection Summary			7					

Dullu-Out Fivi												_
	*		*	✓	←	•	4	†	1	>	ţ	4
Movement	EBL	EST	EBR	WBL	WBI	WEIR	Niil	NBT	NBR	981	SBT	SER
Lane Configurations	ሻ	Þ		ሻ	ĥ		ሻ	13			4	7
Volume (vph)	59	405	4	- 1	647	110	1	- 1	1	77	1	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	12	12	14	9	9	12	12	12	15
Grade (%)	CONTRACTOR OF CO	-2%	munneumho ei ve na vora e-sove	i den skriver skriver og skriver skriver i skriver	. 0%		inadako adalda kerkatura (Galda)	-4%	notes a receive a re		9%	
Total Lost time (s)	6.6	6,6		6.6	6.6		6.0	6.0			5.5	5,8
Lane Util. Factor	1.00	1.00	www.ww.ed.en.hieferi.en.heed.hi	1.00	1.00	mario de mario de la compansión de la comp	1.00	1.00	S-XXIII XXXII X		1.00	1.00
Frt	1.00	1.00		1.00	0.98		1.00	0.93			1.00	0.85
Flt Protected	0.95	1.00	008525W00000W0055	0.95	1.00		0.95	1.00	508088240888888888		0.95	1.00
Satd. Flow (prot)	1728	1817		1770	1816		1624	1582			1695	1663
Flt Permitted	0.13	1.00	riaitsuvõiniilistatameinastovastunoiss	0.44	1.00		0.69	1.00			0.73	1.00
Satd. Flow (perm)	245	1817		815	1816		1180	1582	100		1294	1663
Peak-hour factor, PHF	0.64	0.76	0.92	0.92	0.75	0.64	0.92	0.92	0.92	0.75	0.92	0.74
Adj. Flow (vph)	92	533	4	1	863	172	1	1	1	103	1	147
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	92	537	0	1	1035	0	1	2	0	0	104	147
Turn Type	Perm			Perm	robenishts	THE PROPERTY OF THE SAME ASSESSED.	Perm		ofuro 26/16/adrovalenski o humotiški	Perm	irenamus fe fewils - alimpus socios	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2			6	14431144444444444444444444444444444444	oraya suffusion with all Sections	4	XADDA SUNANNI FAARINI SUUSI	on varies by sing in a stablish	8	Kasimir (Alausi Yakarrani/kidi	8
Actuated Green, G (s)	40,5	40.5		40.5	40.5		8.4	8.4			8.9	8.8
Effective Green, g (s)	40.5	40.5		40.5	40.5		8.4	8.4		rinas en la companya de la companya	8.9	8.9
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0,14	0.14			0.14	0.14
Clearance Time (s)	6.6	6.6		6.6	6.6	1210 - OUG-SANSER	6.0	6.0			5.5	5.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	161	1197		537	1196	Colonia (Salanda Salanda Saland	161	216			187	241
v/s Ratio Prot		0.30			c0.57			0.00				
v/s Ratio Perm	0.38	an eta eta erre de la composition de la composit		0.00	(2000)248804888888	000000000000000000000000000000000000000	0.00				0.08	c0.09
v/c Ratio	0,57	0.45		0.00	0.87		0.01	0.01			0.56	0.61
Uniform Delay, d1	5.7	5.1	######################################	3.6	8.3		22.9	23.0			24.5	24.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	4.8	0.3	335000 7 700 (QCS)	0.0	6.8		0.0	0.0			3.6	4.3
Delay (s)	10.6	5.4		3.6	15.1		23.0	23.0			28.0	29.0
Level of Service	В	A		Α	В		С	C			C	С
Approach Delay (s)		6.1			15.1			23.0			28,6	
Approach LOS		Α			В			С			С	
Intersection Summary												1. 1
HCM Average Control Delay	٧		13.9	HO	M Level	of Service	•		В			
HCM Volume to Capacity ra			0.82									
Actuated Cycle Length (s)	.m. 1999 1979 1979 1979 1979 1979 1979 197	oarsennereneerine	61.5	Su	ım of lost	time (s)	BOARD THE STREET STREET, STREE	n yayayı ir parqueri (Albertyi MEMS)	12.1	Access of the second second	ALTERNATION STREET	nera empere en primital (dia)
Intersection Capacity Utiliza	tion		70.1%		U Level o				C			
Analysis Period (min)	manan Progressia (Sangarya Palana)	occurrent de l'ornie de l'anne	15	resonagoisteenii 1945 Siilee Ogo Siilee	a prospiliting years of the Television (Highline	aren er minister en		marti stabili il Regilli (1866)	nava y Manazarocci w Marinist Again (1947). V	CONTRACTOR STREET, STR		
c Critical Lane Group												

Performance Report Synchro 7 - Light: Report

US 64 @ Banner Farm Build-out PM

	Þ	-	•	←	•	†	ţ	4		
Lane Group	EBL	EBT	WEL	WET	NBL	ABT	SEL	SBR		
Lane Group Flow (vph)	92	537	1	1035	1	2	104	147		SERESVUE
v/c Ratio	0.53	0.42	0.00	0.80	0.01	0.01	0.41	0.45		
Control Delay	23.1	7.2	5.0	16.6	28.0	28.0	31.9	31.5	ternidas praedė presiytės aikira valas distriktūrių kaikira valas distriktūri.	onenerane
Queue Delay	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0		
Total Delay	23.1	7.2	5.0	16.6	28.0	28.0	31.9	31.5		STEPPEN STATE
Queue Length 50th (ft)	18	94	0	297	0	1	38	55		
Queue Length 95th (ft)	42	142	2	386	5	7	92	95		
Internal Link Dist (ft)		944		755		506	419			
Turn Bay Length (ft)	150		100			oemaaa 400 00 250 000		50		STEATURE
Base Capacity (vph)	197	1469	658	1468	360	482	407	523		
Starvation Cap Reductn	0	0	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	0.47	0.37	0.00	0.71	0.00	0.00	0.26	0.28		
Intersection Summary										

US 64 @ Stie Access Build-out AM

	→	7	•	←	*	<i>p</i>			
Movement	EBT	EBR	WEL	WBT	NBL.	NGP			
Lane Configurations	Þ		er arribonar and History of Gree	4	Y				
Volume (veh/h)	786	3	4	390	1	2			
Sign Control	Free			Free	Stop				
Grade	0%	0.00	0.00	0%	0%	0.00			
Peak Hour Factor	0.92	0.92	0.92 4	0.92 424	0.92 1	0.92 2			
Hourly flow rate (vph)	854	3	4	424	, , , , ,	4			
Pedestrians Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)	A	Almost Andrews				PHANAGE PROCESS ASSESSMENT ASSESS	namente aprilaren inia de Arbinhea inia din Salikuliki (1814)		
Median type	None			None					
Median storage veh)			orania ang ang ang ang ang ang ang ang ang an						
Upstream signal (ft)									
pX, platoon unblocked vC, conflicting volume			858		1289	856			
vC1, stage 1 conf vol		1	030		, izus	000			
vC2, stage 2 conf vol			-						
vCu, unblocked vol	en ment propositiones	10443464118441044441	858	reasy to proceed a superior of the second	1289	856	edite cui de sector de la compacte d	Allifon Antion Clark and Control of Annies Street Street	Abhadan III temahan yang ilihan ya Mamana Abanan ya Harana ya Mamana Abana ya Mamana y
tC, single (s)			4.1		6.4	6.2			
tC, 2 stage (s)	nAINEMARINESEE	omensolangelyapak	enanceinsum Linearistica						
tF (s)			2.2		3.5	3.3			
p0 queue free %			99 783	A	99 180	99 357			
cM capacity (veh/h)			TANKS OF STREET STREET, SANS		LOU	337			
Direction, Lane#	E9 1	WB/I	MB 1	9					
Volume Total	858	428	3						
Volume Left	0	4	1 2						
Volume Right cSH	3 1700	0 783	269						
Volume to Capacity	0.50	0.01	0.01						
Queue Length 95th (ft)	0.00	0	1						MASSA CONTRACTOR STATE S
Control Delay (s)	0.0	0.2	18.6						
Lane LOS		Α	С						
Approach Delay (s)	0.0	0.2	18.6						
Approach LOS			С						
intersection Summary									
Average Delay			0.1	- Concession to the Contestion of the Contestion	eliminum de publica consultant de Accombo	erfessibilitätsilitäyydeksilistefendiskus etimbasteksilistikkoloni.			
Intersection Capacity Utilization	1		51.6%	IC.	U Level o	f Service		Α	
Analysis Period (min)			15						

US 64 @ Site Access Build-out PM

				4	•	<i>p</i> -	-			
	EBT	ESE	WEL	WEE	MBL	NSR				
Movement	# }			લ	kf					
Lane Configurations	457	. 8	11 .	759	8	11				
Volume (veh/h)	Free	U	I I	Free	Stop	- t				
Sign Control Grade	0%			0%	0%					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	200700000000000000000000000000000000000	EE (G) Labor VOTA COLLABOR CONTROL AND ACT A.	Check to business a state out of the contract	
Hourly flow rate (vph)	497	9	-12	825	9	12				
Pedestrians	1993/344000 W MANUS CONTROL	And little of the second second	ED ONESEN NEW STANSON OF	Marie Control of State Control of the State of	STACO POTO CERTAIN SECTION A NOV.	and the same year of the same and the same a		and the second second second second second		94556768797888882782
Lane Width (ft)										
Walking Speed (ft/s)				oose sameraanov seka	PRAYER PARTIES FOR SAFETY A LOSS					LEASON REPORTED
Percent Blockage										
Right turn flare (veh)	Ephilips (Million 4 Adabatic A Million	www.pa/wininhiszan.pa/	namazasurini revinani si	4-00-04-03-03-03-03-03-03-03-03-03-03-03-03-03-						
Median type	None			None						
Median storage veh)	one susabilities (nessaussaussa Nessaussaussa								
Upstream signal (ft)										120
pX, platoon unblocked	11.		505		1350	501				
vC, conflicting volume vC1, stage 1 conf vol			303		1000	Joi				STATES STATES CONTRACTOR OF ST
vC1, stage 1 conf vol										
vCu, unblocked vol			505		1350	501			ONE SECTION CONTRACTOR SECTION	(MA)-mainter an entrance and
(C, single (s)			4.1		6.4	6.2				
tC, 2 stage (s)		Control or the Constitution of	2457455197454441111457	20 9657-954954-9544				nicen Xendunu xu kithookkik (1841)(1851)(1	anarii anarana sa	den Gelen in den der den de de
tF (s)			2.2		3.5	3.3				
p0 queue free %			99	name (You have a constructed by the	95	98				
cM capacity (veh/h)			1059		164	570				
Direction Lane#	EB 1	Wille I	NB 1							
Volume Total	505	837	21							
Volume Left	0	12	9				and the second s	at Artifest of Market American Control	CORES OF STREET AND STREET STREET STREET	a productive and a second
Volume Right	9	0	12							
cSH	1700	1059	279	ingo dani sensi in Managari Indonesia	Statement of the second	THE CONTRACT OF THE CONTRACT O	A	annovamento compresso de la California	Lawrence was painted by the Market Delication	coverniolekuszbickow.
Volume to Capacity	0.30	0.01	0.07							
Queue Length 95th (ft)	0	1	6	COSSUMBLE AND CONTRACTOR	EMEC EMES OF CASE CHES AS AN					
Control Delay (s)	0,0	0,3	18.9		Ē					
Lane LOS		Α	С							
Approach Delay (s)	0.0	0.3	18.9							
Approach LOS			С							etitoonerix-non givoo
intersection Stimmary										
Average Delay			0.5		emakanista da Arramania					
Intersection Capacity Utilizatio	n		58.7%	10	U Level o	of Service		В		
Analysis Period (min)			4 "							
Alialysis i Citou (IIIII)		NAMES AND ADDRESS OF THE PARTY	15	(1915 12 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16	AND THE RESERVE					NAMES OF STREET

Appendix D

TRAFFIC SIGNAL PLAN OF RECORD

