Morrill's Crossing

Application Review Correspondence



VOLUME ONE

Pre 3/7/06 Workshop Portland, Maine



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December 8, 2005

Chairman Leslie Lowry III
Members of the Portland Planning Board
389 Congress Street
Portland, ME 04101

RE: Truffic Comments on the Morrill's Crossing Proposed Mixed Use Development - Portland, Maine; CME Project No. 04-147.

Dear Chair Lowry and Members of the Portland Planning Board:

On behalf of Hannaford Bros. Co., Creighton Manning Engineering, LLP (CME) has completed a review of the revised Traffic Impact and Access Study dated November 2005 for the Morrill's Crossing, a proposed mixed-use retail and residential project in the City of Portland. This review follows our previous reviews and comments on the October 2004 and June 2004 traffic studies, We offer the following comments for consideration:

A. Study Area:

 The study area among the fhree traffic studies continues to change with each new report. No explanation has been given as to why the analyses of intersections have been deleted for this very large project. The differences include:

From June 2004 to October 2004 TIS, intersections added

- a. Forest Avenue @ Newton St/School Drwy
- b. Allen Avenue (a) Northfield Green Drive/Plymouth Street

From June 2004 to October 2004 TIS, intersections deleted

- c. Forest Avenue @ Riverside Street
- d. Walton Avenue @ Ocean St
- e. Forest Ave @ Ocean St.
- f. Forest Ave @ Walton St.

From October 2004 to November 2005 TIS, intersections deleted

g. Stevens Avenue @ Walton Street

From October 2004 to November 2005 TIS, intersections added

h. Warren Avenue @ Hicks Street

B. Site Generated Traffic:

1. A new trip generation 'credit' is added for each successive traffic study revision to minimize the volume of traffic from the project at the study area intersections. The June 2004 study contains a 'pass-by' credit only; the October 2004 study adds a 'diverted-link' credit; now the November 2005 study adds an 'internal' credit. This gives the impression that the applicant is trying to use any and all means to reduce the volume of site traffic and to limit the impact of this project.

Engineers, Planners and Surveyors

2. To illustrate, a 44% pass-by credit was used in June 2004 study. In the October 2004 and November 2005 studies, the pass-by credit drops to 30-35%, but a diverted link credit of 20-30% is added, as is the internal trip credit in the November 2005 study. The result is a substantial reduction in the number of 'new' trips for the Saturday peak hour from 745 vph to 505 vph.

The total value of all credits taken to reduce the traffic impacts is extremely and unrealistically high (60% – 65%) and the true impacts of the project are not analyzed. In other words, the applicant is claiming that 65% of the site traffic is coming from traffic already passing near the project. At the very least, studies of similar land uses in the area need to be conducted for their trip reduction credits to validate the levels used for this project.

In my analysis and review of hundreds of similar projects, I have not taken such a high credit nor seen such a high credit taken by another firm. Further, I have not seen any reviewing agency allowing such a high credit to be taken. The highest total credit in these cases has been 30% to 40%.

C. Traffic Analysis

1. The traffic analysis is flawed from the beginning and does not accurately portray the true operating characteristics of the study area intersections.

The most significant flaw in the analysis is that for all multilane approaches at each of the intersections along Forest Avenue, the applicant claims through the analysis that vehicles use the lanes available in relatively balanced and equal distributions. This is not how the intersections operate. With lane drops and lane merges through the area the traffic uses the lanes in a highly unbalanced and unequal manner. The result is a dramatic under-reporting of the true intersection delays and queue lengths.

For example, Figure 6 of the November 2005 traffic study indicates that the weekday design hour volume on Allen Avenue traveling southbound and turning left onto Forest Avenue and into to McDonald's is 445 vph (430+15). Downstream from this intersection, the right-most lane becomes a right turn lane onto Bishop Street and Stevens Avenue. The distribution of fraffic traveling in the southbound direction on Forest Avenue at Bishop Street is approximately 67% traveling through, and 33% turning right onto Bishop Street or Stevens Avenue. The traffic study assumes that the southbound shared left/through lane on Allen Avenue at Forest Avenue is relatively even (typical default lane utilization factor of 93% is used in the analysis). However, most drivers, wishing to continue south on Forest Avenue and not turn right onto Bishop Street or Stevens Avenue, favor the left-most turn lane on Allen Avenue. Under this condition, the lane utilization factor would be closer to 77%, and, as stated above, results in dramatically longer delays and quening than reported in the traffic study.

This same analysis flaw is repeated for other areas that have lane drops/inerges including the Forest Avenue northbound approaches, the Forest Avenue southbound approaches, and the Stevens Avenue approach to Forest Avenue. With the closely spaced offset intersections, lane drops, and merges, significant detail to the collection of traffic volumes is required in order to replicate the true operating conditions when calibrating and using the traffic analysis software. As opposed to just counting the amount of traffic on the intersection approaches as the study did, each lane must be counted individually and tracked through the area to see how vehicles enter and exit these compact and confusing intersections. Also, the actual queue lengths in the field need to be observed and recorded

Chairman Lestie Lowry III December 8, 2005 Page 3 of 6

for the calibration process. There is no indication in the studies that this or any analysis calibration was done.

- 2. The studies mention transit service stops and pedestrian activity exist in the area, yet they were not included in the data collection or the intersection analysis. As part of the study's recommended TDM measures, increased pedestrian traffic is being encouraged, yet, again, the pedestrians are not included in the analysis.
- 3. Since the intersection analysis of existing conditions is flawed, it follows that all subsequent analysis for no-build and build conditions are flawed as well. No meaningful results are contained in the study; and, therefore, the traffic impacts of the project have yet to be presented.
- 4. The proposed mitigation plan includes a fourth leg to the site driveway intersection at Allen Avenue. However, a fourth leg is not included in the analysis. Even if the amount of traffic from the fourth leg may be minimal, it affects the true operations of the intersection and needs to be included.

D. Safety

1. There are at least four merge/weave areas that have not been evaluated for their safety impacts. Lane reductions and lane drops within extreme short distances will lead to increased crash exposure for rear-end and sideswipe accidents for the area that already has numerous safety problems. Lane drops create uneven queuing as drivers favor the lane that continues through the downstream intersection towards their destinations yetsus the lane that ends in a merge or becomes a dedicated turn lane.

In addition to the lane drop/merge areas noted in the Intersection Analysis section, the applicant is proposing to add another lane drop/merge area on the Allen Avenue approach to the site driveway. As reported in the traffic study, the queue length expected on the Allen Avenue northbound through movement at the site driveway is 295-369 feet during the PM/Saturday peak hours. The railroad tracks are only about 200 feet away meaning that traffic will queue across the tracks creating a dangerous condition. With only about 600 feet separating the site driveway and Forest Avenue, the long queue lengths do not allow traffic enough room to safely merge out of the lane drop area.

- 2. The study states and presents crash data that the intersection of Forest Avenue at Stevens/Bishop Street is a high crash location. The study further states that many of the crashes are rear end and angle-type in nature, and then routinely dismisses them are being typical of a congested area. Without the benefit of reviewing a Collision Diagram, which is not included in the study appendices as stated in the text, it is my professional opinion through field observations that many of the crashes at this location are due to the lane drop from Allen Avenue to Stevens/Bishop Street. The high volume of traffic from the proposed project will make this high crash location significantly worse.
- 3. Numerous other intersections and links have been identified in the traffic study as being high crash-locations. The recommended improvement at the Morrill Street/Forest Avenue intersection is to restrict turning movements to right in/right out during peak hours. Drivers wishing to make left turns could use Adelaide Street to access Morrill Street. Adelaide Street/Read Street/Forest Avenue is already a high crash location. This improvement will require an analysis of the condition and a discussion of impacts to the local husinesses that use Morrill Street.

No improvements are discussed at Adelaide Street/Read Street/Forest Avenue intersection which has a high crash rate.

Chairman Leslie Lowry III December 8: 2005 Page 4 of 6

- 4. The queuing for the northbound through and right turn movement on Forest Avenue at Allen Avenue is expected to be 325-350 feet during the PM peak hour under the proposed Build with mitigation condition as stated in the study. The northbound right turn lane has a storage length of approximately 80 feet before blocking the right most through lane on Forest Avenue. The distance from the stop bar to the Bishop Street/Steven Avenue intersection is 300 feet. Therefore, the right turn queue is expected to extend into the through lane. With the additional queuing expected for the through lanes, vehicles will extend south on Forest Avenue, blocking the Bishop Avenue/Stevens Avenue intersection.
- 5. The northbound approach of Forest Avenue to Stevens Avenue is currently two lanes wide, and is going to four lanes wide in the improvement concept. As noted earlier, Morrill Street is a high crash location. The expected queue on Forest Avenue is 325 feet. Therefore the back of queue will be right at Morrill Street. Drivers exiting Morrill Street will have difficulty turning left onto Forest Avenue and seeing approaching southbound drivers potentially increasing the frequency/severity of accidents.
- 6. It is noted that discussions of the queue lengths above are based on the results presented in the traffic study; however, as noted earlier, the analysis and results are flawed as the base conditions have not been accurately analyzed. Therefore, the results above can be considered to be much worse.

E, Parking

1. The traffic study states that 666 parking spaces are planned for the project and the evaluation of the adequacy of the number of parking spaces takes into account full use of the 666 spaces. However, the core parking field, central to the supermarket, retail, office, and restaurant land uses has only about 490 spaces. Drivers will not even consider parking in the apartments or the boxing areas or the recreation field due to the segregation of these lots to their destinations.

Based on Figure 15 and 16 of the November 2005 study, the peak mid-day parking demand (peak season) of these land uses will be approximately 600-675 spaces, and 510-550 during the non-peak season. This is significantly higher than the 490 spaces to be provided in the core area. Drivers will not even consider parking in the apartments or the boxing areas or the recreation field due to the segregation of these lots to their destinations and having to walk a long way to the stores. Additionally, parking should exceed demand by approximately 10-15% to allow for drivers to quickly and conveniently find empty spaces, and to provide areas for snow storage. For these reasons, the amount of parking proposed for the project is not adequate.

F. Improvements

- 1. The study notes that pedestrians are likely to cross Forest Avenue for access to the site. Given that Forest Avenue is 5 to 6 lanes wide, an exclusive pedestrian phase for safe crossing is required at all intersections. All vehicular traffic movements are stopped during an exclusive pedestrian phase. At these intersections, the vehicular traffic movements will be stopped in excess of 30 seconds. This will cause extreme queues and delays throughout the network. The study did not analyze this condition and it needs to be analyzed.
- 2. There are no design details of the additional signal coordination with the railroad crossing nor is it known if the railroad preemption equipment/hardware can actually be installed to function properly. During a railroad preemption signal phase, the railroad gates must be lowered well in advance of any train movement. This, coupled with actual train movement across Allen Avenue, will result in extreme traffic delays that will be compounded by the high volumes from the proposed development. These delays will eventually cause Forest Avenue to bettle-neck so that the whole system shuts

down. Even if the design details can be worked out, the safety and delay consequences of adding a signal at the site driveway and coordinating with the railroad crossing far outweigh any benefits.

3. The applicant presents a mitigation plan to widen Forest Avenue to provide a four-lane roadway section from Allen Avenue to Bell Street. However, the study makes no mention of the impacts of the displaced on-street parking. Further, the widening pushes the roadway edge much closer to the building faces thus limiting the available sidewalk space. There is no mention if this concept can meet the minimum Americans with Disability Act standards for accessibility. There is no mention of fixed objects or doorways that may prevent the ADA standards being met. The viability of this concept needs to be carefully evaluated at this time.

G. Impacts

1. There are seven insignalized intersections that will operate at imacceptable Level of Service F after development of the proposed project. The City of Portland and MDOT have adopted a standard of Level of Service D as the minimum acceptable operating condition for intersections. The traffic generated by the project will exacerbate the congestion and delay at these intersections; however, the study does not propose mitigation to address the project's impact.

H. Comparison of Volumes

1. The existing traffic volumes from the site are considered minimal given the limited use of the existing buildings on-site. Under the current Low Impact Industrial zoning several different land uses are allowed including warehouses, assembly, and research and development. Residential and retail trades are prohibited. The following table summarizes the trip generation of the existing, allowable uses under Low Impact Industrial zoning, and the proposed Morrill's Crossing development.

Table 1 - Trip Generation Comparison

	PM Peak Hour (yph)	Weekday (vpd)	Saturday Peak Hour (vph)	Saturday (vpd)		
Existing	man.	3			
Low Impact Industrial Light, Industrial or Research and Development ²	190	1,110	20	300		
	310	1,600	50	385		
Proposed Supermarket/Retail/Office Residential Soccer Field Total	1,065	10,005	1,265	18,070		
	25	170	10	50		
	15	185	20	280		
	20	70	30	120		
	1,125	10,430	1,325	18,520		

1 - Based in ITE Land Use Code 110 - Light Industrial, 20 acres.

2 - Based in ITE Land Use Code 760 - Research and Development, 20 acres.

As can be seen from the table, tremendous volume increases would occur with the proposed development as compared to existing conditions or allowed uses on the site.

^{3 -} Information previded in Morrill's Crossing, Traffic Hupaci and Access Study, prepared by VHB, November 2005, vph; vehicles per hour, vpd; vehicles per day.

Chairman Leslie Lowry III December S. 2005 Page 6 of 6

I. Summary

Our review shows that potential traffic impacts of the project have not been accurately presented in the Study. We have requested that the Applicant provide to us the Synchro files for a complete and thorough review of the study. The files have not been sent to us. We request that the Public Hearing be continued so that the files can be sent us for our review.

Thank you for your consideration in these matters.

Sincerely,

Creighton Manning Eyzinegging, LLP

Thomas R. Johnson, P. P. PTOE Associate, Senior Traffic Engineer

Maine P.E. License No. 10778

c: Engineering - Hannaford Bros. Co.
Peggy McGehee - Perkins, Thompson, Hinckley & Keddy



January 10, 2006

59 Middle Street Portland, ME 04101 (207) 871-1785 (207) 871-5825 fax www.wilbursmith.com

Ms. Sarah Hopkins
Development Review Services Manager
Department of Planning & Development
City of Portland
389 Congress Street
Portland, Maine 04101

Subject: Peer Traffic Review for Morrill's Crossing/Packard Development Project

Dear Sarah:

As a follow-up to my January 9, 2006 letter to you, the following outlines my responses to comments submitted by Creighton Manning Engineering, LLP (CME) dated December 8, 2005. My responses reflect the order of comments in the CME letter.

A. Study Area

1. The study area for the traffic study was identified at a project level scoping meeting and meets methods established by the Maine Department of Transportation (MaineDOT). Accordingly, I find the study area to be acceptable.

B. Site Generated Traffic

- 1. The VHB traffic study attempts to estimate traffic generation levels by accounting for various trip types that are considered to be accepted engineering methods. Pass-By Trips, Diverted Trips, and Internal Capture Trips were accounted for in the analysis and resulted in a more accurate estimate of traffic conditions in the study area. I find the trip generation estimate to be acceptable.
- The Pass-By Trip percentages used in the November 2005 Traffic Impact Study are based upon suggested percentages by the Institute of Transportation Engineers and seem reasonable.

C. Traffic Analysis

Unequal lane distribution within the Morrill's Corner area is a concern, which is why I
have asked the applicant to prepare a traffic simulation model. I would note that under
the Build with Mitigation Scenario, the volume distribution issue is not relevant for
inbound Forest Avenue due to the provision of two inbound travel lanes through the
Steven Avenue intersection. The unequal distribution on Allen Avenue to inbound

Albany NY, Anaheim CA, Atlanta CA, Baltimore MD, Bangkok Thailand, Burlington VT, Charleston SC, Clundeston WV, Chicago IL, Cincinnati OH, Clevelaud Oli Columbia SC, Columbus OH, Dallas IX, Dubai UAE, Falls Church VA, Greenville SC, Hong Kong, Houston TX, Iselin NJ, Kansas City MO, Knoxville TN Lansing MI, Lexington KY, London UK, Milwaukee WI, Mumbai India, Myrtle Beach SC, New Havon CT, Orlando I/L, Philadelphia PA, Pittsburgh PA, Portland ME Poughkeepsie NY, Raleigh NC, Richmond VA, Salt Lake City UT, San Francisco CA, Tallahassee FL, Tampa FL, Tempe AZ, Trenton NJ, Washington DC

Forest Avenue will continue to be an issue and the analysis will need to reflect this condition.

- 2. It is my understanding that pedestrian volumes were recorded at the study intersections and included if counted.
- 3. I have asked the applicant to create an existing conditions traffic simulation model that is calibrated to existing characteristics. The model will serve as the base model for evaluating future conditions.
- 4. I concur with this comment. The applicant should revise their analysis to account for traffic from Paul White Tile.

D. Safety

- The applicant is being required to evaluate locations in the study area that meet MaineDOT criteria for potential unsafe conditions. Queuing is a concern and I will rely on the simulation model results to assist in determining whether conditions will be acceptable.
- 2. The applicant will be providing collision diagrams for this location. Additionally, I have asked the applicant to obtain additional crash data for the Portland Police Department for post MaineDOT improvement conditions.
- 3. I concur with this comment.
- 4. As stated previously, queuing is a key concern and the applicant will need to clearly document that it will not be problematic.
- 5. Conditions at Morrill's Street will need to be evaluated and a mitigation plan developed as appropriate.
- As stated previously, a comprehensive traffic simulation model is being requested and
 the results of the model will be a key factor in determining whether acceptable queue
 conditions will be provided.

E. Parking

1. I have no comment at this time.

F. Improvements

1. The use of an exclusive pedestrian phase at this location is not practical and therefore I find the analysis of concurrent pedestrian operations to be reasonable.

- 2. I have asked for additional information from the applicant on train crossings on Allen Avenue.
- 3. I concur with this comment.

G. Impacts

1. I concur that mitigation strategies should be identified at locations that operate at poor levels of service.

H. Comparison of Volumes

1. I have no comment.

Please do not hesitate to call should you have any questions.

Sincerely,

WILBER SMITH ASSOCIATES

Thomas A. Errico P.E.

Senior Transportation Engineer





imagination innovation energy Creating results for our clients and benefits for our communities

January 17, 2006

Vanasse Hangen Brustlin, Inc.

Ref:

07334.00

Mr. Kevin Beal, Chair City of Portland Planning Board 389 Congress Street Portland, Maine 04101

Re:

Response to Comments

Morrill's Crossing Traffic Study

Portland, Maine

Dear Mr. Beal:

Vanasse Hangen Brustlin, Inc. (VHB) has received and reviewed the traffic study comment letter submitted on behalf of Hannaford Bros. Co. (Hannaford) by Creighton Manning Engineering, LLP (CME) of Albany, NY. The following letter provides responses to each of the major comments raised by Hannaford's traffic consultant, Mr. Thomas R. Johnson, PE, PTOE of CME.

Additionally, it is worth noting that the City's Acting Traffic Engineer, Mr. Thomas A. Errico, PE, of Wilbur Smith Associates has submitted comment letters both addressing his review of the traffic study as well as responding to the CME letter from the City's perspective.

Before responding to the issues raised, it is important to point out that the traffic study being reviewed by the Board has been prepared in accordance with the City's and the Maine Department of Transportation's (MDOT) guidelines. While we recognize that there have been multiple versions of traffic studies authored for this parcel of land, prior versions of the traffic study focused on different mixes of land uses, sizes of buildings, and sets of off-site mitigation. In each case, the development program at this site has been evaluated and reevaluated from both the developer's perspective and the City's perspective throughout the re-zoning process. This process has changed the development from its original proposal of a retail-only development, to an office and retail development, and finally into the development of the current mixed-use project that is before the Planning Board now for review.

The other issue that should be considered in reviewing both this study and these responses is that there has been a significant amount of time between the initial submission of a traffic study to the City in support of the rezoning request back in 2002 and the current submission. Through that time, we are all aware that traffic conditions have changed in the Morrill's Corner area. With each submission, information was updated, evaluated, and reevaluated so as to present the most up-to-date information possible to the various stakeholders and decision-makers. For example, the initial traffic study submitted for this parcel considered the Morrill's Corner and Allen's Corner roadway improvement projects to be constructed at some point in the future. However, over time, these improvements were constructed and traffic has been traveling through these locations for some time. For this reason, the most recent version of the traffic study (and the study that was reviewed by the City Council when the rezoning of the property was under their consideration) included totally updated traffic information that documented not only the beneficial impacts of the improvements on traffic flow, but also included real numbers – not projections – so that the City could make an informed decision on the projects impacts.

www.vhb.com

Therefore, any reference to prior versions of a traffic study submitted to the City is largely irrelevant. Those traffic studies were for alternative development scenarios, had different off-site mitigation measures being proposed, included historical traffic information that has since been updated for the current project, and ultimately did not represent the impacts of the project that is currently under review by the City.

1. This review follows our previous reviews and comments on the October 2004 and June 2004 traffic studies. (VHB: For the purpose of clarity, the previous sentence was taken from introductory paragraph.) The study area among the three traffic studies continues to change with each new report. No explanation has been given as to why the analyses of intersections have been deleted for this very large project. (Hannaford's traffic consultant provides examples of intersections that were added or subtracted from the study areas that were analyzed as part of the traffic studies.)

In accordance with MDOT standards¹, intersections to be included in the study area include those meeting certain criteria. Since the actual project has changed several times (both in its size, land-use composition, and the amount of traffic it will be generating), it stands to reason that the impact area should be expanded or reduced based on the project's area wide impacts.

The current November 2005 traffic study under review by the City includes all those locations that should be studied (based on the MDOT and City requirements). This study area was confirmed at the September 15, 2005 Scoping Meeting held between the City, the Applicant, abutters, and other interested individuals. In fact, at the request of a member of the public, the study area was expanded at this scoping meeting to include the intersection of Hicks Road and Warren Avenue — which would have normally not been considered in the development of this study.

In his January 10, 2006 letter, Mr. Errico concurs with our finding and states that the selected study area used in the November 2005 traffic study for this project is acceptable.

For informative purposes, the MDOT criteria include, "intersections where, during any one-hour period, traffic attributable to the proposed development equals or exceeds: (a) 25 vehicles in a left-turn-only lane; (b) 35 vehicles in a through lane, right-turn lane, or a combined through and right-turn lane; or (c) 35 vehicles (multiplying the left-turn volume by 1.5) in a combined left-turn and through lane, or a combined left-turn, through and right-turn lane" are required to be studied."

2. A new trip generation 'credit' is added for each successive traffic study revision to minimize the volume of traffic from the project at the study area intersections. The June 2004 study contains a 'pass-by' credit only; the October 2004 study adds a 'diverted-link' [sic] credit; now the November 2005 study adds an 'internal' credit. This gives the impression that the applicant is trying to use any and all means to reduce the volume of site traffic and to limit the impact of this project.

As noted previously, the development being considered on this site has been continually evolving to the current development program. While the June 2004 study and October 2004 study both referenced different traffic generation methodologies and volumes, they also referred to different development programs on the site.

¹ Traffic Movement Permit; State of Maine, Department of Transportation, Traffic Engineering Division; April 2000.



The November 2005 traffic study currently under review utilizes the appropriate traffic generation methodologies and applies them based on standard traffic engineering procedures published by the Institute of Transportation Engineers (ITE)² to develop an accurate estimate of the proposed development. Because of the mixed use nature of this project (one incorporating housing, retail, recreational, and office uses on one site), ITE recommends that an internal capture rate be applied.

Ultimately, in his January 10, 2006 letter, Mr. Errico concurs with our estimates and states that the selected trip generation estimates used in the November 2005 traffic study for this project are acceptable.

3. To illustrate, a 44% pass-by credit was used in [the] June 2004 study. In the October 2004 and November 2005 studies, the pass-by credit drops to 30-35%, but a diverted link credit of 20-30% is added, as is the internal trip credit in the November 2005 study. The result is a substantial reduction in the number of 'new' trips for the Saturday peak hour from 745 vph to 505 vph.

The total value of all credits taken to reduce the traffic impacts is extremely and unreasonably high (60%-65%) and the true impacts of the project are not analyzed. In other words, the applicant is claiming that 65% of the site traffic is coming from traffic already passing near the project. At the very least, studies of similar land uses in the area need to be conducted for their trip reduction credits to validate the levels used for this project.

In my analysis and review of hundreds of similar projects, I have not taken such a high credit nor seen such a high credit taken by another firm. Further, I have not seen any reviewing agency allowing such a high credit to be taken. The highest total credit in these cases has been 30% to 40%.

The percentage of primary, pass-by, and diverted linked trips associated with the retail portion of the development was prepared, documented, and shown to be entirely consistent with ITE and general traffic engineering practice. To highlight this lack of understanding, we refer to the comment about not having seen a reviewing agency allow such a high credit to be taken for a retail development. While it may be true that Mr. Johnson has not seen this in his dealings in the State of New York, the Hannaford consultant along with the Planning Board need look no further than the recent July 2003 Traffic Impact Study prepared for his client when they proposed to develop the Hannaford Supermarket located on Riverside Street in Portland, Maine. In this study, Hannaford's consultant utilized an identical 30 percent pass-by rate and a 35 percent diverted linked rate in estimating the impacts of the proposed supermarket. Additionally, the traffic study submitted and approved by the City of Portland Planning Board for the Somerset Marketplace development on Marginal Way also used an identical pass-by and diverted linked rate.

Ultimately, supporting documentation for this approach was submitted as part of the Sections 1-6 submission and approved for use by the City at the Scoping Meeting held on September 15, 2005. Mr. Errico concludes in his January 10, 2006 letter to the Planning Board that these percentages are reasonable.

4. The traffic analysis is flawed from the beginning and does not accurately portray the true operating characteristics of the study area intersections.

² Trip Generation Handbook; Institute of Transportation Engineers (ITE); Washington, DC; March 2001.



The most significant flaw in the analysis is that for all multilane approaches at each of the intersections along Forest Avenue, the applicant claims through the analysis that vehicles use the lanes available in relatively balanced and equal distributions. This is not how the intersections operate.

With lane drops and lane merges through the area the traffic uses the lanes in a highly unbalanced and unequal manner. The result is a dramatic under-reporting of the true intersection delays and queue lengths.

For example, Figure 6 of the November 2005 traffic study indicates that the weekday design hour volume on Allen Avenue traveling southbound and turning left onto Forest Avenue and into to McDonald's is 445 vph (430+15). Downstream from this intersection, the right-most lane becomes a right turn lane onto Bishop Street and Stevens Avenue. The distribution of traffic traveling in the southbound direction on Forest Avenue at Bishop Street is approximately 67% traveling through, and 33% turning right onto Bishop Street or Stevens Avenue. The traffic study assumes that the southbound shared left/through lane on Allen Avenue at Forest Avenue is relatively even (typical default lane utilization factor of 95% is used in the analysis). However, most drivers, wishing to continue south on Forest Avenue and not turn right onto Bishop Street or Stevens Avenue, favor the left-most turn lane on Allen Avenue. Under this condition, the lane utilization factor would be closer to 77%, and, as stated above, results in dramatically longer delays and queuing than reported in the traffic study.

This same analysis flaw is repeated for other areas that have lane drops/merges including the Forest Avenue northbound approaches, the Forest Avenue southbound approaches, and the Stevens Avenue approach to Forest Avenue. With the closely spaced offset intersections, lane drops, and merges, significant detail to the collection of traffic volumes is required in order to replicate the true operating conditions when calibrating and using the traffic analysis software. As opposed to just counting the amount of traffic on the intersection approaches as the study did, each lane must be counted individually and tracked through the area to see how vehicles enter and exit these compact and confusing intersections. Also, the actual queue lengths in the field need to be observed and recorded for the calibration process. There is no indication in the studies that this or any analysis calibration was done.

As part of the initial review of traffic conditions in the field, VHB identified that there are several lane drops in and around the Morrill's Corner area of the City, particularly along Forest Avenue. Lane drops in and of themselves are not problematic; it is when they are not designed and/or constructed in a safe and well thought-out manner that they result in poor traffic operations. In this specific case, the lane drop that exists on the inbound side of Forest Avenue as drivers approach Stevens Avenue in two lanes and are forced to split either to Stevens Avenue or Forest Avenue in their own lane is problematic for the existing commuters who use these roadways.

The single largest improvement being offered by the development's roadway improvement package focuses on eliminating this lane drop and providing drivers with the ability to travel inbound in two consistent lanes until such a point that the two lanes can properly transition to one single lane.



At the request of the City's traffic engineer, VHB has reviewed the impacts associated with this lane drop phenomenon and attempted to calibrate the existing and no build conditions of the assessment to account for its presence. The end result is that the Existing and No-Build traffic scenarios operate in a slightly worse manner than was initially presented in the November 2005 traffic study. However, it is extremely important to point out that this only serves to magnify the benefits of the proposed off-site mitigation package to the City. Moreover, during the morning commuter peak hours—when the majority of the existing traffic heading into the downtown Portland area is at its greatest—is when the project will be generating its least volume of traffic—thereby providing additional benefits to the City and those who commute along Forest Avenue.

To demonstrate the extent by which the results would have been altered by performing the analysis in the manner suggested by Hannaford's traffic consultant, the applicant has attached a summary table to this letter showing the analysis results for Existing conditions (with an adjusted lane utilization factor applied) and the Build condition with the applicant's suggested Mitigation in place and no factors applied.

5. The studies mention transit service stops and pedestrian activity exist in the area, yet they were not included in the data collection or the intersection analysis. As part of the study's recommended TDM measures, increased pedestrian traffic is being encouraged, yet, again, the pedestrians are not included in the analysis.

As part of the traffic counting efforts conducted for this project, observations of pedestrian activity were performed at several study area intersections to determine the level of usage and patterns of travel that they were using. In general, the pedestrian activity in and around the Morrill's Corner area is minimal with little or no activity observed crossing either Forest Avenue or Allen Avenue near the signals. It would appear that part of this low occurrence of crossings is a result of the poor conditions of the crossing equipment and the current state of the pedestrian striping along this stretch of roadway. In fact, most of the crossing activity was noted to occur at mid-block locations (not near the signals), presumably because pedestrians found it easier to cross in these locations as opposed to crossing at the signals.

Regardless, the applicant has been working with both the City and METRO to account for and incorporate upgraded pedestrian and transit amenities into the design of both the on-site and off-site roadway improvements. While no projection or credit has been taken for the likely reductions in vehicular traffic arriving and departing from the site resulting from these benefits, clearly the incorporation and consideration of these various forms of alternative modes of transportation will further improve the projected vehicular operating conditions in and around the Morrill's Corner area.

Furthermore, the design improvements to the system have considered the likely increased usage of pedestrians and bicyclists by providing concurrent pedestrian crossings at each signalized intersections as well as providing a bicycle lane along Forest Avenue – which do not currently exist.

6. Since the intersection analysis of existing conditions is flawed, it follows that all subsequent analysis for no-build and build conditions are flawed as well. No meaningful results are contained in the study; and, therefore, the traffic impacts of the project have yet to be presented.



Similar to the response to Comment 4, the applicant has adjusted the Existing and No-Build conditions to account for the lane utilization factors suggested by Hannaford's consultant. In doing so, the end result only serves to magnify the benefits being offered by the Build conditions assessment which was correctly and adequately modeled.

7. The proposed mitigation plan includes a fourth leg to the site driveway intersection at Allen Avenue. However, a fourth leg is not included in the analysis. Even if the amount of traffic from the fourth leg may be minimal, it affects the true operations of the intersection and needs to be included.

This statement is incorrect and misleading. The appendix material submitted in support of this application clearly shows a single eastbound lane opposite the site driveway. Hannaford's traffic consultant is referred to pages 9-10 for each peak hour analysis worksheet under the Build with Mitigation condition in the Synchro analysis output, which is included in the Technical Appendix.

8. There are at least four merge/weave areas that have not been evaluated for their safety impacts. Lane reductions and lane drops within extreme short distances will lead to increased crash exposure for rear-end and sideswipe accidents for the area that already has numerous safety problems. Lane drops create uneven queuing as drivers favor the lane that continues through the downstream intersection towards their destinations versus the lane that ends in a merge or becomes a dedicated turn lane.

In addition to the lane drop/merge areas noted in the Intersection Analysis section, the applicant is proposing to add another lane drop/merge area on the Allen Avenue approach to the site driveway. As reported in the traffic study, the queue length expected on the Allen Avenue northbound through movement at the site driveway is 295-369 feet during the PM/Saturday peak hours. The railroad tracks are only about 200 feet away meaning that traffic will queue across the tracks creating a dangerous condition. With only about 600 feet separating the site driveway and Forest Avenue, the long queue lengths do not allow traffic enough room to safely merge out of the lane drop area.

As discussed previously, the applicant is proposing to eliminate the existing lane drops and merges along Forest Avenue as part of the off-site mitigation plan. One of the benefits of the off-site transportation improvement plan is the reduction/elimination of merge and weaving sections, which are expected to result in a reduction in the number of crashes at these locations.

With respect to the lane drop being created along Allen Avenue, this is a mischaracterization of this condition. With only one lane of traffic from Forest Avenue feeding the two lanes along Allen Avenue coupled with the fact that these single lanes will be operating under their own signal phases, drivers will not be weaving along Allen Avenue between Forest Avenue and the site driveway.

In addition to roadway geometric improvements, the applicant has proposed to coordinate the four traffic signals in the Morrill's Corner area and connect this system to the control boxes for the railroad crossings of Allen Avenue and Forest Avenue. This system will reduce the delay for vehicles traveling along Forest Avenue, minimize the queue lengths between all locations, and limit the impact of a train crossing on vehicular traffic flow.



In the example described by Hannaford's traffic consultant, this improved system will force vehicles along Allen Avenue between Forest Avenue and the site drive to clear while prohibiting vehicles in the Morrill's Corner area and north of the site from accessing this section of Allen Avenue in advance of the railroad crossing gates being lowered. Once the train has passed and the crossing gates have been lifted, the system will normalize over the course of one to three signal phases as it currently does.

9. The study states and presents crash data that the intersection of Forest Avenue at Stevens [Avenue]/Bishop Street is a high crash location. The study further states that many of the crashes are rear-end and angle-type in nature, and then routinely dismisses them are being typical of a congested area. Without the benefit of reviewing a Collision Diagram, which is not included in the study appendices as stated in the text, it is my professional opinion through field observations that many of the crashes at this location are due to the lane drop from Allen Avenue to Stevens [Avenue]/Bishop Street. The high volume of traffic from the proposed project will make this high crash location significantly worse.

We wholeheartedly agree with the statement that the *existing* lane-drop along inbound Forest Avenue, as drivers pass Stevens Avenue, has added to the high crash designation of this location. The proposed off-site improvements to be provided by the applicant will eliminate this existing lane-drop along Forest Avenue and, therefore, eliminate the likely cause of several of these collisions.

10. Numerous other intersections and links have been identified in the traffic study as being high crash locations. The recommended improvement at the Morrill Street/Forest Avenue intersection is to restrict turning movements to right in/right out during peak hours. Drivers wishing to make left turns could use Adelaide Street to access Morrill Street. Adelaide Street/Read Street/Forest Avenue is already a high crash location. This improvement will require an analysis of the condition and a discussion of impacts to the local businesses that use Morrill Street.

No improvements are discussed at [the] Adelaide Street/Read Street/Forest Avenue intersection which has a high crash rate.

Initially, the MDOT was considering improving the intersection of Adelaide Street/Read Street/Forest Street through a BTIP project which has since been placed on the states "deferred" list – meaning that it will not be constructed in the near future. It was the applicant's opinion, supported by the City, that these improvements, when constructed, would address the high crash issues inherent in the design of this location.

In addition, the City and State were considering the creation of a new signal at Bell Street farther inbound along Forest Street. This improvement, coupled with the one-way designation of Read Street away from Forest Street, would improve/eliminate the high crash designation at the Adelaide/Read/Forest intersection. VHB will work with the City and Planning Board to advance this issue further.

As requested by the City's traffic engineer, the applicant will be submitting a complete set of recommendations for the unsignalized intersections that highlight the likely causes of the collisions as well as the suggested recommendations to address these unsafe conditions.

11. The queuing for the northbound through and right turn movement[s] on Forest Avenue at Allen Avenue is expected to be 325-350 feet during the PM peak hour under the proposed Build with mitigation condition as



stated in the study. The northbound right turn lane has a storage length of approximately 80 feet before blocking the right most through lane on Forest Avenue. The distance from the stop bar to the Bishop Street/Steven Avenue intersection is 300 feet. Therefore, the right turn queue is expected to extend into the through lane. With the additional queuing expected for the through lanes, vehicles will extend south on Forest Avenue, blocking the Bishop Avenue [sic]/Stevens Avenue intersection.

This is a somewhat misleading statement. The northbound right-turn lane of Forest Avenue at Allen Avenue has a storage length of approximately 185 feet (not the 80 feet suggested by Hannaford's consultant). Additionally, the Synchro analysis reports that queue lengths for the northbound right turns on Forest Avenue are expected to be approximately 325 feet during the evening peak hour (not the 325-350 feet as suggested).

Ultimately, this is a timed queue which will be alleviated when the two signals along Forest Avenue (at Allen Avenue and at Stevens Avenue) are coordinated. Essentially, the queue shown will not block adjacent intersections except when the northbound movements at *both* intersections are moving – therefore not interfering with other movements at the intersections.

12. The northbound approach of Forest Avenue to Stevens Avenue is currently two lanes wide, and is going to four lanes wide in the improvement concept. As noted earlier, Morrill Street is a high crash location. The expected queue on Forest Avenue is 325 feet. Therefore the back of queue will be right at Morrill Street. Drivers exiting Morrill Street will have difficulty turning left onto Forest Avenue and seeing approaching southbound drivers potentially increasing the frequency/severity of accidents.

This is also a misleading statement. The northbound (or outbound) approach of Forest Avenue at Morrill Street is currently two lanes wide and will remain two lanes wide with the suggested off-site roadway improvements in place.

Regardless, the northbound approach of Forest Avenue at Stevens Avenue/Bishop Street has a storage length of approximately 325 feet. During the evening peak hour, the queue on this approach is expected to reach Morrill Street, allowing vehicles exiting Morrill Street to continue to enter Forest Avenue to turn right or left. However, if the peak hour restrictions prohibiting left turns at this location during the peak hours were implemented (as highlighted in Comment 10), this potential safety issue would be addressed.

13. It is noted that discussions of the queue lengths above are based on the results presented in the traffic study; however, as noted earlier, the analysis and results are flawed as the base conditions have not been accurately analyzed. Therefore, the results above can be considered to be much worse.

The applicant has submitted a revised traffic model to the City detailing the modifications to the Existing and Build traffic conditions. The end result of these modifications highlight that the existing conditions are worse than what was originally submitted and reviewed, but that the Build Condition with Mitigation is still valid. Ultimately, the modifications to the existing conditions assessment only serves to highlight the benefit that the applicants mitigation plan will have on area traffic flow by eliminating several of the inherent flaws in the current transportation network.

14. The traffic study states that 666 parking spaces are planned for the project and the evaluation of the adequacy of the number of parking spaces takes into account full use of the 666 spaces. However, the core parking



field, central to the supermarket, retail, office, and restaurant land uses has only about 490 spaces. Drivers will not even consider parking in the apartments or the boxing areas or the recreation field due to the segregation of these lots to their destinations.

Based on Figure[s] 15 and 16 of the November 2005 study, the peak mid-day parking demand (peak season) of these land uses will be approximately 600-675 spaces, and 510-550 during the non-peak season. This is significantly higher than the 490 spaces to be provided in the core area. Drivers will not even consider parking in the apartments or the boxing areas or the recreation field due to the segregation of these lots to their destinations and having to walk a long way to the stores. Additionally, parking should exceed demand by approximately 10-15% to allow for drivers to quickly and conveniently find empty spaces, and to provide areas for snow storage. For these reasons, the amount of parking proposed for the project is not adequate.

The peak parking demand was estimated for each land use individually using rates published by ITE's and then added together for each hour of the day. This is a conservative estimate, as mixed-use developments such as the proposed site are conducive for shared parking. As defined by the Urban Land Institute (ULI)4:

Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions: (1) variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and (2) relationships among the land uses that result in visiting multiple land uses on the same auto trip.

In this study, reductions for shared parking were not used in order to present a worst-case scenario and, thus, a conservative look at the parking demand for the site. ULI research on sites similar in land use to the proposed site has shown that between 12 and 30 percent of the parking demand could be reduced due to shared parking during the peak season. At a minimum, applying this data would result in a substantial decrease in the number of spaces that would be required at any one time.

Furthermore, in the study no credit was taken for transit-oriented trips that would be accommodated by the two bus stops located on the site. These shoppers, employees and residents who arrive and depart the site via the bus represent vehicular trips and parking spaces that can be subtracted from the primary trips and base parking spaces.

15. The study notes that pedestrians are likely to cross Forest Avenue for access to the site. Given that Forest Avenue is 5 to 6 lanes wide, an exclusive pedestrian phase for safe crossing is required at all intersections. All vehicular traffic movements are stopped during an exclusive pedestrian phase. At these intersections, the vehicular traffic movements will be stopped in excess of 30 seconds. This will cause extreme queues and delays throughout the network. The study did not analyze this condition and it needs to be analyzed.

It is important to point out that these signals are <u>currently programmed to provide concurrent pedestrian crossings</u> at all locations throughout the Morrill's Corner area. It is our professional opinion that concurrent

⁴ Shared Parking, Second Edition; Urban Land Institute (ULI); Washington, DC; 2005.



³ Parking Generation; Second Edition; Institute of Transportation Engineers (ITE); Washington, DC; 1987.

pedestrian phasing at the signalized intersections is the safest and most efficient means of handling the volume of pedestrians in the vicinity of the Morrill's Corner area.

This standard traffic engineering concept was found to be acceptable by the City's traffic engineer in his January 10, 2006 letter.

If CME is suggesting that the pedestrian crossings be altered from their existing concurrent phasing operations to a less effective exclusive pedestrian phasing, we wholeheartedly agree that end result would be the creation of extreme queues and delays throughout the roadway network. It is for this reason that these suggestions were not made.

16. There are no design details of the additional signal coordination with the railroad crossing nor is it known if the railroad preemption equipment/hardware can actually be installed to function properly. During a railroad preemption signal phase, the railroad gates must be lowered well in advance of any train movement. This, coupled with actual train movement across Allen Avenue, will result in extreme traffic delays that will be compounded by the high volumes from the proposed development. These delays will eventually cause Forest Avenue to bottle-neck so that the whole system shuts down. Even if the design details can be worked out, the safety and delay consequences of adding a signal at the site driveway and coordinating with the railroad crossing far outweigh any benefits.

As stated in the response to Comment 8, the applicant has proposed to coordinate the four traffic signals in the Morrill's Corner area and connect this system to the control boxes for the railroad crossings of Allen Avenue and Forest Avenue. The engineering details of this design will be provided in the design phase of this project.

It is also important to note that the mere development of this project will not create additional train crossings along Allen Avenue. Our focus has been to make sure that the train crossings that do occur do so in a safe and efficient manner. There is no denying that these crossings create some driver delays in and around the Morrill's Corner area. In fact, they create impacts all along the rail line when a train crosses a major roadway corridor.

Furthermore, VHB was asked by the City to prepare and provide the results of a detailed investigation as to when and how often trains cross Allen Avenue over the course of a week. In response to this request, VHB has provided additional train crossing information to the City detailing how often, what time of the day, and for how long these crossings take (e.g., how long are the gates in their down position?). As part of this review, VHB identified 27 train crossings along Allen Avenue between Wednesday, December 7 and Tuesday, December 13, 2005 (or an average of about four crossings per day). The average time that the gates were down was approximately three minutes. In all these cases, there is only one instance where a train was documented crossing Allen Avenue during the weekday evening peak commuter hour (Friday, December 9, 2005 at 4:08 PM when the gates were lowered for three minutes). The remaining 26 train crossing events were documented to occur outside of evening commuter peak hour.

Of note is that these train crossings, however frequent or infrequent, occur for an average of about three minutes each — or less time than it takes for two complete light cycle phases to take place at the existing intersection of Allen Avenue at Forest Avenue.



The bottom line is that these train crossings will stop traffic along Allen Avenue with or without this project. This project will bring along with it updated train pre-emption equipment, safer crossing equipment for both pedestrians and motorists and will certainly not exacerbate these conditions any more than currently exist along area roadways. In fact, as discussed previously, these improvements will provide opportunities to improve traffic flow along Forest Avenue with the crossings occurring.

17. The applicant presents a mitigation plan to widen Forest Avenue to provide a four-lane roadway section from Allen Avenue to Bell Street. However, the study makes no mention of the impacts of the displaced on-street parking. Further, the widening pushes the roadway edge much closer to the building faces thus limiting the available sidewalk space. There is no mention if this concept can meet the minimum Americans with Disability Act standards for accessibility. There is no mention of fixed objects or doorways that may prevent the ADA standards [from] being met. The viability of this concept needs to be carefully evaluated at this time.

Regarding parking, the applicant has made a recommendation that the seven or eight unmarked on-street parking spaces which currently exist along Forest Avenue be restricted between the hours of 6:00 - 9:00 AM and 3:00 - 6:00 PM during the weekdays.

Regarding sidewalks, as shown on the conceptual plan, the applicant has proposed to provide a seven-foot sidewalk along both sides of Forest Avenue, matching the existing sidewalk width that was constructed as part of the recent MDOT transportation improvement project in the area. Alternately, the applicant has recommended a six-foot sidewalk as part of cross-section modification that would include a three-foot shoulder suitable for bicycle travel. In both cases, the proposed sidewalk would certainly be wide enough to meet ADA standards, even with a fixed object or doorway present.

18. There are seven unsignalized intersections that will operate at unacceptable Level of Service F after development of the proposed project. The City of Portland and MDOT have adopted a standard of Level of Service D as the minimum acceptable operating condition for intersections. The traffic generated by the project will exacerbate the congestion and delay at these intersections; however, the study does not propose mitigation to address the project's impacts.

In discussing this issue with the City's Traffic Engineer, the Level of Service F standard has been applied to signalized intersections throughout the City of Portland and is not applied to unsignalized intersections. Additionally, while the Maine Department of Transportation has adopted this standard, they also recognize that the level of impact from developments, such as the one under review, at unsignalized intersections is unrealistic in some cases. For this reason, they provide language in their permit that states:

"In the case of unsignalized intersections, if traffic with the development in place would not meet the warrant criteria for signalization or auxiliary turning lanes, as set forth in the edition of Federal Highway Administration's "Manual on Uniform Traffic Control Devices"...then the Department may reduce the mitigation requirement for those measures so long as the resulting traffic conditions provide for safe movement."

Of the seven locations highlighted by CME, all of them are unsignalized locations. These impacts are summarized on pages 34-35 of the November 2005 Traffic Impact and Access Study and focus on the



Page 12

operations at each of the seven unsignalized intersections raised by Hannaford's consultant. The specific unsignalized intersections studied include the following:

- Forest Avenue at Newton Street
- Forest Avenue at Morrill Street
- Forest Avenue at Read Street/Adelaide Street
- Forest Avenue at Bell Street
- Allen Avenue at Woodlawn Avenue
- Allen Avenue at Plymouth Street/Northfield Green
- Warren Avenue at Hicks Street

Generally, each of these unsignalized intersections exists on what can be defined as an arterial roadway that carries a significant volume of commuter traffic during the weekday evening conditions. In an urban environment, such as Portland, it is not uncommon for drivers on the side streets to wait some period of time for an adequate break in the traffic stream during these peak hours.

It is important to understand the traffic operational characteristics used in the engineering models to predict the delays at unsignalized intersections are based on a series of conservative assumptions and calculations. Furthermore, the delays shown in the tables assume that only the side streets are inconvenienced. Mainline traffic will continue to flow through these intersections in an unaffected, free-flow, manner.

As part of this review, as requested by the City, VHB visited and investigated each of these locations to determine if potential actions could be implemented to address the delays experienced by those few motorists waiting to turn left or right onto the mainline roadway and any identifiable safety deficiencies. This investigation focused on the following possible solutions, but also considered other options (where available):

Signalization – Signals provide the greatest level of control at a given intersection by clearly defining the right of way to drivers on the mainline and on the side streets. According to the Federal Highway Administration and the MDOT, signals may only be constructed if at least one of the various volume-based and safety-based criteria for signalization is met. If they are not met, then signals are not considered appropriate and cannot be installed. In many cases, the low-volume nature of these side streets does not trigger the need for the installation of traffic signals.

Turn Lanes – At most unsignalized locations where traffic signals are not warranted, it is usually more appropriate to upgrade the intersections to provide additional turning lanes and/or wider approach lanes on the side streets. These turn lanes are provided so that right-turning motorists do not have to wait behind those drivers seeking to turn left onto a busy street and/or to address potential safety issues that have been documented at specific locations. Similarly, these also could include providing turn lanes along the mainline corridor so that drivers waiting to turn left into a side street are not blocking those drivers seeking to travel through the intersection. In many cases, these types of improvements are aimed at improving the safety at intersections as well as facilitating traffic flow through those locations that have a large volume of turning traffic.

Movement Restrictions – Finally, another option worth considering focuses on restricting turning movements at those locations which are deemed problematic and/or unsafe. Typically, this involves restricting certain low-



volume movements at an intersection. It is critical that alternative routes are provided to motorists when these options are considered.

As requested by the City, VHB offers the following operational review of each intersection and provides an aerial image of each specific location for reference purposes.

Forest Avenue at Newton Street

There currently is a pedestrian signal at this intersection which provides breaks in the traffic stream to let students and residents cross Forest Avenue. Based on the observed and projected volumes at this location, traffic signals are not warranted (except for pedestrian crossings, given the proximity of the school to this location). A review of the recent MDOT crash data indicates that this location is well below the state's 1.00 CRF threshold and, therefore, is not considered a high crash location.

Under future conditions, it is projected that between 15 and 30 left-turns will occur at this intersection from the side street movements. Because there are limited opportunities to widen Newton Street (given the proximity of residential properties on each corner) and/or the School Driveway (given the proximity of the fire station on the corner), there does not appear to be any reasonable means or methods to minimize or eliminate the delay experienced by the side-street drivers at this intersection without significantly impacting the adjacent property owners.

Forest Avenue at Morrill Street

The five left turns and 35 right turns that exit Morrill Street during the weekday evening peak commuter hour currently operates at LOS F and is projected to remain at this level under the future conditions. Based on our review of the MDOT crash rate statistics, there were 12 collisions at this intersection over the most-recent three-year period available (from 2002-2004).

The proposed improvements along Forest Avenue suggested by the applicant are expected to reduce the congestion at this location and, in turn, will likely improve the overall safety of this intersection by reducing the number of congestion-related collisions that have historically occurred here.

VHB reviewed this intersection to determine if any feasible improvements could be implemented at this location to reduce the delay experienced along Morrill Street. Based on our review, due to the limited right of way at this intersection and the proximity of buildings located immediately adjacent to the intersection, there are limited options available to provide a wider approach. As shown in the attached figure, there are two options worth considering at this intersection to reduce the delay for side street drivers. The first alternative is to restrict left-turns from Morrill Street onto Forest Avenue during the peak evening commuter hour (between 4:00 and 6:00 PM). This restriction would only impact five motorists during this peak hour and would require them to make a left turn at either Bell Street or Read Street – outside of the influence of the Stevens Avenue signal. The other option worth considering would be to flare the right-turn corner at Morrill Street and Forest Avenue to provide the opportunity for motorists turning right to by-pass those motorists seeking to turn left at the intersection.



Forest Avenue at Adelaide Street/Read Street/parking lot driveway and at Bell Street

As part of the Forest Avenue BTIP proposal, this intersection would be expected to be both widened and have the traffic flow restricted along Read Street (so that it would travel one-way away from Forest Avenue). Specifically, the BTIP proposal calls for the widening of Forest Avenue to provide four lanes of traffic flow along this corridor and the traffic signalization of Bell Street with associated minor geometric improvements. Currently, there is one through lane in each direction along Forest Avenue with an exclusive left-turn lane from Forest Avenue (inbound) to Read Street.

There are a number of options worth considering at these intersections. The first option is to continue to pursue the benefits afforded by the BTIP application. Clearly, those improvements would provide the greatest level of control and operational benefits to this area. The applicant will continue to work with the City to advocate these improvements.

Should the BTIP project not move forward, the applicant has developed a series of potential other actions that would be worth considering. These actions include:

- Restricting left-turns from Read Street to Forest Avenue Given the acute angle that Read Street enters the intersection and the low volume of traffic that seeks to make this movement, it would appear reasonable that this movement could be restricted during peak hours. These turns would then take place at the Bell Street intersection with Forest Avenue and would do so under much more favorable geometric conditions.
- Close Adelaide Street at Read Street By dead-ending the Adelaide Street corridor at Read Street, the
 fifth leg of this intersection would be removed and, therefore, reduce the number of vehicle conflicts at
 this intersection. These movements could then take place either at Bell Street or other locations along
 Forest Avenue.
- Make Read Street one-way away from Forest Avenue as suggested in the BTIP proposal, the Read Street corridor could be converted to a one-way flow away from Forest Avenue. In concert with this action, the Bell Street intersection with Forest Avenue would be upgraded to provide separate right-and left-turn lanes. Signalization would not be required at this intersection if this improvement was made.

Allen Avenue at Woodlawn Avenue

As stated in the traffic report, the applicant is proposing to provide a one-way connection from the Woodlawn Avenue neighborhood into the site via Morrill Street. This connection would serve two purposes. First, to allow convenient access from the neighborhood into the development and, second, to provide access to those residents who live in the neighborhood to access Allen Avenue via the site's signalized access driveway. As noted, there are only 30 motorists that exit Woodlawn Avenue during the peak hour conditions – so the resulting impact at the signal would be minimal.



Allen Avenue at Plymouth Street/Northfield Green

According to discussions with the City, this intersection will be signalized in the near future as part of a separate project unrelated to the Morrill's Crossing development. This signalization will improve the operating levels at this intersection to acceptable standards.

Warren Avenue at Hicks Street

Based on traffic count information at this intersection, only five left turns were observed taking place during the evening peak hour (no left turns were observed during the Saturday midday peak hour). Motorists who elect to make this movement do so out of convenience as there are connections within this neighborhood that also provide access to Forest Avenue. In reviewing the operational deficiencies at this intersection, there does not appear to be any reasonable mitigation that could be implemented at this location to address this operational deficiency short of restricting left-turns out of Hick Street during the peak hour conditions.

In summary, the applicant is willing to coordinate these improvements with the City as the process moves forward. Each alternative appears to offer some benefit to the overall traffic operations at these intersections.

19. The existing traffic volumes from the site are considered minimal given the limited use of the existing buildings on-site. Under the current Low Impact Industrial zoning several different land uses are allowed including warehouses, assembly, and research and development. Residential and retail trades are prohibited. The following table summarizes the trip generation of the existing, allowable uses under Low Impact Industrial zoning, and the proposed Morrill's Crossing development. (Hannaford's traffic consultant provides a table comparing peak hour and daily traffic volumes for the existing traffic counts, 20 acres of light industrial's, 20 acres of research and development's, and the estimated trips for the proposed site.)

As can be seen from the table, tremendous volume increases would occur with the proposed development as compared to existing conditions or allowed uses on the site.

The site is no longer zoned Low Impact Industrial. The proposed uses are permitted uses under the terms of the conditional rezoning.

Conclusion

I trust that this information addresses Hannaford's traffic consultant's comments relating to this project and the accompanying traffic study. Should you have any questions related to these responses, please let me know. We are eager to address all of the Planning Board's traffic safety and operational questions and look forward to presenting this information to the Board.

⁶ Ibid.



⁵ Trip Generation - Seventh Edition; Institute of Transportation Engineers (ITE); Washington, DC; 2003.

Page 16

Regards,

VANASSE HANGEN BRUSTLIN, INC.

Robert L. Nagi, PÉ, PTOE Principal/Project Manager

Attachments

Copies: City of Portland Planning Board (6)

Sarah Hopkins, City of Portland Tom Errico, Wilbur Smith Associates

Tom Gorrill, Gorrill-Palmer Consulting Engineers, Inc.

Attachments

™ Comment 4



Comment 4

Signalized Intersection Capacity Analyses Summary

-		2004 Existing			2004 Existing d			2007 Build with Mitigation		
Location	Peak Hour	v/c ^a	Delay ^b	LOS c	v/c	Delay	LOS	v/c	Delay	LOS
Forest Avenue at	Weekday Evening	0.77	19	В	0.77	19	В	0.83	20	B
Warren Avenue	Saturday Midday	0.71	16	В	0.71	16	В	0.76	17	В
Forest Avenue at Allen Avenue	Weekday Evening Saturday Midday	0.86 0.75	36 27	D C	0.87 0.77	37 28	D	0.97	37 27	D
Forest Avenue at	Weekday Evening	0.86	25	C	0.86	25	C	0.82	19	В
Stevens Ave/Bishop St	Saturday Midday	0.77	18	В	0.77	18	В	0.71	12	В
Allen Avenue at Washington Avenue	Weekday Evening Saturday Midday	0.75 0.67	40 33	D C	0.75 0.67	40 33	D C	0.86 0.80	39 34	D C

volume to capacity ratio average delay per vehicle in seconds level of service

analysis includes lane utilization factor adjustments





January 9, 2006

59 Middle Street Portland, ME 04101 (207) 871-1785 (207) 871-5825 fax www.wilbursmith.com

Ms. Sarah Hopkins
Development Review Services Manager
Department of Planning & Development
City of Portland
389 Congress Street
Portland, Maine 04101

Subject: Peer Traffic Review for Morrill's Crossing/Packard Development Project

Dear Sarah:

The following presents my initial comments relative to the review of traffic information transmitted to us in conjunction with the Packard Development project at Morrill's Corner. Our initial review is based upon a Traffic Impact Study (with attached Technical Appendix and Improvement Plan), Morrill's Crossing, dated November 2005 prepared by Vanasse Hangen Brustlin, Inc. I want to emphasize that my review is not complete, and further comments should be expected. Related to this is the recent receipt of the traffic simulation results, which has not been reviewed. I would also note that I will be responding to comments submitted by Creighton Manning Engineering, LLP. My initial comments are summarized as follows.

- 1. The study area for the traffic study was identified at a project level scoping meeting and meets methods established by the Maine Department of Transportation (MaineDOT). Accordingly, I find the study area to be acceptable.
- 2. From a traffic volume and analysis perspective, intersection turning movement counts are the most relevant. Accordingly, I would ask that the applicant provide a historical perspective on the various intersection turning movement volumes collected over the last several years. I would suggest that this be provided in tabular form with dates of counts, day of week information, peak hour information, and supporting commentary.
- 3. Turning Movement count reports should be provided for the intersections of Forest Avenue/Read Street/Adelaide Street and Forest Avenue/Bell Street.
- 4. Some of the intersection turning movement volumes do not balance between intersections. As an example: volumes on inbound Forest Avenue between Warren Avenue and Allen Avenue vary by approximately 115 vehicles. Traffic volumes between intersections should reasonably balance.

Albany NY, Anaheim CA, Atlanta GA, Baltimore MD, Bangkok Thailaud, Burlington VT, Charleston SC, Charleston WV, Chicago IL, Cincinnati OH, Clevelaud OH Columbia SC, Columbus OH, Dallas TX, Dubai UAE, Falls Church VA, Greenville SC, Hong Kong, Houston TX, Iselin NJ, Kansas City MO, Knoxville TN Lansing MI, Lexington KY, London UK, Milwaukee WI, Mumbai India, Myrtle Beuch SC, New Haven CI; Orlando FL, Philadelphia PA, Pittsburgh PA, Portland ME Poughkeepsic NY, Raleigh NC, Richmond VA, Salt Lake City UT, San Francisco CA, Tallalassec FL, Tampa FL, Tempe AZ, Trenton NJ, Washington DC

- Some of the turning movement volumes at the Allen's Corner intersection on Figure 7 do not seem to match data from the turning movement count reports. An explanation should be provided.
- 6. The report notes general pedestrian and bicycle deficiencies. I would ask that the applicant document specific deficiencies.
- 7. The applicant should provide recent information on train activity at the Allen Avenue crossing. I would like to see crossing information over an extended period of time.
- 8. Four locations within the study area were identified as having potential safety problems as defined by MaineDOT methods. For the Forest Avenue/Stevens Avenue/Bishop Street and Washington Avenue/Allen Avenue intersections, I would suggest that the applicant obtain crash data from the Portland Police Department during the time period following recent improvements to determine if safety problems have been corrected. For the Forest Avenue/Morrill Street and Forest Avenue/Read Street/Adelaide Street intersections, details of improvement strategies should be fully developed. Additionally, collision diagrams should be provided.
- 9. The City no longer expects funding through the PACTS BTIP process for the Forest Avenue improvement project, and the study should account for this.
- 10. The City is in the process of installing a traffic signal at the Allen Avenue/Plymouth Street intersection. The signal should be operational within the next month and therefore all analyses should reflect this condition.
- 11. Historical Growth assumptions within the study area should be discussed, particularly declining traffic volumes documented in the report. This effort should include both daily and peak hour volumes.
- 12. I concur with the trip generation methods. However, I would suggest (if available) that the applicant provide information on trip generation activity at a typical Stop N' Shop supermarket for comparison purposes. Additionally, the applicant should confirm that improvements to the existing Bruno's Restaurant will not increase seating capacity and therefore traffic levels.
- 13. The applicant should provide parking demand information in tabular form for each hour (not just the percent) for review purposes with hourly parking totals. I plan on reviewing parking demand issues after receiving the table summary.
- 14. At this time the City does not expect BTIP funding to improve the Forest Avenue/Adelaide Street/Read Street intersection. Accordingly, the applicant should identify improvements that mitigate deficiencies.

- 15. In conjunction with the proposed Traffic Demand Management Plan, the City may want to request annual progress reports on the plan for City review and comment.
- 16. At the Allen Avenue/Site Drive intersection it is recommended that a raised island be provided that physically prevents driveway movements near the intersection.
- 17. The applicant shall provide information on proposed site layout changes at Paul White Tile as part of the Allen Avenue improvements.
- 18. The applicant shall provide a graphic that illustrates the turning adequacy of bus movements through the traffic circle near Morrill Street. Additionally, the applicant should implement design treatments that minimize illegal movements to Morrill Street.
- 19. The improvement plan should provide details on how Forest Avenue will transition from two lanes to one in the inbound direction.
- 20. The applicant needs to fully explore and provide alternatives for the provision of four travel lanes on Forest Avenue as it relates to the loss of on-street parking.
- 21. Peak hour factors computed during the conduct of the turning movement counts should be used in the capacity analysis calculations.
- 22. The capacity analysis calculations take credit for right-turn on red movements at the Forest Avenue/Allen Avenue intersection. Right-turn-on-red movements are prohibited for northbound right turns. The analysis should be revised to reflect this prohibition.
- 23. The volume-to-capacity ratio for the Forest Avenue/Allen Avenue intersection exceeds 1.0 for the Build with Mitigation Scenario during the Weekday time period. Volume-to-capacity computations should be less than 1.0 at all study intersections.
- 24. The applicant should provide information on existing storage lane capacities at the study intersections such that a determination on storage lane adequacy can be determined. Additionally, 95th% queues should be used for the determination of lane storage adequacy.
- 25. The applicant should identify a mitigation plan for the Forest Avenue/Riverton School/Newton Street intersection.
- 26. I am concerned about vehicle queuing at the Morrill's Corner intersections and will rely on the SimTraffic results to determine whether conditions are acceptable. As indicated previously, that review will be conducted in the near future.

Ms. Sarah Hopkins Page 4 January 9, 2006

As noted earlier, additional comments will be provided in the near future particularly related to the site plan, parking, and traffic simulation. Please do not hesitate to call should you have any questions.

Sincerely,

WILBUR/SMITH ASSOCIATES

Thomas A. Errico, P.E.

Senior Transportation Engineer

Transportation Land Development Environmental Services

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imagination | innovation | energy Creating results for our clients and benefits for our communities

February 6, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Ms. Sarah Hopkins Development Review Services Manager Department of Planning & Development City of Portland

389 Congress Street Portland, Maine 04101

Re: Response to Comments

Morrill's Crossing Traffic Study

Portland, Maine

Dear Sarah:

Vanasse Hangen Brustlin, Inc. (VHB) has received and reviewed the peer traffic review letter submitted on behalf of the City of Portland by the City's traffic reviewer, Mr. Thomas A. Errico, PE of Wilbur Smith Associates. VHB has since met with Mr. Errico and other members of the City staff on several occasions to review these and other comments with him.

The following provides detailed responses to comments 1-18 and 24 from Mr. Errico's letter dated January 9, 2006. At the request of Mr. Errico, VHB is currently in the process of gathering additional data on traffic operations through the Morrill's Corner area which will be summarized and submitted to the City under separate cover. This additional data is required in order to provide responses to Comments 19-24 and 26.

The following letter provides responses to the comments raised by Mr. Errico (numbered and shown in italics).

1. The study area for the traffic study was identified at a project level scoping meeting and meets methods established by the Maine Department of Transportation (Maine DOT). Accordingly, I find the study area to be acceptable.

No response is necessary.

2. From a traffic volume and analysis perspective, intersection turning movement counts are the most relevant. Accordingly, I would ask that the applicant provide a historical perspective on the various intersections turning movement volumes collected over the last several years. I would suggest that this be provided in tabular form with dates of counts, day of week information, peak hour information, and supporting commentary.

We concur that the peak hour traffic counts are the most relevant aspect of reviewing this project. All roadway and intersection analyses and, in turn, all off-site roadway improvements are designed around the peak hour

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> > www.vhb.com

Ms. Sarah Hopkins Project No.: 07334.00 February 3, 2006 Page 2

impacts. A table summarizing the dates of traffic counts conducted in the vicinity of the project, the day of the week those counts were conducted, and the volumes observed is attached to this letter (see Comment 2 Attachment). Also included with the Table is a brief summary of the traffic volume information in relation to what general construction was on-going in the region.

It is VHB's opinion that the November 2004 traffic counts are representative of the current traffic volumes in and around the study area. This was confirmed in discussions with Mr. Errico prior to undertaking the November 2004 traffic counts.

3. Turning Movement count reports should be provided for the intersections of Forest Avenue/Read Street/Adelaide Street and Forest Avenue/Bell Street.

The traffic count reports for these two locations were inadvertently omitted from the Technical Appendix to the traffic study. The turning movement count sheets are attached to this letter (Comment 3 Attachment).

4. Some of the intersection turning movement volumes do not balance between intersections. As an example: volumes on inbound Forest Avenue between Warren Avenue and Allen Avenue vary by approximately 115 vehicles. Traffic volumes between intersections should reasonably balance.

VHB has reviewed all the volumes presented in the report and found only this one instance where the volumes would be expected to balance. VHB will correct this minor imbalance as part of the resubmission of the traffic model. Ultimately, this will not likely have a significant impact on area-wide intersection operations.

5. Some of the turning movement volumes at the Allen's Corner intersection on Figure 7 do not seem to match data from the turning movement count reports. An explanation should be provided.

VHB reviewed this intersection and compared them with the turning movement data provided in the Technical Appendix of the traffic study. There are only two movements that are inconsistent. In both cases, these were for movements that are not critical to the overall intersection operation. Therefore, in correcting this information, there is no change in the operational level of service or the findings of this report.

Again, this will be corrected and included in the final traffic model to be presented in the next submission.

6. The report notes general pedestrian and bicycle deficiencies. I would ask that the applicant document specific deficiencies.

VHB conducted a detailed inventory of the pedestrian and bicycle environment recently. Attached to this letter is a figure which provides a summary of general pedestrian deficiencies in the area (Comment 6 Attachment). For the most part, the general pedestrian deficiencies observed included:

- Non-ADA compliant ramps
- Non-ADA compliant railroad crossings
- Worn and faded pedestrian crosswalk pavement markings
- Broken sidewalks/asphalt



Ms. Sarah Hopkins Project No.: 07334.00 February 3, 2006 Page 3

There are no formal bicycle amenities provided throughout the Morrill's Corner area along either Forest Avenue or Allen Avenue.

7. The applicant should provide recent information on train activity at the Allen Avenue crossing. I would like to see crossing information over an extended period of time.

VHB investigated the train crossing information as requested. VHB is providing information on how often, what time of day, and for how long these crossings restricted vehicular traffic flow. The specific details of this information are provided as an attachment to this letter (Comment 7 Attachment). The following summarizes these findings and observations:

VHB identified 27 train crossings along Allen Avenue between Wednesday, December 7 and Tuesday, December 13, 2005 (or an average of about four crossings per day). The average time that the gates were down was approximately three minutes. In all cases, there was only one instance where a train was documented crossing Allen Avenue during the peak evening commuter hour (Friday, December 9, 2005 at 4:08 PM when the gates were down for three minutes). The remaining 26 train crossing events were documented to occur outside of the evening peak hour.

Of note is that these train crossings, however frequent or infrequent, occur for an average of about three minutes each – or less time than it takes for two complete light cycle phases to take place at the existing intersection of Allen Avenue at Forest Avenue.

VHB also noted that, when a train crosses Allen Avenue, it generally takes between two and three signal cycles to normalize traffic patterns along Forest Avenue. Allen Avenue takes generally between three and five signal cycles to normalize after a train crossing occurs under the existing lane geometry.

With the updated train crossing equipment, improved pre-emption equipment and phasing, as well as the addition of a new lane of traffic in each direction along Allen Avenue, it is VHB's opinion that traffic flow along Allen Avenue will remain unchanged from its current operations and, in fact, will improve in many instances. Ultimately, the upgraded crossing and pre-emption equipment will lead to an improved level of safety for all users throughout the Morrill's Corner area with respect to train crossings.

8. Four locations within the study area were identified as having potential safety problems as defined by MaineDOT methods. For the Forest Avenue/Stevens Avenue/Bishop Street and Washington Avenue/Allen Avenue intersections, I would suggest that the applicant obtain crash data from the Portland Police Department during the time period following recent improvements to determine if safety problems have been corrected. For the Forest Avenue/Morrill Street and Forest Avenue/Read Street/Adelaide Street intersections, details of improvement strategies should be fully developed. Additionally, collision diagrams should be provided.

Detailed crash information and collision diagrams were provided to the City Traffic Engineer on Friday, January 13, 2006. The applicant has also been researching crash data from the Portland Police Department as requested and will summarize and provide to the City shortly for review when it is provided to VHB.

Strategies for alleviating these high crash locations are provided below:



Ms. Sarah Hopkins Project No.: 07334.00 February 3, 2006 Page 4

Forest Avenue at Stevens Avenue/Bishop Street – The proposed roadway project at this location will serve to eliminate one of the primary safety issues at this location. The elimination of the Forest Avenue inbound lanedrop will serve to provide smoother traffic flow along this stretch of roadway.

Washington Avenue at Allen Avenue (Allen's Corner) — While no strategies are being provided at this point in time, the recent upgrade of the intersection (completed in 2004) was done, in part, to address safety issues at this location. VHB is researching recent data from the City of Portland Police Department to identify if any improvements to the safety issues inherent with the prior design have been alleviated with these improvements.

Morrill Street at Forest Avenue — As will be noted later in this response, the primary cause of delay and safety concerns at this location is the left-turning traffic into and out of Morrill Street — particularly during the peak traffic hours. It is recommended that left turns out of Morrill Street be restricted during peak commuter hours to alleviate both the delays at this intersection, but more importantly address the safety issue inherent with the current design of the intersection.

Forest Avenue at Read Street/Adelaide Street – Again, as will be noted later in this response, the odd configuration of this intersection, coupled with the high crash designation supports the concept of addressing the pre-existing safety and operational issues at this intersection. After reviewing the BTIP proposal and investigating the causes of the high crash designation at this location, VHB recommends that the City pursue the following alternative to address both the high crash designation as well as the operational issues at this intersection (which is graphically shown in the Comment 8 Attachment):

- Make Read Street and Adelaide Street one-way heading away from Forest Avenue to Bell Street (although maintain two-way traffic flow for the majority of Adelaide Street as shown in the graphic).
- Widen Bell Street to provide separate right- and left-turn lanes at Forest Avenue.

Ultimately, these improvements should be considered with or without the proposed Morrill's Crossing project as these are conditions that exist today — without the project in place. While the majority of the later two recommendations are mainly restrictive in nature (and do not require any significant capital expenditures to implement) the applicant will work with the City to advance these concepts to a greater degree if so directed.

9. The City no longer expects funding through the PACTS BTIP process for the Forest Avenue improvement project, and the study should account for this.

While the project remains on the MDOT's "Deferred List" as a potential future project, the DPW and City Traffic Engineer noted that it was not something that should be considered in the preparation of this traffic study. For this reason, VHB noted that it is a potential project, but took no "credit" for its benefits when creating the traffic study.

However, the Forest Avenue roadway improvements being recommended by the applicant are consistent with the City's and PACTS' original plan (including the four-lane cross-section along Forest Avenue inbound of the train crossings). If the Morrill's Crossing project were to advance with the proposed roadway improvements along Forest Avenue in place, a large portion of the BTIP project would have been, essentially, completed.

10. The City is in the process of installing a traffic signal at the Allen Avenue/Plymouth Street intersection. The signal should be operational within the next month and therefore all analyses should reflect this condition.

Ms. Sarah Hopkins Project No.: 07334.00 February 3, 2006 Page 5

VHB was initially advised to prepare the traffic study under the assumption that this signal would not be installed. As directed by Mr. Errico, VHB will include a signal at Allen Avenue/Plymouth Street in the updated model.

11. Historical Growth assumptions within the study area should be discussed, particularly declining traffic volumes documented in the report. This effort should include both daily and peak hour volumes.

As shown in Table 2 of the Traffic Study, there appears to be some indication from the data that <u>daily</u> traffic volumes might be declining slightly in the vicinity of Morrill's Corner over the past four years. However, <u>peak hour</u> traffic volumes have remained relatively consistent between June 2004 and November 2005.

Even with an apparent decline in daily volumes, the relative stability of the peak hour volumes, or minor increases (as highlighted in the response to Comment 2, earlier in this letter) may indicate that the Forest Avenue corridor is continuing to see some minor level of growth along it.

Some reasons for the apparent daily decline in traffic volumes might be related to improved alternative routes into the City of Portland – namely the upgrades of Congress Street and Washington Street (at Allen's Corner). With these improved routes into the City, there could be a likely shift in driver tendencies to use these alternative commuter routes into and out of the City. Other changes to the regional traffic network include construction and opening of the Exit 47 (formerly known as "Exit 7B") interchange – providing drivers the ability to avoid some of the traditional commuting routes into and out of the City.

Ultimately, in the face of the potential decline or stability in the volumes, the traffic study utilized a one percent per year growth rate to provide some reasonable estimate of potential new traffic on area roadways.

12. I concur with the trip generation methods. However, I would suggest (if available) that the applicant provide information on trip generation activity at a typical Stop N' Shop supermarket for comparison purposes. Additionally, the applicant should confirm that improvements to the existing Bruno's Restaurant will not increase seating capacity and therefore traffic levels.

VHB has collected trip generation data at Stop & Shop supermarkets throughout the northeast United States for a number of years. Tabular comparisons of ITE theoretical rates and Stop & Shop observed rates and of the estimated site-generated trips for this project using this data are attached to this letter (Comment 12 Attachment).

Of particular note is that the observed Stop & Shop peak hour traffic generation is universally <u>lower</u> than the theoretical ITE Supermarket rates, which were used in the development of the traffic study currently under review.

As the table shows, the peak hour trips estimated using theoretical ITE regression equations are more than one trip per 1,000 square feet (sf) greater than those observed at similar Stop & Shop supermarket sites in New England. In other words, the traffic study has assumed there will be about 75 to 85 additional peak hour trips on the roadway than will likely be observed when the store is completed and operational. This is the equivalent of building in a "factor of safety" into the analysis results presented in the study.



Ms. Sarah Hopkins Project No.: 07334.00 February 3, 2006

Page 6

With respect to the increase in size of Bruno's restaurant and its traffic impact, the additional square footage was included to the retail portion of the project. Ultimately, the minor expansion will consist of adding kitchen and storage space.

13. The applicant should provide parking demand information in tabular form for each hour (not just the percent) for review purposes with hourly parking totals. I plan on reviewing parking demand issues after receiving the table summary.

A detailed parking summary / evaluation are provided under separate cover.

14. At this time the City does not expect BTIP funding to improve the Forest Avenue/Adelaide Street/Read Street intersection. Accordingly, the applicant should identify improvements that mitigate deficiencies.

As noted in the response to Comment 8, there are number of options worth considering at these intersections to improve operational and safety purposes. After reviewing the BTIP proposal and investigating the causes of the delays at this location, VHB recommends that the City pursue the following alternative to address both the high crash designation as well as the operational issues at this intersection (which was previously shown graphically in the Comment 8 Attachment):

- Make Read Street and Adelaide Street one-way heading away from Forest Avenue to Bell Street (although maintain two-way traffic flow for the majority of Adelaide Street as shown in the graphic).
- Modify Bell Street to provide separate right- and left-turn lanes at Forest Avenue.
- 15. In conjunction with the proposed Traffic Demand Management Plan, the City may want to request annual progress reports on the plan for City review and comment.

The applicant would be willing to incorporate this if so directed.

16. At the Allen Avenue/Site Drive intersection it is recommended that a raised island be provided that physically prevents driveway movements near the intersection.

As stated previously, it is our opinion that a raised island will introduce a physical object into the Allen Avenue corridor which could be problematic for wintertime plowing operations as well as providing a fixed object in the travel way for passenger vehicles to contend with. This will also require minor additional widening along Allen Avenue to incorporate this median divider along this route. VHB believes the scored concrete with left-turn restrictions is adequate.

17. The applicant shall provide information on proposed site layout changes at Paul White Tile as part of the Allen Avenue improvements.

An exhibit showing the proposed site plan modifications to the Paul White Tile site is included (Comment 17 Attachment)

18. The applicant shall provide a graphic that illustrates the turning adequacy of bus movements through the traffic circle near Morrill Street. Additionally, the applicant should implement design treatments that minimize illegal movements to Morrill Street.

Ms. Sarah Hopkins Project No.: 07334.00 February 3, 2006 Page 7

VHB has been working with the METRO to design the desired bus route serving the Morrill's Crossing site. An exhibit showing the turning radius movement for a bus is included as an attachment to this letter (Comment 18 Attachment). The cul-de-sac radii have been revised to meet the METRO's specifications. The one way connection between Morrill Street has been designed to discourage or prevent illegal movements to Morrill Street through physical restrictions, signage, and pavement markings.

Note: Comments 19 thru 24 and Comment 26 will be thoroughly addressed as part of the new capacity analysis and simulation that are currently being prepared.

25. The applicant should identify a mitigation plan for the Forest Avenue at Riverton School/Newton Street intersection.

There currently exists a pedestrian signal at this intersection which provides breaks in the traffic stream to let students and residents cross Forest Avenue. Based on the observed and projected volumes at this location, traffic signals are not warranted (except for pedestrian crossings, given the proximity of the school to this location). A review of the recent MDOT crash data indicates that the critical rate factor at this location is well below the state's 1.00 CRF threshold, therefore this intersection is not considered a high crash location.

Under future conditions, it is projected that between 15 and 30 left turns will occur at this intersection from the side street movements. Because there are limited opportunities to widen Newton Street (given the proximity of residential properties on each corner) and/or the School Driveway (given the proximity of the fire station on the corner), there does not appear to be any reasonable means or methods to minimize or eliminate the delay experienced by the side-street drivers at this intersection without significantly impacting the adjacent property owners.

I trust that this letter address these specific comments about traffic. Should you have any questions related to these responses, please feel free to contact me directly.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

Robert L. Nagi, PE, PTOE

Principal – Transportation Systems

Copies: City of Portland Planning Board (6 copies)

Tom Errico, Wilbur Smith Associates

Tom Gorrill, Gorrill-Palmer Consulting Engineers, Inc.



Attachments

- ➤ Comment 2
- ➤ Comment 3
- ➤ Comment 6
- ➤ Comment 12
- ➤ Comment 14
- ➤ Comment 17
- ➤ Comment 18

Historical Traffic Comparison – Forest Avenue at Allen Avenue

Date	Day	Forest Avenue (East of Allen Avenue) ^a	Forest Avenue (West of Allen Avenue)	Allen Avenue (North of Forest Avenue)
September 30, 2003	Tuesday	2,890	2,649	1,625
May 19, 2004	Tuesday	2,900	2,736	1,272
October 5, 2004	Tuesday	3,034	2,739	1,706

a vehicles per hour

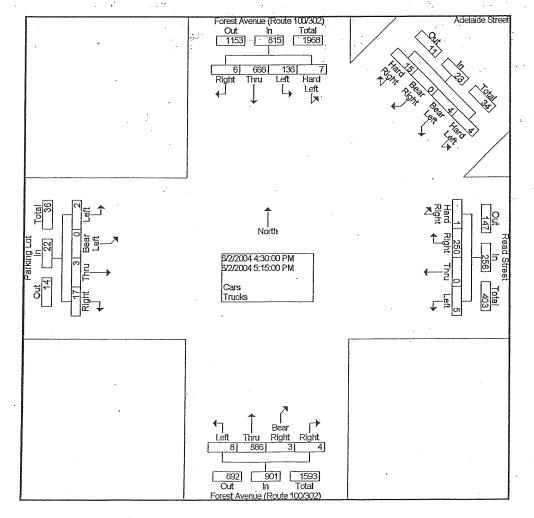
I/S/NE: Forest Avenue/Adelaide Street

: Read Street/Parking Lot

State: Portland, ME lient: VHB/J. Quitter

File Name: 03012BB Site Code : 00007334 Start Date : 6/2/2004

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I/S/NE: Forest Avenue/Adelaide Street

Read Street/Parking Lot

State: Portland, ME lient: VHB/J. Quitter

File Name: 03012BB

Site Code : 00007334 Start Date : 6/2/2004

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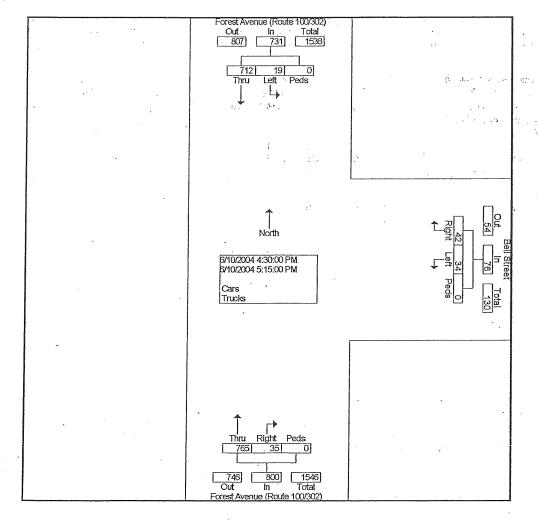
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Start Date : 6/10/2004

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Transportation Data Corporation
P.O. Box 734 Natick, MA 01760
Office: 508-651-1610 Fax: 508-651-1229

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State: Portland, ME lient: VHB/J. Quitter

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04:15 PM	0 -	184	3	0	7	0	9.	0	6	124	0	0	333
04:30 PM	0	177	8	0 .	4	0	10	0	9	138	0	0	. 346
· 04:45 PM	. 0	183	4	. 0	12	0	4	0	5	224	0	0	432
 Total	0	708	21	- 0	28	0	30	0	26	601	0	0	1414
05:00 PM	. 0	174	4	0	11	0	8	0	10	206	0	0	413
05:15 PM	0	171.	2	0	13	0	12	0	10	194	0	0	402
05:30 PM	0	153	3	0	6	0	7	0	4	166	0	0	339
05:45 PM	0	142	5	0	7	0	7	0	6	147	0	0	314
 Total	0	640	14.	0	37	0	34	0	. 30	713	0	0	1468
Grand Total	0	1348	35	0	65	0	64	0	56	1314 :	0	0	2882
Apprch %	0.0	97.5	2.5	0.0	5 0.4	0.0	49.6	0.0	4.1	95.9	0.0	0.0	
Total %	0.0	46.8	1.2	0.0	2.3	0.0	2.2	0.0	1.9	45.6	0.0	0.0	

			enue (Rout From Nort)			Bell Stree From Eas				Forest Ave	nue (Route From South			
Start Time	Right	Thru	Left	Peds·	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
ak Hour From 04:	00 PM to 0	5:45 PM	- Peak 1 of	1	•								. :			
Intersection	04:30 P	M		-						•						
Volume	0	705	18	. 0	723	40	0	34	0	. 74	34	762	0	0	796	1593
Percent	0.0	97.5	2.5	0.0		54.1	0.0	45.9	0.0		4.3	95.7	0.0	0.0		٠,
)4:45 Volume	0	183	4	0	187	12	0	4	0	16	5	224	0	0	229	432
k Factor											•					0.922
High Int.	04:45 P	M				05:15 PM	Л				04:45 P	M				
Volume	0	183	4	0	187	13	0	12	0	25	- 5	224	0	0	229	
Peak Factor					0.967					0.740					0.869	

J/S/NE: Forest Avenue/Adelaide Street

32

Volume

Peak

Factor

236

I/W: Read Street/Parking Lot

State: Portland, ME lient: VHB/J. Quitter

File Name: 03012BBB

Site Code : 00007334 Start Date : 6/5/2004

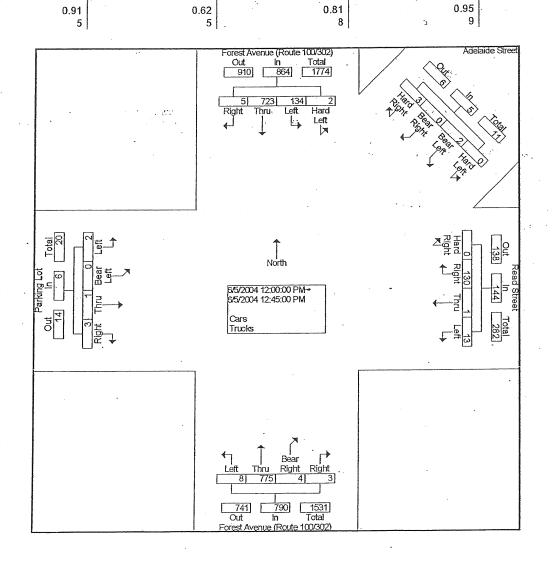
0.50

Page No : 1

206

									.'									_								
	Fores	t Aven	ue (Ro	oute 10	0/302)		Ade	elaide :	Street]	R	ead St	reet		Fores	t Aven	ue (Ro	oute 10	0/302)	ĺ		arking			
		Fi	rom No	orth]	Fro	m Norl	heast		1	·F	rom E	ast			Fr	om Sc	uth			F	rom W	est		
Start Time	Rig ht	Thr u	Left	Left	App. Total	Rig ht	r Rig ht	Bea r Left	Har đ Left	App. Total	Har d Rig ht	Rig ht	Thr u	Left	App. Total	Rig ht	Bea r Rig ht	Thr u	Left	App. Total	Rig ht	Thr u	Bea r Left	Left	App. Total	Int. Total
eak Hour F	rom 11:	1A 00:	/I to 01	:45 PN	1 - Peak	1 of 1															· ,			:		ı
Intersect ion	12:00	D PM											-							-						
Volume	5	72 3	13 4	2	864	3	0	2	0	5	0	13 0	1	13	144	3	4.	77 5	8	790	3	1	0	2	6	180 9
Percent	0.6	83. 7	15. 5	0.2		60. 0	0.0	40. 0	0.0		0.0	90. 3	0.7	9.0		0.4	0.5	98. 1	1.0		50. 0	16. 7	0.0	33. 3		
12:30 Volume	2	18 7	40	0	229	. 0	~ 0	1	0	1	0	40	0	4	. 44	2	1	19 - 4	0	197	0	0	0	1	1	472 0.95
Peak Factor																					, .					0.50
High Int.	12:45	5 РМ				12:0	0 PM				12:3	0 PM				12:0	0 PM				12:4	5 PM				t
Volume	1	20	32	٥	236	2	O	n	Λ	2	n	40	O-	A	44	n	0.	20	2	206	2	1	0	0	3	

2





N/S/NE: Forest Avenue/Adelaide Street

3/77: Read Street/Parking Lot

State: Portland, ME Client: VHB/J. Quitter

File Name: 03012BBB

Site Code : 00007334

Start Date : 6/5/2004

	- 5								Grou	ıps Print	ed- Cars							-			
	Fo	rest Ave 100/ From	302)	ıte		Adelaide From No				Read : From			For	rest Aver 100/3 From	302)	rte		Parkin From	West		
Start Time	Right	Thru	Left	Hard Left	Hard Right	Bear Right	Bear Left	Hard Left	· Hard Right	Right	Thru	Left	Right	Bear Right	Thru	Left	Right	Thru	Bear Left	Left	Int. Total
11:00 AM	0	142	23	0	1	0	0	0	- 0	25	0	2	0	1	137	.0	0	0	0	1	332
11.15 AM	0	158	28	0	1	1	. 0	0	0	27	0	2	2	2	164	1	-1	1	0	1	389
11:30 AM	1	177	26	0	- 2	0	1	. 1	0	40	1	1	. 0	1	199	2	1 -	. 0	0	2	455
11:45 AM	0	154	34	1	- 1	0	0	0	0	36	0	0	. 1	0	192	1	2	0	0	1	423
Total	1	631	111	1	5	1	1	. 1	0	128	1	5	3	4	692	4	4	1	0	5	1599
12:00 PM	2	188	28	1	2	0	0	0	0	24	0	4	0	0	201	2	. 0	0	0	0	452
12:15 PM	0	142	34	1	1	0	0	0	0	40	1	1	1	0	192	3	1	0	0	1	418
12:30 PM	2	186	40	o l	0	0	1	0	0	40	0	4	2	1	193	0	. 0	0	0	1	470
12:45 PM	1	201	32	0	0	0	. 1	0	0	25	. 0	4	0	3	184	3	2	- 1	. 0	0	* 457
Total	5	717	134	2	3	0	2	0	. 0	129	1	13	3	4	770	8	3	1	0	2	1797
01:00 PM	2	189	29	o l	0	0	0	0-	. 0	33	1	4	1	. 0	165	2	0	1	1	1	429
01:15 PM	1	198	28	0	n	0	0	0	0	25	ó	o l	o.	0	156	0	2.	0	. 0	0	410
01:30 PM	2	175	41	0	0	Ô	0	0	. 0	31	2	o l	2	0	152	0	0	1	0	. 1	407
01:45 PM	2	172	28	0	2	0	1	0	0	26	ō	o l	2	1	166	1	0	1	. 0	1	403
Total	7	734	126	0	2	0	1	0	0	115	3	4	5	1	639	3	2	3	1	3	1649
Total	•	154	120		_	Ū	•	.0	Ü	110	Ū	٠,١	Ū	•			1				•
Grand Total	13	208	371	3	10	. 1	. 4	1	0	372	5	22	11	. 9	210. 1	15	9	5	1	10	5045
Apprch %	0.5	84.3	15.0	0.1	62.5	6.3	25.0	6.3	0.0	93.2	1.3	5.5	0.5	0.4	98.4	0.7	36.0	20.0	4.0	40.0	
Total %	0.3	41.3	7.4	0.1	0.2	0.0	0.1		1 0.0	7.4	0.1	0.4	0.2	0.2	41.6	0.3	0.2	0.1	0.0	0.2	

-	Fores		ue (Ro		00/302)			elaide S					ead St			Fores		ue (Ro		0/302)	11.		arking om W			
Start Time	Rig ht	Thr u	Left	Har	App. Total	Har d Rig ht	Bea r Rig ht	Bea r Left		App. Total	Har d Rig ht	Rig ht	Thr	Left	App. Total	Rig ht	Bea r	Thr u	Left	App. Total	Rig ht	Thr u	Bea r Left	Left	App. Total	Int. Total
ak Hour Fi	rom 11	1A 00:	1 to 01	:45 PN	1 - Peak	1 of 1										,					· ;• I					
ntersect ion	12:0	0 PM																								
Volume	5	71 7	13 ·	2	858	3	0	2	0	5	0	12 9	1	13	143	3	. 4	77 0	8	785	. 3	1	0	2	6	179 7
Percent	0.6	83. 6	15. 6	0.2		60. 0	0.0	40. 0	0.0		0.0	90. 2	0.7	9.1		0.4	0.5	98. 1	1.0	-	50. 0	16. 7	0.0	33. 3		
12:30 Volume	. 2	18 6	40	. 0	228	0	0	1	0	1	0	40	0	4	44	2	1	19 3	0	196	0	0	0	1	1	470
Peak Factor																										0.956
ligh Int.	12:4	5 PM				12:0	0 PM				12:3) PM				12:0	0 PM		7		12:45	5 PM				
Volume	1	20 1	32	0	234	2	. 0	0.	0	2	0	40	0	4	44	0	.0	20 1	2	203	2	1	0	0.	3	
Peak					0.91					0.62					0.81					0.96					0.50	
Factor					7.	١.				5					3					7					0	



N/S: Forest Avenue (Route 100/302)

E-Pell Street

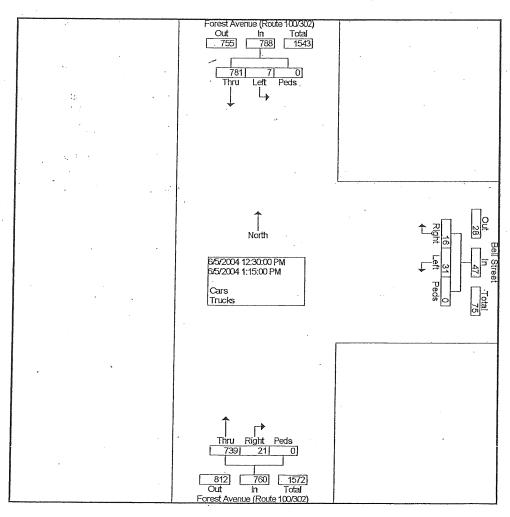
State: Portland, ME Client: VHB/J. Quitter

File Name: 03012AAA

Site Code : 00007334

Start Date : 6/5/2004

				te 100/302	2)			Bell Stree	l .		I	Forest Av	enue (Rout	te 100/302	2)	
			From Nort	h				From Eas	t				From Sout	th		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	· App. Total	Right	. Thru	Left	Peds	App. Total	Int. Total
eak Hour From 11:	00 AM to 0	11:45 PM -	Peak 1 o	f 1								•				
Intersection	12:30 P	M													1	
Volume	. 0	781	7	0	788	16	0	31	0	47	21	739	0	0	760	1595
Percent	0.0	99.1	0.9	0.0		34.0	0.0	66.0	0.0		2.8	97.2	0.0	0.0		
12:45 Volume	0	207	1	0	208	5	0	16	0	21	7	190	0	0	197	. 426
Peak Factor															.]	0.936
High Int.	12:45 PI	VI				12:45 PN	A				12:30 PI	VI				
Volume	0	207	-1	0	208	5	0	16	0	21	6	201	0	0	207	
Peak Factor					0.947					0.560	•				0.918	





40

1.9

0.9

Transportation Data Corporation P.O. Box 734 Natick, MA 01760 Office: 508-651-1610 Fax: 508-651-1229

J/S: Forest Avenue (Route 100/302)

1.7 - 11 Street

State: Portland, ME lient: VHB/J. Quitter

Grand Total

Apprch %

Total %

-0

0.0

- 0.0

2103

98.1

47.1

File Name: 03012AAA

64

2.9

1.4

0

0.0

0.0

2132

97.1

47.7

0

0.0

0.0

0

0.0

0.0

44465

Site Code : 00007334 Start Date : 6/5/2004

Page No :1

mena (112/): Q		•			~	os Printed- C	am				J		
	Forart	Avenue (Rou	to 100/302)	1	Group	Bell Stre			Forest A	Avenue (Ro	ute 100/302)		
1	. rolesi	From Nor		. 1		From Ea				From So			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	. Left	Peds	Int. Total
11:00 AM	0	159 -	2	. 0	. 3	0	5	0	. 2	145	0	0	316
11:15 AM	0	170	7	0	3	0	5	0	11	174	0	0	370
11:30 AM	0	180	4	0	9	. 0	8	0	3	187	0	0	391
11:45 AM	0	165	4	Ö	· 4	0	7	0	- 6	189	0	0	375
Total	0	674	17	0	19	0 -	25	0	, 22	695	0	0	1452
12:00 PM	0	183	. 2	01	4	0	4	ol	3	191.	0	0	387
12:15 PM	0	137	3	0	4	0	8	o	. 3	187	0	0	342
12:30 PM	0	180	4	٥	2	0	1	0	6	200	0 -	0	393
12:45 PM	ō	205	1	0	5	0	16	0	7	190	0	0	424
Total	0^	705	10	0	15	0	29	0	19:	768	0	0	1546
. 01:00 PM	0	198	0	ol	6	0	5	o l	5	1818	0	0	395
01:15 PM	o 0	192	2	ol	. 3	0	9	0	3	162	0 .	0	. 371
01:30 PM	· ŏ	167	4	ő	3	Ô	5	0	6	152	0	0	337
01:45 PM	n	167	7	ő	2	ő	5	ol	9	174:	0	0	364
Total	0	724	13	0	14	0	24	0	23	669	0	0	1467

0

0.0

0.0

48

38.1

1.1

0

0.0

0.0

78

61.9

1.7

			enue (Rout From Nort)			Bell Stree					епие (Rout From Sout		2)		
tart Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	2 Thru	Left	Peds		\pp. otal	Int. Total
ak ur From 11:	00 AM to 0	01:45 PM	- Peak 1 of	1		-								1	9 .		1 4 4 2
Intersection	12:30 P	M															
Volume	0	775	7	0	782	16	0	31	0	47	21	733	0	. 0	•	754	1583
Percent	0.0	99.1	0.9	0.0		34.0	0.0	66.0	0.0		2.8	97.2	0.0	0.0			
12:45 Volume	0	205	1	0	206	5	0	16	0	21	7	190	0	0		197	424
Peak Factor								_									0.933
High Int.	12:45 P	M				12:45 PM		*			12:30 P	M					;* *
Volume	0	205	1	0	206	5	0	16	0	21	. 6	200	0	0	:	206	was t
Peak Factor	•		-	-	0.949		_			0.560					0.9	915	

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the *curb ramp* shall not be steeper than 1:20. The adjacent surfaces at transitions at *curb ramps* to walks, gutters, and streets shall be at the same level.

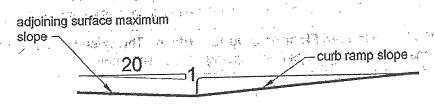


Figure 406.2

Counter Slope of Surfaces Adjacent to Curb Ramps

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall not be steeper than 1:10.

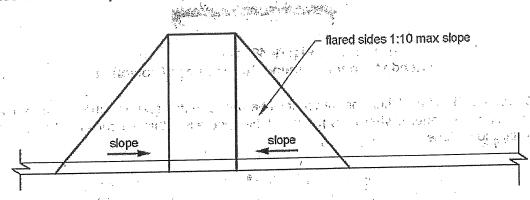
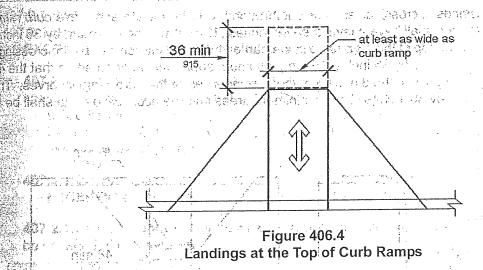


Figure 406.3 Sides of Curb Ramps

406.4 Landings. Landings shall be provided at the tops of *curb ramps*. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the *curb ramp*, excluding flared sides, leading to the landing.

EXCEPTION: In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.



406.5 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked rossings shall be wholly contained within the markings, excluding any flared sides.

406.6 Diagonal Curb Ramps. Diagonal or corner type curb ramps with returned curbs or other li-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of agonal curb ramps shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.

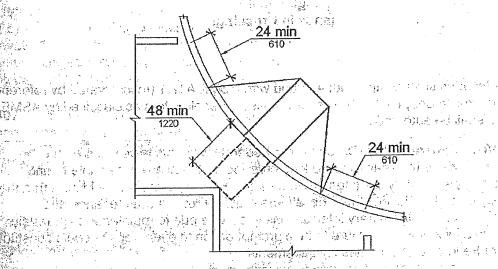


Figure 406.6 Signature Diagonal or Corner Type Curb Ramps

406.7 Islands. Raised islands in crossings shall be cut through level with the street or have *curb ramps* at both sides. Each *curb ramp* shall have a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum at the top of the *curb ramp* in the part of the island intersected by the crossings. Each 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area shall be oriented so that the 48 inch (1220 mm) minimum length is in the direction of the *running slope* of the *curb ramp* it serves. The 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum areas and the *accessible* route shall be permitted to overlap.

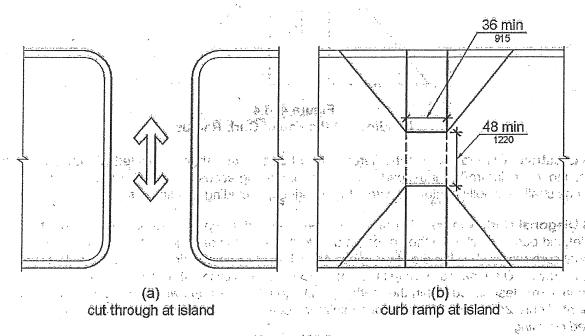


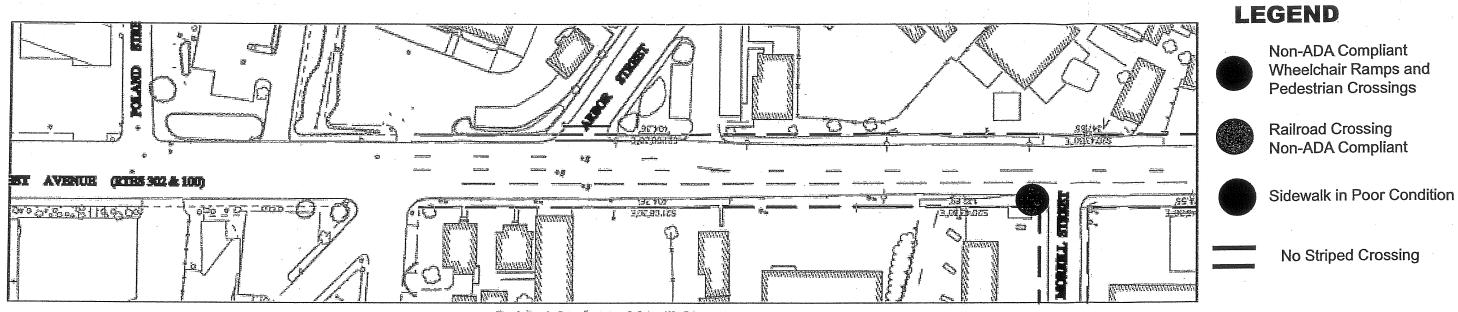
Figure 406.7 Islands in Crossings

407 Elevators

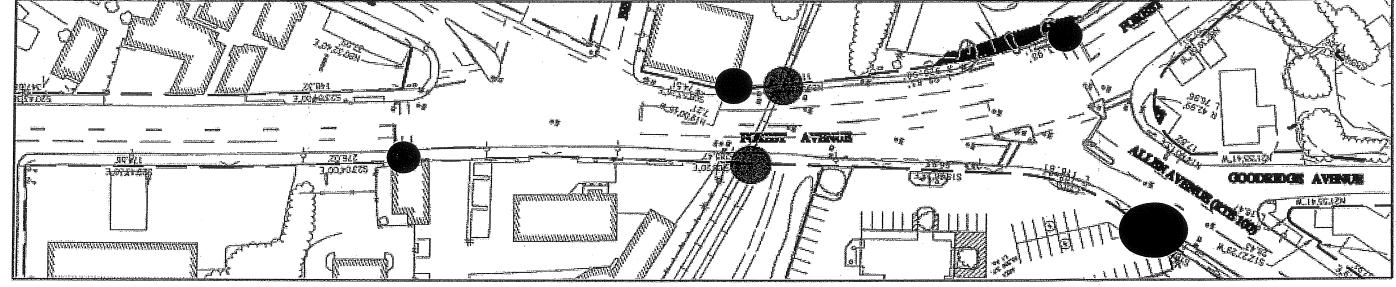
407.1 General. Elevators shall comply with 407 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1 Elevator operation shall be automatic.

Advisory 407.1 Generals The ADA and other Federal civil rights laws require that accessible features be maintained in working order so that they are accessible to and usable by those people they are intended to benefit. Building owners should note that the ASME Saiety Code for Elevators and Escalators requires routine maintenance and inspections a isolated or remporary interruptions in service due to maintenance or repairs may be unavoidable showever, railure to take prompt action to effect repairs could constitute a violation of Federal laws and these requirements.

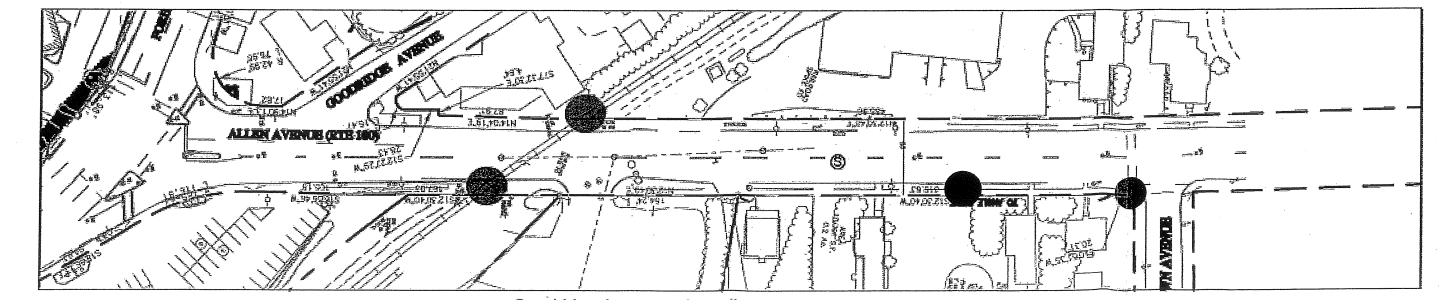
407.2 Elevator Landing Requirements: Elevator landings shall comply with 407.2.



Poland Street to Morrill Street

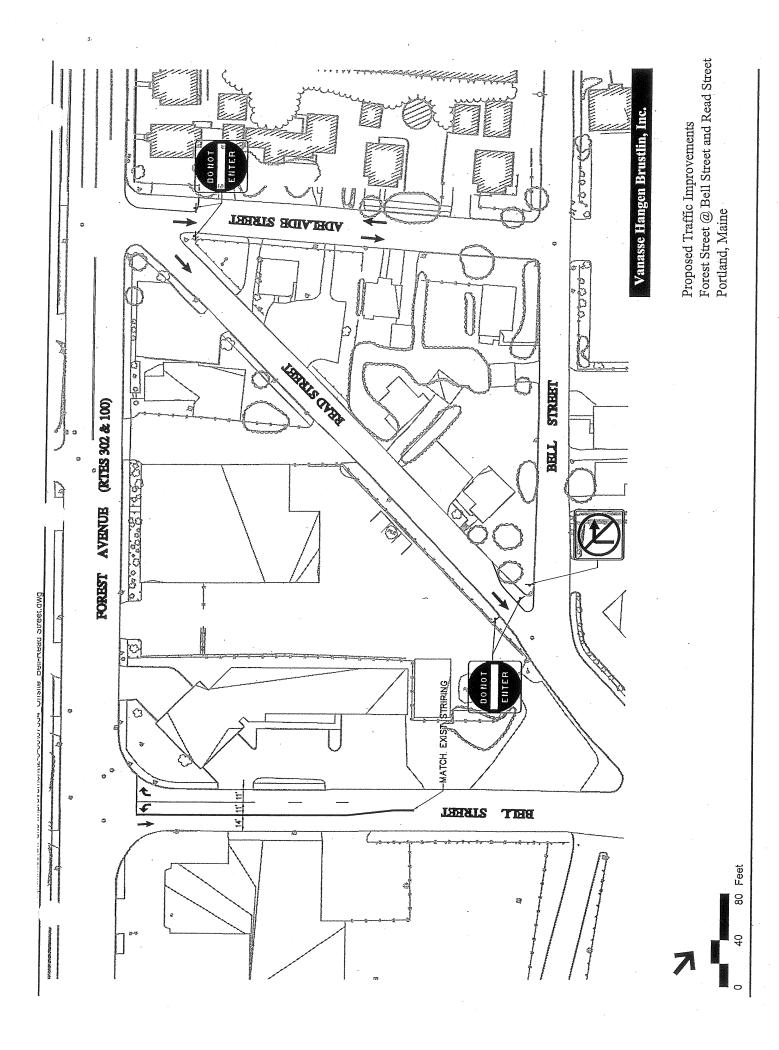


Morrill Street to Allen Avenue



Rail Preemption Log Morrill's Corner, Portland Maine Logged by Local Traffic Signal Controller Forest Avenue at Allen Avenue

Allen Avenue Train Event			, ~
<u>Date</u>	<u>Time</u>	Duration (minutes)	
Wed 12/7	9:04 AM	4	
	12:10 PM	2	
	12:34 PM	2	
	12:48 PM	3	
	6:13 PM	1	
Thursday 12/8	9:27 AM	2	
•	8:44 PM	4	
Friday 12/9	12:04 PM	4	,
	4:08 PM	3 <	Occurred during traditional Evening commuter peak ho
	8:11 PM	4	
Saturday 12/10	6:23 AM	3	
	7:54 AM	4	
	8:05 AM	1	
	11:44 AM	3	•
	12:14 PM	3	
	3:27 PM	2	
	11:22 PM	2	
Sunday 12/11	9:24 AM	4	
	11:05 AM	3	
	2:52 PM	2	
Monday 12/12	7:44 AM	4	
•	12:12 PM	4	
	8:24 PM	3	
Tuesday 12/13	7:24 AM	5	
	12:08 PM	4	
	8:21 PM	4	
	10:24 PM	2	
•		3.037037037 <=	Average time gates are down.



Trip Rate Comparison – ITE Theoretical vs. Stop & Shop Observed

Data Source	Weekday Daily	Weekday Evening Peak Hour	Saturday Daily	Saturday Midday Peak Hour
ITE Theoretical *	86.36	10.01	177.62	10.57
S&S Observed ^b	95.92	8.83	107.10	9.50

based on ITE LUC 850 (Supermarket – regression) for 71,445 st of gross floor area. Saturday daily projections are presented as projected by ITE, but include a sample size of only two stores. based on empirical data collected at Stop & Shop supermarkets throughout the northeast United States

Trip Generation Comparison – ITE Equations vs. Stop & Shop Empirical Rates

		Super	Supermarket	
Time Period	Movement	ITE '	Empirical S&S b	Trip Difference
Weekday Daily d	Enter	3,085	3,430	-345°
	<u>Exit</u>	<u>3,085</u>	<u>3,430</u>	<u>-345</u>
	. Total	6,170	6,860	-690
Weekday Evening	Enter	365	315	50
Design Hour *	Exit	350 715	<u>315</u>	± <u>35</u>
-	Total	715	630	9 - 85
Saturday Daily ^d	Enter	6,345	3,825	2,520
.* *	Exit	<u>6,345</u>	<u>3,825</u>	<u>2,520</u>
	Total	12,690	7,650	5,040
Saturday Midday	Enter	385	340	45
Design Hour *	Exit	<u>370</u>	<u>340</u>	30
	Total	755	680	75

based on ITE LUC 850 (Supermarket – regression) for 71,445 st of gross floor area. Saturday daily projections are presented as projected by ITE, but include a sample size of only two stores. based on empirical data collected at Stop & Shop supermarkets throughout the northeast United States

difference in gross trips

vehicles per day

vehicles per hour

Trip Generation Stop & Shop Supermarket Stores > 70,000 square feet

Portland, ME	07334.00
OCATION:	ROJECT #:

s *	ý,	New Trips	. 2433 2433 4866
Veekday Daily	Pass-by Trips vs. <u>New Trips</u>	Pass-by Trips	994 994 1987
		Total Trips	3427 3427 6853
≱	s. Area	Trip Ends 6853	3427 342 <u>7</u> 6853
٠	Average Trip Ends vs. 000 sf of Gross Floor Area	1000 sf of area 原列的工作的存在SPURE	Enter <u>Exit</u> TOTAL
	4) 1000	avg. rate 95,92	Distribution 50% enter 50% exit

-	ý,	New Trips	2716 271 <u>6</u> 5433
	Pass-by Trips vs. New Trips	Pass-by Trips	1110 1110 2219
Saturday Daily		Total Trips	3826 <u>3826</u> 7652
Satı	vs, Area	Trip Ends 7652	3826 <u>3826</u> 7652
	Average Trip Ends vs. 00 sf of Gross Floor Area	1000 sf of area 71,445	Enter EXII TOTAL
	1000 1000	<u>avg. rate</u> 107.1	Distribution 50% enter 50% exit

177 353
139 278
315 631
•
315 631
<u>Exit</u> TOTAL
50% enter 50% exit

	's	New Trips	241 241 482
	Pass-by Trips vs. <u>New Trips</u>	Pass-by Trips	98 9 <u>8</u> 197
turday Midday		Total Trips	339 339 679
nrd			• •
Sat	Area	Trip Ends 679	339 339 679
, Š .	Average Trip Ends vs. 000 st of Gross Floor Area	1000 sf of area 71,445	Enter EXII TOTAL
	Av.	avg, rate 9.5	Distribution 50% enter 50% exit

STOP & SHOP TRAFFIC COUNTING PROGRAM

SITE LOCATION; Brisfol, Rhode Island

SQUARE FOOTAGE OF THE SITE

Sales: 63,128

Mezzanine:

12.175

Total Building:

75,303

WEEKDAY DAILY			
(Friday April 10, 1994)		OBSERVED	
1.00		TRIPS	RATE
•	IN	3,340	44.35
	OUT	2.815	37.38
_			٠,
	TOTAL	6,155	81.74

SATURDAY DA	ILY		
(Saturday Ap	ril 11, 1994)	OBSERVED	
		IRIP\$	RATE
	IN	4,115	54.65
	OUI	3.440	45.68
	TOTAL	. 7,555	100.33

WEEKDAY EVENING PEAK HOL	JR		
OF THE ADJACENT STREET			
(Friday April 10, 1994)			
		OBSERVED	•
		IRIPS	RATE
			•
	IN	335	4.45
	QUI	260	<u>3.45</u>
The state of the s			
	TOTAL	595	7.90

SATURDAY MID OF THE GENERA (Saturday Apri	NTOR	8	
		OBȘERVED <u>IRIPS</u>	RATE
	IN OUT	365 310	4.85 4.12
	TOTAL	675	8.96

Based on: ATR data collected by Vanasse Hangen Brustlin, Inc.

STOP & SHOP TRAFFIC COUNTING PROGRAM

SITE LOCATION: Stoughton, Massachusetts

SQUARE FOOTAGE OF THE SITE:

Sales:

59,987

Mezzanine:

12.500

Total Building:

72,487

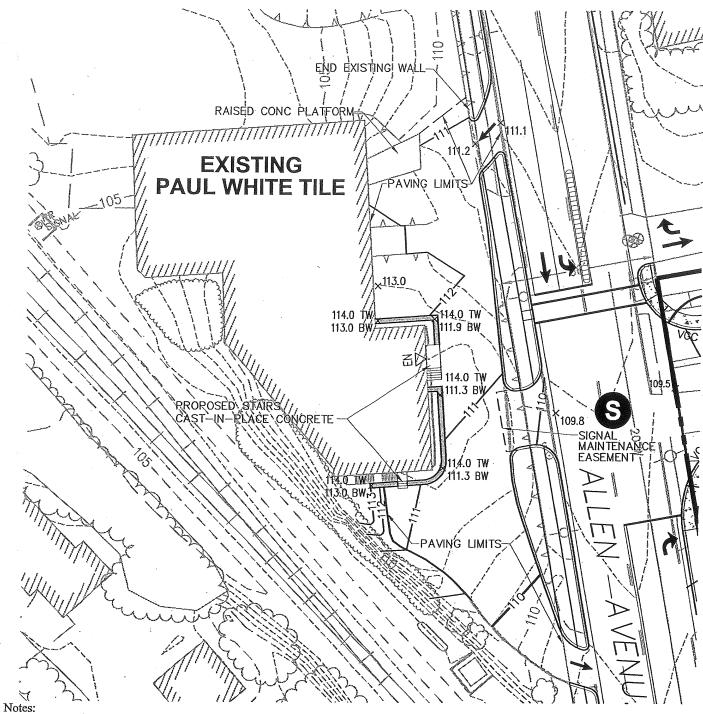
WEEKDAY DAILY			
(Friday Feb. 4, 1994)		OBSERVED IRIPS	RATE
	IN	3,720	51.32
	OUT	3.430	47.32
	TOTAL	7,150	98.64

SATURDAY DAILY			
(Saturday Feb. 5	.1994)	OBSERVED	
		TRIPS	RATE
4.	. IN	3,975	54.84
	OUT	3.845	53.04
	TOTAL	7,820	107.88

WEEKDAY EVENING PEAK H	OUR		
OF THE ADJACENT STREET	•		
(Friday Feb.4, 1994)			
		OBSERVED	
		<u>TRIPS</u>	RATE
	IN	320	4.41
	OUT	<u>320</u>	<u>4.41</u>
	TOTAL	640	. 8.83

SATURDAY MI OF THE GENER (Saturday Feb	'	IR	
		OBSERVED IRIPS	RATE
	IN OUT	395 345	5.45 <u>4.76</u>
	TOTAL	740	10.21

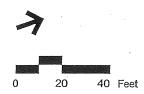
Based on: ATR Data collected by Robert D. Vanasse and Associates

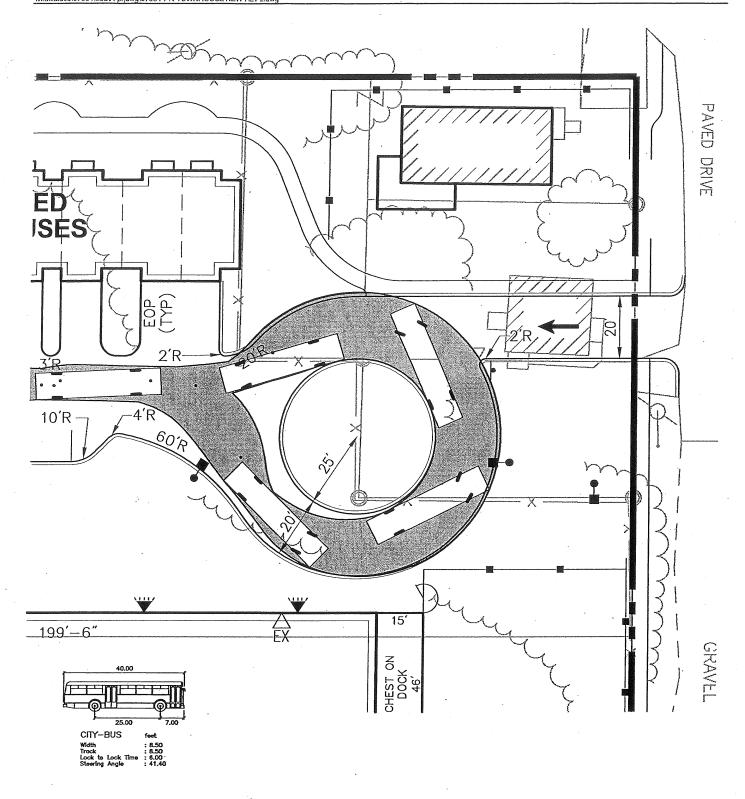


- 1) THE PAVEMENT SECTIONS WITHIN THE PAVING LIMITS WILL BE 3 INCHES OF BITUMINUOS (11/2" SURFACE COURSE OVER 11/2" BINDER COURSE) OVER 6 INCHES OF COMPACTED GRAVEL
- RETAINING WALLS SHALL BE SEGMENTAL BLOCK, WITH A SPLIT-FACE FINISH, AND BE LESS THAN 4 FEET IN HEIGHT

Vanasse Hangen Brustlin, Inc.

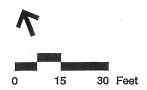
Driveway Reconstruction Exhibit Paul White Tile Property Morrill's Crossing Portland, Maine





Vanasse Hangen Brustlin, Inc.

Bus Route Turning Movement Townhouse Cul-de-Sac Morrill's Crossing Portland, Maine



Transportation Land Development Environmental Services



Vanasse Hangen Brustlin, Inc.

101 Walnut Street
P. O. Box 9151
Watertown, MA 02471-9151

617 924 1770 FAX 617 924 2286

Memorandum

To: Sarah Hopkins

Date

Date: February 7, 2006

Development Review Services Manager Department of Planning & Development

City of Portland 389 Congress Street Portland, Maine 04101

Project No.: 07334.00

From: Robert L. Nagi, PE, PTOE

Principal – Transportation Systems

Re: Morrill's Crossing

Parking Demand

Vanasse Hangen Brustlin, Inc. (VHB) has provided detailed responses to Comments 1-12, 14-18, and 25 from Mr. Thomas A. Errico's January 9, 2006 comment letter on transportation issues. The following memorandum provides a detailed response to Comment 13 on parking demands at the Morrill's Crossing development.

Institute of Transportation Engineers (ITE)

The <u>Traffic Impact and Access Study</u>¹ identified the projected parking generation for the proposed Morrill's Crossing development for typical weekdays and weekends during the peak and non-peak seasons. These parking generation projections were derived from the ITE <u>Parking Generation</u>² manual. The results shown in the report indicate that there is an adequate parking supply for the proposed development uses, with the exception of four hours per day on Saturdays and Sundays during the month of December.

While the ITE provides a reasonable assessment of the likely parking demands for the project site, it is limited in that the ITE parking rates calculate cumulative parking space demand by time of day. It does not attempt to model the effects of shared parking throughout the site, as should be with a mixed use development such as Morrill's Crossing.

For reference, the ITE parking section from the TIAS and its accompanying Appendix materials with a tabular breakdown of the parking demand in spaces (not percentage) is attached (TIAS Parking).

Urban Land Institute (ULI)

Since the submission of the November 2005 study, the Urban Land Institute (ULI) published an updated edition of the <u>Shared Parking</u>³ manual. This manual outlines a more appropriate methodology for determining parking demand for a mixed-use development like Morrill's Crossing, as ULI looks not only at parking demand by land use but also considers shared parking between different land uses.

Morrill's Crossing - Traffic Impact and Access Study; Portland Maine; Vanasse Hangen Brustlin, Inc. (VHB); November 2005.

Parking Generation; 3rd Edition; Institute of Transportation Engineers (ITE); Washington, DC; 2004.

³ Shared Parking; 2rd Edition; Urban Land Institute (ULI); Washington, DC; 2005.

Project No.: 07334.00

Using procedures outlined in the ULI manual, the peak parking demands for the development were estimated. The seasonal variation in the peak parking demand for the project is attached to this memorandum. Clearly, the month of December (Peak Season) has the highest estimated parking demand, with approximately 100 more spaces needed than any other month of the year. The attached graphic also shows that November has the highest demand for the remaining 11 months of the year.

Based on this information, a more detailed review of the parking requirements has been completed for November (assumed to represent the worst case "Non-Peak Season") and December (the "Peak Season"). The detailed parking demand (by spaces) for these uses is included in the attachments.

In reviewing the site plan and understanding how several of the planned uses are anticipated to operate, VHB has assumed that the parking supply and demand for the townhouses, apartments (adjacent to the boxing club), and the boxing club were excluded from these projections. For instance, the townhouse parking (two spaces per unit; one garage space and one driveway space) has not been included in the 666-space total. Also of note, the 34 spaces in the area of the apartments to the rear of the site exceed the demand for these apartments and 25 spaces have been reserved for the boxing club.

Ultimately, the remainder of the on-site parking will be available to all users on the site including the mix of retail, restaurant, and apartments above the retail. The following describes the non-peak season and peak season parking projections for the development according to the ULI procedures:

November (Non-Peak Season)

The weekday and weekend hourly (10:00 AM-8:00 PM) parking demand, by use, for the month of November (Non-Peak Season) is attached to this memorandum. The hourly demand in both graphic and tabular form is included. As shown in the attachments, the peak demand of 468 spaces occurs at 2:00 PM on the weekend. Another attached graphic illustrates where parking spaces are provided for each use during the November weekend condition.

December (Peak Season)

The weekday and weekend hourly (10:00 AM-8:00 PM) parking demand, by use, for the month of December (Peak Season) is attached to this memorandum. The hourly demand in both graphic and tabular form is included. As shown in the attachments, the peak demand of 603 spaces occurs at 2:00 PM on the weekend. Another attached graphic illustrates where parking spaces are provided for each use during the December weekend condition.

Recommendation

Based on these findings, Packard has agreed to implement a parking management plan during the peak December season which will require all retail employees to park in designated areas outside of the main parking field. These areas are shown graphically in the attachments. With this parking management plan in place, there will be adequate parking in the primary parking field for the retail, restaurant, supermarket, and apartment users during the peak season. During the remainder of the year, there is adequate parking provided in the primary parking field for customers, residents and employees.

Conclusion

Based on the projections outlined in the ULI's Shared Parking manual as well as the previous ITE information presented in the traffic study, it is clear that adequate parking is provided for the Morrill's Crossing site. For 11 months of the year, a surplus of parking is provided. For the

Date: February 7, 2006 Project No.: 07334.00

December Peak Season, adequate parking is provided with the retail employee parking management plan in place.

Copies: City of Portland Planning Board (6 copies)

Tom Errico, Wilbur Smith Associates

Tom Gorrill, Gorrill-Palmer Consulting Engineers, Inc.

Alexander Jaegerman, Planning Division Director

John Peverada, Parking Manager

Attachments

- ➤ TIAS Parking
- ➤ ULI Seasonal Demand
- ➤ ULI November Hourly Demand
- ➤ ULI December Hourly Demand

TIAS Parking

On-site Parking Assessment

Under the current proposal, the proposed project will provide 666 parking spaces on site. The following text presents an assessment of the adequacy of the proposed parking supply based on information provided by the Institute of Transportation Engineers (ITE), the Urban Land Institute (ULI), as well as empirical parking data collected at existing Stop & Shop supermarket sites.

ITE Parking Generation

In order to estimate the number of parking spaces required by the proposed redevelopment project, parking generation estimates for the various land uses were derived from the ITE <u>Parking Generation</u>¹ manual using the programmed square footage and/or number of residential units of the buildings under consideration.

In sum, the proposed new development will consist of the following land uses and sizes:

- ➤ 65,821-sf supermarket (with an additional 5,624 sf of non-sales mezzanine space)
- ▶ 63,765 sf of additional retail
- > 23 apartment units
- > 20 townhouses
- ➤ 2 single-family houses
- > 15,462 sf of additional office space
- > 15,090 sf of boxing club space (with an additional 11,922 sf of ancillary space)
- ➤ 1 multi-purpose field

One of the additional benefits of a mixed use development is the ability of the site amenities to support multiple uses. For example, parking spaces used by retail and office uses generally peak in the middle of the day, while parking demand for the residential users generally peaks in the evening. For this reason, a parking space that is used by an office tenant during the typical work day can be used by a resident of the site during the evening.

For this reason, the temporal parking demands for the various land uses on the site were overlaid to determine the overall peak parking demand

Parking Generation; 3rd Edition; Institute of Transportation Engineers (ITE); Washington, DC; 2004.

Land Use: 850 Supermarket

The following table present the time-of-day distributions of parking demand for all sites that included at least five hours of continuous count data.

					·	
Based on Vehicles per		urban Pkday		urban urday		ural urday
1,000 sq.ft. GFA	Percent of	Number of	Percent of	Numberof	Percentor	Number of
Hour Beginnings	Peak Penod	Data Points	Peak Period	Data Points	Peak Period	Data Points*
12:00-4:00 a.m.		0	-	0		0
5:00 a.m.		0	_	0		0
6:00 a.m.		0	_	0 -	· -	0
7:00 a.m.	_	0		0		0
8:00 a.m.	<u>'</u>	0	_	0 .	·. ' =	0
9:00 a.m.	-	0	_	0	64	1
10:00 a.m.	58	2	_	0 ;	83	. 1
11:00 a.m.	- 66	2	_	0	80	1
12:00 p.m.	93	4	91	2	85	1
1:00 p.m.	100	4	100	2	93	1
2:00 p.m.	90	4 .	95	2	96	1
.3:00 p.m.	94	4	98	2	100	34 .1 · · ·
4:00 p.m.	97	4	89	2	93	1
5:00 p.m.	82	. 5	72	1.12 Jaky 1.	, 99	1
6:00 p.m.	62	, 4	72	2 ;	96	i. 1: ::
7:00 p.m.	47	1	-	. 0	81	1
8:00 p.m.		. 0		0 :	. :	. 64, 1 0 (40)
9:00 p.m.		0	_	0	- 1.00	- 0
10:00 p.m.		0	_	0	_	0
11:00 p.m.	_	0	_	0	-	0
* Cubact of detabas						

^{*} Subset of database

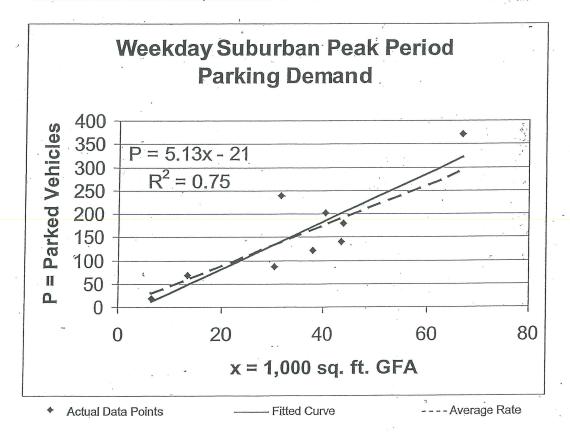
Additional Data

Monthly parking variation cannot be derived from the available data. However, the following supermarket sales information (averaged for the period 1999 through 2003 from the U.S. Census) is provided as a reference to peak month activity. The supermarkets that compose the U.S. Census data set may not have the same land use characteristics as sites contained in the ITE *Parking Generation* database for this land use.

Land Use: 850 Supermarket

Average Peak Period Parking Demand vs: 1,000 sq. ft. GFA
On a: Weekday
Location: Suburban

Statistics	Peak Period Demand
Peak Period	1:00–5:00 p.m.
Number of Study Sites	9.
Average Size of Study Sites	35,000 sq. ft. GFA
Average Peak Period Parking Demand	4.36 vehicles per 1,000 sq. ft. GFA
Standard Deviation	1.60
Coefficient of Variation	37%
Range	2.73–7.59 vehicles per 1,000 sq. ft. GFA
85th Percentile	5.45 vehicles per 1,000 sq. ft. GFA
33rd Percentile	3.20 vehicles per 1,000 sq. ft. GFA



The following tables present the time-of-day distributions for parking demand.

December

	Monday-	Thursday	i In	day	Sati	reay
Hour Beginning -	Percent of	Number of	Percent of	Number of	Percent of	Number of
	Peak	- Data	Peak	Data :	Peak	a Data
	Period	Points	Period	Points*	Period	Points
12:00-4:00 a.m.	-	.0	_	0	7	0
5:00 a.m.	_	0		0	–	0
6:00.a.m.	-	0	_	0		0
7:00 a.m.	9	1	-	0	_, :	0
8:00 a.m.	16	1	. 55	1		0
9:00 a.m.	62	4	76	3	- 1	0
10:00 a.m.	64	5	77	6	78	10
11:00 a.m.	91	7	92	6	94	. 10
12:00 p.m.	. 87	5	100	6	100	10
1:00 p.m.	84	9	100	6 :	93	10
-2:00 p.m.	100	9	90	6	95	. 10
.3:00 p.m.	95	-10	88	6	94	10
4:00 p.m.	85	7	87	6	87	10
5:00 p.m.	91	8	87	6	.81	10
6:00 p.m.	96	6	85	6	69	10
7:00 p.m.	95	6	84	6	* y= +	0
8:00 p.m.		0	87	4	· —	0
9:00 p.m.		0		0 -		- 0""
10:00 p.m.	- !	0		0	4.	0.
11:00 p.m.		0		0	-	0′
* Subset of database	:Α					

^{*} Subset of database

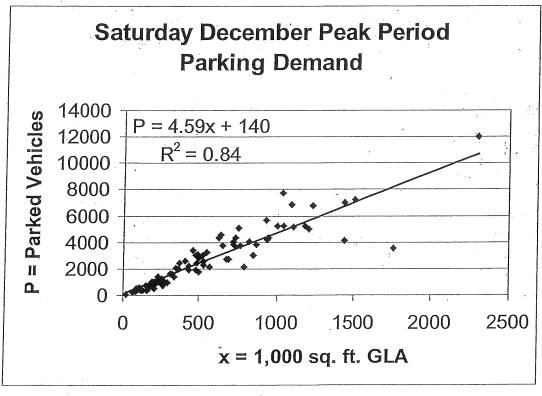
Non-December

	S				1	
	Nioniday-	-Thursday	j j	day	Sit	robly .
Hour Beginning	Percention	Number of	Percent of	Number of	Percention	Number
	Peak	Data	Peak	== Data ==	Peak	of Data
	Period	Points'	Period	Points	Period	- Points*
12:00-4:00 a.m.		0	, -:	0		0
5:00 a.m.	_	0		0		. 0
6:00 a.m.	_	0	- .	:.; 0 '	:	. 0
7:00 a.m.	.5 ⁵	1	_	0	13	1
8:00 a.m.	18	2	_	0 .	27	2 .
9:00 a.m.	38 ;	, 3		0	61	(c) 3
.10:00 a.m.	53,	. 3	59	5	75	6
11:00 à.m.	86	4	74	6	90	7
12:00 p.m.	100	4	94	7	100	7
1:00 p.m.	98	4	85	8	99	7
2:00 p.m.	'91	4	.74	8	98	7
3:00 p.m.	***86*********************************	4	68	7-8	88 .	6
4:00 p.m.	81	4	67	8 🦠	68	≠65 #11
5:00 p.m.	. 757 😂	. 3	70 -	7	56	4
6:00 p.m.	69	3	76	7	73	2 1
7:00 p.m.	82	2	100	3 .	52	. 1
8:00 p.m.	70	. 2	91 .	.3	53	1
9:00 p.m.	42	2		0	. 44	1 .
10:00 p.m.	10	1		0 .	29	1 .
11:00 p.m.	_	0		0 .	· -	0
* Cuback of database						

^{*} Subset of database

Average Peak Period Parking Demand vs: 1,000 sq. ft. GLA On a: Saturday (December)

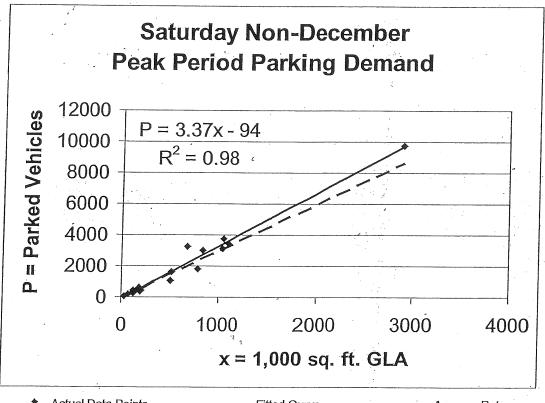
Statistic	Peak Period Demand
Peak Period	11:00 a.m6:00 p.m.
Number of Study Sites	82
Average Size of Study Sites	558,000 sq. ft. GLA
Average Peak Period Parking Demand	4.74 vehicles per 1,000 sq. ft. GLA
Standard Deviation	1.19
Coefficient of Variation	25%
95% Confidence Interval	4.48–5.00 vehicles per 1,000 sq. ft. GLA
Range	2.01–7.50 vehicles per 1,000 sq. ft. GLA
85th Percentile	5.92 vehicles per 1,000 sq. ft. GLA
33rd Percentile	4.23 vehicles per 1,000 sq. ft. GLA



Actual Data Points

Average Peak Period Parking Demand vs: 1,000 sq. ft. GLA On a: Saturday (Non-December)

Statistic	Peak Period Demand
Peak Period	1:00–2:00 p.m.
Number of Study Sites	20.
Average Size of Study Sites	549,000 sq. ft. GLA
Average Peak Period Parking Demand	2.97 vehicles per 1,000 sq. ft. GLA
Standard Deviation	0.71
Coefficient of Variation	24%
95% Confidence Interval	2.66–3.28 vehicles per 1,000 sq. ft. GLA
Range	1.85-4.82 vehicles per 1,000 sq. ft. GLA
85th Percentile	3.56 vehicles per 1,000 sq. ft. GLA
33rd Percentile	2.65 vehicles per 1,000 sq. ft. GLA



Actual Data Points

---- Fitted Curve

---- Average Rate

Land Use: 932 High-Turnover (Sit-Down) Restaurant

Additional Data

The National Restaurant Association identifies August as the most popular month to eat out and Saturday as the most popular day of the week for dining out.¹

Monthly parking variation cannot be derived from the available data. However, the following full service restaurant sales information (averaged for the period 1999 through 2003 from the U.S. Census) is provided as a reference to peak month activity. The full service restaurants that compose the U.S. Census data set may not have the same land use characteristics as sites contained in the ITE *Parking Generation* database for this land use.

Full Service Restaurant Sales Variation Data

I dii Oci vice reconditant odico variation odic				
	Percent of Average Month			
Month	Full Service Restaurant Sales (%)			
January	90			
February	90			
March	101			
April	99			
May	104			
June	103			
July	105			
August	107			
September	98			
October	102			
November	98			
December	103			
<u> </u>				

SOURCE: Unadjusted and Adjusted Estimates of Monthly Retail and Food Services Sales by Kinds of Business: 1999-2003. Monthly Retail Service Branch, U.S. Census. August 2004, NAICS Code 722. (www.census.gov/mrts/www/mrts.html)

Study Sites/Years

High-Turnover (Sit-Down) Restaurant without Bar/Lounge (Family Restaurant)

Bossier City, LA (1978); Cupertino, CA (1982); Sunnyvale, CA (1982); Anaheim, CA (1983); Orange, CA (1983); Tustin, CA (1983); Anaheim, CA (1984); Dewitt, NY (1984); Fayetteville, NY (1984); Naugatuck, CT (1984); Syracuse, NY (1984); Waterbury, CT (1984); Glenview, IL (1986); Oklahoma City, OK (1987); Syracuse, NY (1987); Syracuse, NY (1988); Seattle, WA (1999); Clearwater, FL (2001); Tampa, FL (2001); Tampa, FL (2002); Carpentersville, IL (2003); Indianapolis, IN (2003); Long Beach, CA (2003); Los Angeles, CA (2003); Mooresville, IN (2003); Oak Lawn, IL (2003); Pasadena, CA (2003); Santa Monica, CA (2003); Springfield, PA (2003); Tampa, CA (2003)

High-Turnover (Sit-Down) Restaurant with Bar/Lounge

Beaverton, OR (1994); Hillsboro, OR (1994); Lake Oswego, OR (1994); Portland, OR (1994); Tampa, FL (2001, 2002); Los Angeles, CA (2003); Bedford Park, IL (2003); Burbank, CA (2003); Burbank, IL (2003); West Dundee, IL (2003); Greenwood, IN (2003); Indianapolis, IN (2003); Andover, MA (2003); Methuen, MA (2003); West Norriton, PA (2003); Wayne, PA (2003)

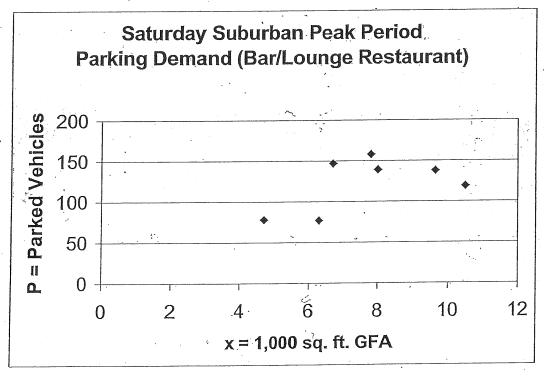
¹ National Restaurant Association. www.restaurant.org/faq.cfm

Land Use: 932 High-Turnover (Sit-Down) Restaurant

Average Peak Period Parking Demand vs: 1,000 sq. ft. GFA
On a: Saturday

Land Use Code Subset: Restaurant With Bar or Lounge Location: Suburban

Statistic	Peak Period Demand		
Peak Period	6:00–9:00 p.m.		
Number of Study Sites	. Zone and and		
Average Size of Study Sites	7,900 sq. ft. GFA		
Average Peak Period Parking Demand	16.3 vehicles per 1,000 sq. ft. GFA		
Standard Deviation	4.0 15.45		
Coefficient of Variation	24% ************************************		
Range	11.3–21.9 vehicles per 1,000 sq. ft. GFA		
85th Percentile	20.4 vehicles per 1,000 sq. ft. GFA		
33rd Percentile	14.3 vehicles per 1,000 sq. ft. GFA		

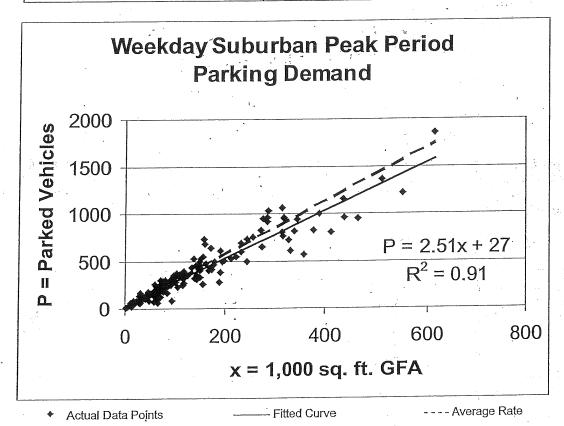


Actual Data Points

Land Use: 701 Office Building

Average Peak Period Parking Demand vs: 1,000 sq. ft. GFA
On a: Weekday
Location: Suburban

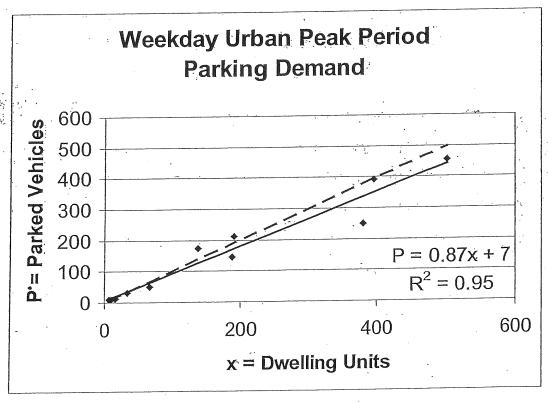
Statistic	Peak Period Demand		
Peak Period	9:00 a.m12:00 p.m.; 2:00-4:00 p.m.		
Number of Study Sites	173		
Average Size of Study Sites	136,000 sq. ft. GFA		
Average Peak Period Parking Demand	2.84 vehicles per 1,000 sq. ft. GFA		
Standard Deviation	0.72		
Coefficient of Variation	25%		
95% Confidence Interval	2.73–2.95 vehicles per 1,000 sq. ft. GFA		
Range	0.86-5.58 vehicles per 1,000 sq. ft. GFA		
85th Percentile	3.44 vehicles per 1,000 sq. ft. GFA		
33rd Percentile	2.57 vehicles per 1,000 sq. ft. GFA		



Land Use: 221 Low/Mid-Rise Apartment

Average Peak Period Parking Demand vs: Dwelling Units
On a: Weekday
Location: Urban

	Peak Period Demand
Statistic	
Peak Period	9:00 p.m.–5:00 a.m.
Number of Study Sites	12 -
Average Size of Study Sites	165 dwelling units
Average Peak Period Parking Demand	1.00 vehicles per dwelling unit
Standard Deviation	0.22
Coefficient of Variation	22%
Range	0.66-1.43 vehicles per dwelling unit
85th Percentile	1.17 vehicles per dwelling unit
33rd Percentile	0.92 vehicles per dwelling unit
Join Let Cettine	1



Actual Data Points

- Fitted Curve

--- Average Rate

Land Use: 492 Health/Fitness Club

Land Use Description

Health/fitness clubs are privately owned facilities that primarily focus on individual fitness or training. Typically these clubs provide exercise classes, weightlifting, fitness and gymnastics equipment; spas; locker rooms; and small restaurants or snack bars. This land use may also include small facilities (ancillary to fitness activity) such as swimming pools, whirlpools, saunas, tennis, racquetball and handball courts and limited retail. These facilities are membership clubs that may allow access to the general public for a fee. Racquet/tennis club (Land Use 491), athletic club (Land Use 493) and recreational community center (Land Use 495) are related uses.

Database Description

The database consisted of all suburban sites with the exception of two urban sites. Parking demand rates at the two urban sites were similar to those of the suburban sites and therefore the data were combined and analyzed together.

- Average parking supply ratios: 5.9 spaces per 1,000 sq. ft. GFA (nine study sites) and 0.15 spaces per member (five study sites).
- Average employee density: 0.57 per 1,000 sq. ft. GFA (nine study sites).

The majority of the data were collected during the winter.

Parking demand counts were submitted for only single hour observations between 6:00 and 7:00 p.m. for 14 of the 20 study sites. Multi-hour continuous counts at the other six study sites indicate the peak period was typically in the same hour as the single counts. The following table presents time-of-day distribution of parking demand for the study sites.

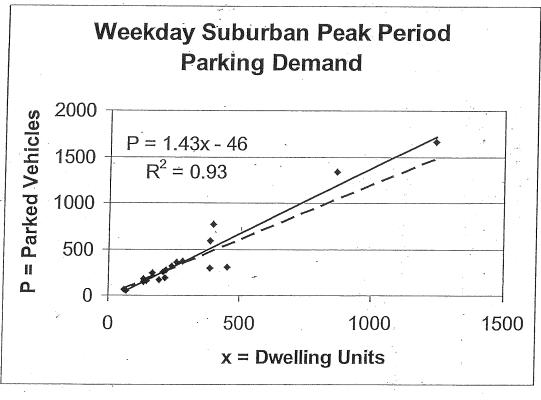
Percent of Peak Period.	Mumber of Data Points's
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^{*} Subset of database

Land Use: 221 Low/Mid-Rise Apartment

Average Peak Period Parking Demand vs: Dwelling Units
On a: Weekday
Location: Suburban

Statistic	D. L.D. L.D.
	Peak Period Demand
Peak Period	12:00–5:00 a.m.
Number of Study Sites	19
Average Size of Study Sites	320 dwelling units
Average Peak Period Parking Demand	1.20 vehicles per dwelling unit
Standard Deviation	0.32
Coefficient of Variation	26%
Range	0.68–1.94 vehicles per dwelling unit
85th Percentile /	1.46 vehicles per dwelling unit
33rd Percentile	1.09 vehicles per dwelling unit



Actual Data Points

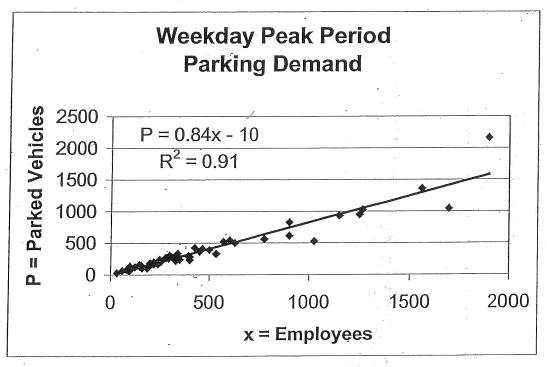
- Fitted Curve

---- Average Rate

Land Use: 701 Office Building

Average Peak Period Parking Demand vs: Employees
On a: Weekday

Statistic	. Peak Period Demand
Peak Period	9:00 a.m12:00 p.m.; 2:00-4:00 p.m.
Number of Study Sites	58
Average Size of Study Sites	440 employees
Average Peak Period Parking Demand	0.83 vehicles per employee
Standard Deviation	0.16
Coefficient of Variation	19%
95% Confidence Interval	0.79–0.87 vehicles per employee
Range	0.52–1.35 vehicles per employee
85th Percentile	0.98 vehicles per employee
33rd Percentile	0.76 vehicles per employee

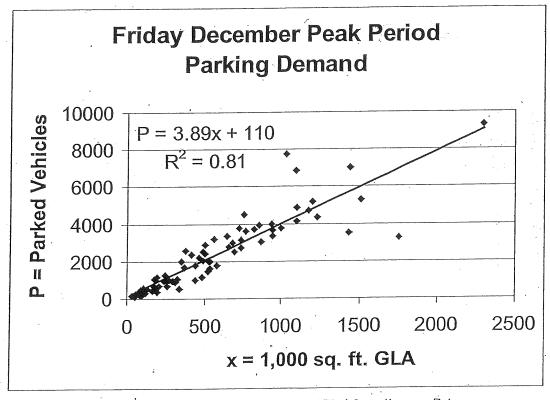


Actual Data Points

- Fitted Curve/Average Rate

Average Peak Period Parking Demand vs: 1,000 sq. ft. GLA
On a: Friday (December)

Statistic	Peak Period Demand
Peak Period	11:00 a.m.–8:00 p.m.
Number of Study Sites	80,
Average Size of Study Sites	533,000 sq. ft. GLA
Average Peak Period Parking Demand	4.01 vehicles per 1,000 sq. ft. GLA
Standard Deviation	1.24
Coefficient of Variation	31%
95% Confidence Interval	3.74-4.28 vehicles per 1,000 sq. ft. GLA
Range	1.47–7.50 vehicles per 1,000 sq. ft. GLA
85th Percentile	5.24 vehicles per 1,000 sq. ft. GLA
33rd Percentile	3.51 vehicles per 1,000 sq. ft. GLA



Actual Data Points

Fitted Curve/Average Rate

Morrill's Cissing - Portland, ME Parking Generation Summary 07334.00

	ITE Land	ITE Land Use Code		2,81	7		
Land Use	Trip Generation	Parking Generation	size [ksf/units/members]	Average	Seasonal Deak	Sat	Saturday
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i otal Expected.				601	682	804	7007

a - assumed Monday - Thursday as Average; assumed as 62.585 sf of retail and 5.472 sf of restaurant

b - assumed to be urban; average and seasonal peak rates assumed to be the same

c - assumed to self-contain required parking d - assumed to self-contain required parking

e - Parking Generation refers to High-Turnover (Sit-Down) restaurant and Quiaity restaurant as coincident land uses;

assumed to be in a suburban location, with bar/lounge service; average calculated using table value; peak calculated using month/year data

f - data assumed to be non-seasonal dependent; Saturday rates calculated to be appriximately 16 percent of weekday rates, based on Trip Generation values

g - assumed to be in a suburban location; peak values obtained by determining multiplier for December months; size = 65,821 sales sf + 5,624 non-sales sf

h - assumes 11 players per team, 2 coaches, 2 assistants, 1 referee, and 22 spectators; assumes a 2.1 VOR; average and seasonal peak assumed to be the same

i - assumed to most closely resemble land use code 492 (health/fitness club); average and seasonal peak assumed to be the same

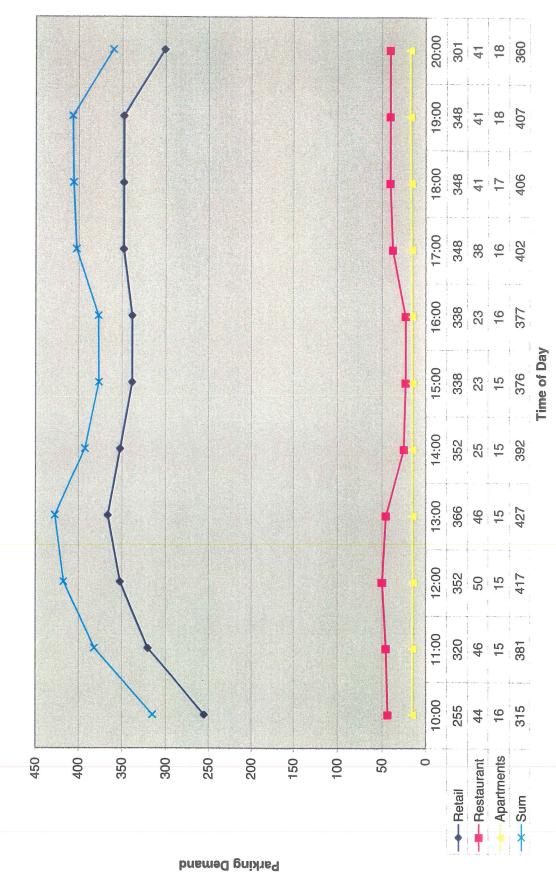
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ULI Seasonal Demand

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ULI November Hourly Demand

Morrill's Parking Demand - Weekday November

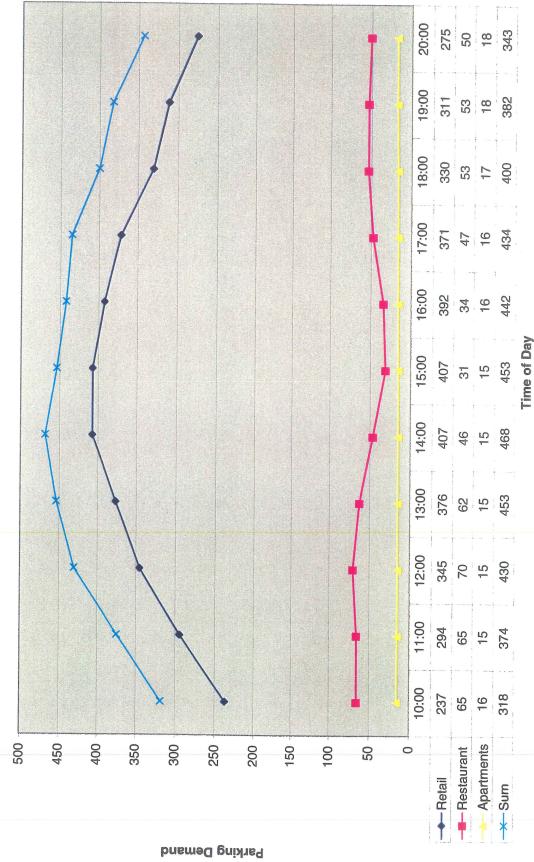


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Morrill's Parking Demand - Weekend November



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Morrill's Parking Demand - Weekend November

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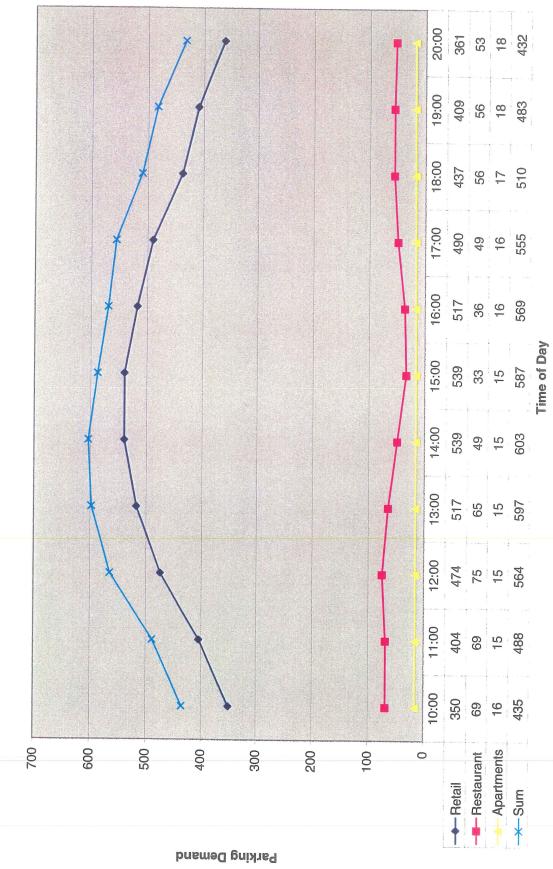
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Morrill's Parking Demand - Weekday Peak December

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Morrill's Parking Demand - Weekend Peak December



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101 Walnut Street, P.O. Box 9151 Watertown, Massachusetts 02471 617 924 1770 • FAX 617 924 2236 WOODLAWN STREET WOODLAWN STREET UNIVERSITY STREET EXISTING PAUL WHITE TILE PRINCETON STREET CORNELL STREET PROPOSED STOP & SHOP SUPERMARKET Morrill's Crossing Allen Avenue Portland, Maine Site Plan Approval Not Approved for Construction Overall Site Plan = Restaurant = 49 spaces = Mixed Use = 76 spaces (61 retail + 15 residential) C-2 = 370 spaces = Retail = Retail Employme = 108 spaces 603 spaces

- DECEMBER WEEKEND -

Transportation Land Development Environmental Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 22, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Ms. Sarah Hopkins Development Review Services Manager Department of Planning & Development City of Portland 389 Congress Street Portland, Maine 04101

Re:

Response to Comments Morrill's Crossing Traffic Study Portland, Maine

Dear Sarah:

Vanasse Hangen Brustlin, Inc. (VHB) has provided detailed responses to Comments 1-18, and 25 from Mr. Thomas A. Errico's January 9, 2006 comment letter on transportation issues. The following memorandum provides detailed responses to Comments 19-24 and 26 of this same letter.

Background

Based on a number of comments and suggestions made by Mr. Errico and others, the applicant has gathered additional traffic-related information in and around the Morrill's Comer area. This additional data was gathered so as to better calibrate the existing "real world" conditions with those "theoretical" conditions modeled in the simulation programs. As part of this effort, VHB collected actual saturation flow rates (as opposed to theoretical values), made observations of existing vehicle queuing through the Morrill's Corner area, and documented lane utilization of the various approaches to the intersections. Attached to this letter is a summary of the means and methods used by VHB to document the saturation flow rates as well as the results of those observations.

With this additional information, the traffic models originally presented were then calibrated to represent what was observed and to portray and project future conditions based on the observations made by professional staff from VHB. The end result is a traffic model that accurately represents the current traffic conditions within the Morrill's Corner area as well as defines the future transportation network both with and without the development of the Morrill's Crossing project. It is important to note that the previously submitted analysis was correct in its assumptions, however this revised evaluation provides a more accurate calibration of existing, and likely future, conditions.

The following letter provides responses to the comments raised by Mr. Errico (numbered and shown in italics).

^{&#}x27;Saturation flow rate: the rate at which vehicles can travel through an intersection assuming that the green signal is available at all times. For example, a saturation flow rate of 1900 indicates that up to 1,900 vehicles could travel through an intersection assuming that the green signal is available at all times. For example, a saturation flow rate of 1900 indicates that up to 1,900 vehicles could travel through an intersection assuming that the green signal is available at all times.

Ms. Sarah Hopkins Project No.: 07334.00 February 22, 2006 Page 2

19. The improvement plan should provide details on how Forest Street will transition from two lanes to one in the inbound direction.

An exhibit showing how Forest Street will transition from two lanes to one in the inbound direction is attached to this letter (see Comment 19 Attachment). The inbound Forest Avenue corridor is proposed to be two lanes from its intersection with Stevens Avenue to a point just past Read Street. Once past Read Street, the Forest Avenue corridor will transition from two lanes to one lane over the course of approximately 125 feet.

This two-lane configuration would provide a consistent flow of traffic in two lanes as motorists traveled inbound past Stevens Avenue without any forced merge or lane drop occurring. Once past Read Street, drivers would gradually transition into one consistent lane along Forest Avenue as they do today.

20. The applicant needs to fully explore and provide alternatives for the provision of four travel lanes on Forest Avenue as it relates to the loss of on-street parking.

Currently, there are five unmarked parking spaces provided along the inbound side of Forest Avenue that would be impacted by the proposed roadway widening project. Based on observations, these spaces are predominantly used by patrons of Samuels, a restaurant/pub located along Forest Avenue.

As was discussed with the City of Portland staff and supported by the Maine Department of Transportation (MDOT) staff, it is proposed that this on-street parking be removed permanently so as to provide a consistent two-lane inbound traffic flow at all hours of the day along Forest Avenue. This recommendation is consistent with the City's prior BTIP plans (which would have eliminated these same spaces).

While consideration has been given to temporary restrictions based on the time of day and traffic flow along this stretch of roadway, the City, MDOT and applicant all agree that the elimination of these parking spaces is the proper long-term approach from an engineering and safety perspective.

The applicant will continue to work with the owner of Samuel's to locate alternative parking opportunities in the immediate vicinity of their business.

21. Peak hour factors computed during the conduct of the turning movement counts should be used in the capacity analysis calculations.

The original data collected for this project included peak hour factors for each individual lane group based on observed traffic counts. As traffic levels increase along a specific approach, it is reasonable to assume that the overall intersection saturation level will increase. This will, in turn, affect the peak hour factors of the approaches to an intersection. Peak hour factors will continue to increase towards a 0.92 default rate as suggested in the Highway Capacity Manual². In cases where a specific movement is projected to operate at congested levels, it is reasonable to assume that the peak hour factors will further increase to 0.95 and then 0.98 to model the effect of congestion on these movements. This



Ms. Sarah Hopkins Project No.: 07334.00 February 22, 2006 Page 3

practice has been accepted in the past by the State of Maine and is commonly used in similar situations when evaluating corridors that experience some peak hour congestion.

In light of the concern raised by Mr. Errico, VHB has eliminated the few instances where the peak hour factor was increased from 0.95 to 0.98. Ultimately, this factor adjustment does not impact the overall level of service results for any of the intersections – all locations continue to operate at LOS D or better.

22. The capacity analysis calculations take credit for right-turn on red movements at the Forest Avenue/Allen Avenue intersection. Right-turn-on-red movements are prohibited for northbound right turns. The analysis should be revised to reflect this prohibition.

This change has been made and is reflected in the accompanying analysis results. Under future conditions with the proposed improvements in place, these right turn on red movements are proposed to be permissible.

23. The volume-to-capacity ratio for the Forest Avenue/Allen Avenue intersection exceeds 1.0 for the Build with Mitigation Scenario during the Weekday time period. Volume-to-capacity computations should be less than 1.0 at all study intersections.

A table showing the updated signalized analysis results is attached to this letter (see Comment 23 Attachment). The table shows that all volume-to-capacity ratios are 1.0 or lower for all movements under the Build with Mitigation condition. Changes to the previous analyses include a balanced traffic volume network, the inclusion of observed saturation flow rates and lane utilization factors, the reduction of peak hour factors that had been increased to be greater than 0.95, the modification of lane configuration on the NB Allen Avenue approach at the site driveway, and the subsequent adjustments to the phasing, timing and offsets at the signalized intersections.

24. The applicant should provide information on existing storage lane capacities at the study intersections such that a determination on storage lane adequacy can be determined. Additionally, 95th% queues should be used for the determination of lane storage adequacy.

A table showing the updated evening peak hour vehicular queue results is attached to this letter (see Comment 24 Attachment). The table presents both existing storage lane capacities (under current conditions) and proposed storage lane capacities (under the Build with Mitigation scenario). It also shows the average and 95th percentile queues for each individual movement based on the Synchro reports generated by this new analysis.

Almost universally, the charts indicate that there will be either an elimination of, or a significant reduction of, the average vehicle queuing when comparing the Existing conditions with the Build with Mitigation condition. While there are a few locations that exhibit 95th percentile queues in excess of the lane storage abilities under the Build with Mitigation condition, they are less than the corresponding 95th percentile queues show in the Existing conditions analysis results.

Based on a meeting held on Friday, February 17, 2006 with the MDOT staff and the City, VHB will be providing additional information regarding this topic. This additional information will be based on the results of the SimTraffic software, which is a traffic simulation model that has been used by MDOT

Ms. Sarah Hopkins Project No.: 07334.00 February 22, 2006 Page 4

as an alternate means of estimating queues where there are closely spaced signalized intersections. The results of this simulation analysis will be provided under separate cover.

26. I am concerned about vehicle queuing at the Morrill's Corner intersections and will rely on the SimTraffic results to determine whether conditions are acceptable. As indicated previously, that review will be conducted in the near future.

As noted in the response to Comment 24 and as requested by MDOT and the City at the meeting held on Friday, February 17, 2006, VHB will provide an estimate vehicular queue summary based on the SimTraffic traffic simulation model to the City for their review under separate cover.

In response to Mr. Errico's February 10, 2006 letter, we were pleased that many of his concerns have been addressed to his satisfaction. The following brief responses are intended to supplement and clarify our initial responses for the City's consideration:

2. From a traffic volume and analysis perspective, intersection turning movement counts are the most relevant. Accordingly, I would ask that the applicant provide a historical perspective on the various intersections turning movement volumes collected over the last several years. I would suggest that this be provided in tabular form with dates of counts, day of week information, peak hour information, and supporting commentary.

Additional information is attached. While we do not see the relevance of this information to the project before the planning board, we have provided it for review purposes.

18. The applicant shall provide a graphic that illustrates the turning adequacy of bus movements through the traffic circle near Morrill Street. Additionally, the applicant should implement design treatments that minimize illegal movements to Morrill Street.

The driveway has been reduced in width from 20 feet down to 16 feet per agreement with the City.

25. The applicant should identify a mitigation plan for the Forest Avenue at Riverton School/Newton Street intersection.

The applicant is willing to discuss reasonable contributions towards this important project.

Finally, as referenced earlier in this letter, VHB has since met with Mr. Errico and MDOT staff on Friday February 17, 2006 to review the off-site concept plans and results of the traffic study. While the meeting was very positive, and the roadway improvements being suggested were supported by MDOT, VHB has agreed to provide an additional few pieces of information to the City and MDOT in support of the traffic report findings.



Ms. Sarah Hopkins Project No.: 07334.00 February 22, 2006

Page 5

Should you have any questions related to these responses, please feel free to contact me directly. We are eager to address all of your questions and concerns prior to the next scheduled Planning Board traffic workshop on March 7, 2006.

Regards,

VANASSE HANGEN BRUSTLIN, INC.

Robert L. Nagi, PE

Principal

Copies: City of Portland Planning Board (6)

Sarah Hopkins, City of Portland Tom Errico, Wilbur Smith Associates

Tom Gorrill-Palmer Consulting Engineers, Inc.

Attachments

- ➤ Saturation Flow Rates
- ➤ Lane Utilization Factors
- ➤ Comment 19
- ➤ Comment 23
- ➤ Comments 24 & 26
- ➤ Comment 2

Saturation Flow Rates

VHB conducted video observations and recordings of the three "traditional" Morrill's Corner intersections (Forest at: Allen Avenue; Warren Avenue; and Stevens Avenue) on Tuesday January 31 thru Friday February 3, 2006.

As these videos were brought back to the office, VHB then conducted a series of saturation flow studies using these video recordings, per the standard procedure outlined by ITE in the <u>Manual of Transportation Engineering Studies</u>.

Under the Existing conditions, the Saturation Flow Rate (SFR) was applied to the Synchro analysis using an iterative process of modifying the Ideal SFR until the Synchro-calculated SFR (prot) and/or SFR (perm) matched the calculated mean SFR that was based on data recorded in the field. The results of this process are attached.



Saturated Flow Rates

	EBL.	EBI	EBH:
LANE WINDOW	<i>"</i>		•

The saturated flow rates are the actual maximum flow rate for this lane group after adjusting for all of the interference factors. The saturated flow rates represent the number of lanes multiplied by the Ideal Saturated Flow Rate and interference factors due to heavy vehicles, buses, parking maneuvers, lane widths, area type, grade, and turning movements.



There is a permitted and a protected saturated flow rate. For left and through lane groups the permitted saturated flow rate is used when left turns are permitted and the protected saturated flow rate is used when left turns are protected. For right turn lane groups, the permitted flow rate is used with permitted and free right turn phases. The protected flow rate is used with protected and overlapping right turn phases.

The Saturated Flow rates are used in capacity and delay calculations, and for optimization calculations.

These fields are calculated but can be overridden.

The saturation flow rate is based on:

S = So * N * Fw * Fn * Fhv * Fg * Fp * Fbb * Fa * Flu * Flt * Frt * FLpb * FRpb

S = saturation flow rate for the subject lane group, expressed as a total for all lanes in the lane group, veh/h'

So = base saturation flow rate per lane, pc/h/In,

N = number of lanes in the lane group,

Fw = adjustment factor for the lane width,

Fhv = adjustment factor for heavy vehicles in the traffic stream,

Fg = adjustment factor for approach grade,

Fp = adjustment factor for the existence of a parking lane and parking activity adjacent to the lane group,

Fbb = adjustment factor for the blocking effect of local buses that stop within the intersection area,

Fa = adjustment factor for area type,

Flu = adjustment factor for lane utilization,

Flt = adjustment factor for left turns in the lane group,

Frt = adjustment factor for right turns in the lane group,

FLpb = pedestrian adjustment factor for left-turn movements, and

FRpb = pedestrian/bicycle adjustment factor for right-turn movements.

Location:	Forest Aven	ue & Warren ir	Portlan	d, ME		→	
Direction:	SB Forest	· .	Lane:	All Lanes			
Date:	2/2/2006	-	Time:	4PM-6PM	City:	Portland, ME	
Observers:	Barry Hoyle			Weather _	Partly Cloudy	- 30's	
Grade:	%	_ Lane Width _	ft.	_ Area: _		Other:	

-				
Obs		econds) betwe		
No.	7th veh.	8th veh.	9th veh.	10th veh
.1	6.4			1
2				11.2
.1 2 3 4 5	7.2			
4		8.9		
5	6.8			
6		8.8		
7				12.1
8	5.8			
9		6.9		
10			8.8	
11	6.7			
12		8.9		
13			10.1	
14				11.7
15	6		1	
16			8.6	
17		6.9		
18			8.9	
19	5.2			
20		7.1		
21		7.2		
22	5.9			
23			9.5	
24			10.7	
25				12.5
26				11.7
27			10.1	
28			10.3	
. 29.				11.3
30				13.1

Column Sums

50

54.7

77

83.6

Mean Saturation Flow Rate

Location:	Forest Avenu	ie & Allen Ave	enue in Po	ortland, ME			T -
Direction:	NB Forest		Lane:	Through Lan	ies		
Date:	2/1/2006		Time:	4PM-6PM	City:	Portland, ME	
Observers:	Barry Hoyle			Weather	Partly Cloudy	r- 30's	
Grade:	%	_ Lane Width _	ft.	Area:		Other:	

5				
Obs		econds) betwee	en 4th vehicle	and
No.	.7th veh.	8th veh.	9th veh.	10th veh.
1			8.2	
2		7.4		
3		7.9		
4		7.2		
5	4.8			
6			8.7	
7				10.7
8		8.4		
9 .				11.5
10	6.8 .			
. 11		7.9		
12	5.9			
13	5.5			
14		6.7		
15			9.9	
16	5.9			
17			9.8	
18				9.1
19	6.6			
20			7.9	
21			8.5	
22	4.6			
23		6.5		
24		7.2		
25			8.7	
26	6			
27		-		12.3
28				9.7
29			8.3	
30	· .		8.6	

Column Sums

46.1

59.2

78.6

53.3

Mean Saturation Flow Rate

Location:	Forest Avenu	ue & Bishop/St	evens in	Portland, ME			
Direction:	NB Forest		Lane:	Left/Throug	h Lanes		
Date:	1/30/2006		Time:	4PM-6PM	City:	Portland, ME	
Observers:	Barry Hoyle			Weather _	Partly Cloud	y- 30's	
Grade:	%	Lane Width	ft.	Area:		Other:	

Processi Salamban Anna Sa				
Obs	Time (se	econds) betwe	en 4th vehicle	and
No.	7th veh.	8th veh.	9th veh.	10th veh.
1	8.5			
2		8.7		
3	7.1			
4				11.1
5			9.8	
6				12.3
7	7.9			
8			9.9	
. 9	7.9			
10	5.8			
11		8.4		
12	7.2			
13			.9.6	
14			10.4	
15	6.1			
16		8.6		
17		7.9	<u> </u>	
18			10.8	
19			9.7	
20				10.9
21		8.4		
22			9.7	
23			8.5	
24		6.6		
25			9.7	
26				11.6
27		7.6		
28				12
29				10.3
30	6.3			

Column Sums

56.8

56.2

88.1

68.2

Mean Saturation Flow Rate

Lane Utilization Factors

The video recordings were also used to count individual lane volumes, which in turn were used to calculate Lane Utilization Factors (LUFs) for SB Forest thru movements at Allen, NB Forest thru movements at Allen, and WB Allen lefts at Forest (as these groups of lanes have the highest observed lane imbalance of those in the traditional Morrill's Corner area). The LUFs were applied to the aforementioned lane groups for the Existing, No-Build and Build Synchro analyses in the existing conditions. The LUFs were disregarded in the Build with Mitigation analyses, as the existing lane drops are to be eliminated as part of the proposed roadway improvements.

Lane Utilization Factor

		1-1-1-76	A 335	
i a	NE VAN	กกษะ	/ % —	· 📑 🦒
ட	HIL WIN	PU.TT	OI ED	T FAA
04-12-04				LULI
Lane Uti	lization F		0 97 0 9	95 1 ₋ 00

When there is more than one lane in a lane group, the traffic will not use all the lanes equally. The Lane Utilization Factor affects the <u>Saturated Flow Rate</u>. The Lane Utilization Factor is calculated automatically to the following values:

Table 4-1, Lane Utilization Factors

Lane Group Movements	# of Lanes	Lane Utilization Factor
Thru or shared	1	1.00
Thru or shared	2	0.95
Thru or shared	3	0.91
Thru or shared	4+	0.86
Left	1	1.00
Left	2 .	0.97
Left /	3+	0.94
Right	1	1.00
Right	2	0.88
Right	3	0.76

If there is an exclusive turning lane plus a shared turning lane, then all of the lanes will be placed in the through lane group to calculate this factor.

This field can be overridden. If for example there is a busy shopping center entrance, just after this intersection, on the right side, most of the vehicles will be using the right lane and cause a lower lane utilization factor. If the actual per lane volumes are know, the Lane Utilization factor can be calculated per the following example:

$$1LU = \frac{\text{Total App. Vol.}}{(\text{No. of Lanes}) \times} = \frac{(100 + 200)}{(2 \times 200)} = 0.75$$

fLU = Lane Utilization Factor

The fLU is a macroscopic adjustment and will only affect the saturation flow rates. Changes to this value have no impact on the simulated results in SimTraffic. To account for unbalanced flow in SimTraffic, be sure to code in the geometric condition that is causing this, such as a downstream lane taper.

Data Analysis at the intersection of Forest Avenue Allen Avenue in Portland, ME

Data Analysis at the intersection of Forest Avenue & Allen Avenue in Portland, ME

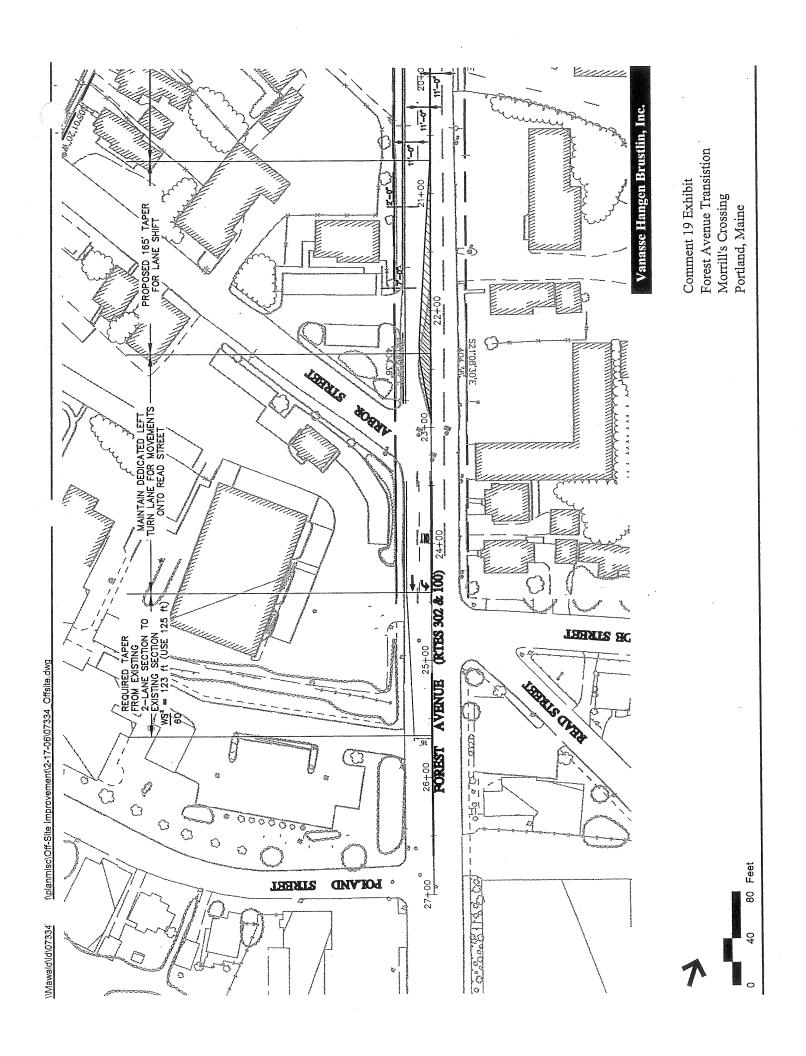
p-m-								-			
Lot	Left	Ĵ	8	හ	ဗ	7	4	9	က	80	42
EB McDonald's Lot	Thru	>	2	2	9	2	ហ	8	တ	7	35
EB N	Right	7	9	2	2	2	Ŋ	6	က	9	35
00)	Right	₹	84	78	91	76	75	66	81	69	653
WB Allen Avenue (Route 100)	Thru	4	2	4	ro	2	5	-	2	0	21
Allen Aven	Left	F	58	35	52	35	42	44	27	40	333
WB	Left	√	51	41	44	26	52	50	45	36	345
2/100)	Left	*	4	12	7	2	က	-	13	4	56
(Route 30)	Thru	†	194	160	203	187	154	200	187	170	1455
NB Forest Avenue (Route 302/100)	Thru	1	156	126	143	103	77	100	88	57	850
NB Fo	Right	*	128	106	114	125	109	145	119	149	995
302)	Right	J	7-	0	က	2	0	1	3	0	10.
ue (Route	Thru	ţ	21	56	52	38	41	33	99	0	167
SB Forest Avenue (Route 302)	Thru	‡	162	139	159	126	164	133	166	170	586
SB	Left	L	94	78	62	80	92	84	72	48	611
	i	Time Period	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	Totals

Totals

Thru lanes could not be separated due to poor night vision on EB starting at 5PM

Comment 19

See attached roadway plans showing the transitions along Forest Avenue inbound from two-lanes down to one-lane.



Comment 23

See attached highway capacity worksheets and summaries for Existing and Build with Mitigation analysis.

Signalized Intersection Capacity Analyses Summary

					and the second s								The state of the s
		20	2004 Existing	d	20	2007 No-Build	Q		2007 Build		2007 Bu	ild with Mir	igation
Location	Time Period	v/c ª	Delay ^b	LOS		Delay	LOS	n/c	Delay	ros	v/c	Delay	LOS
Forest Avenue at	Weekday Evening	0.72	17	В	0,77	19	മ	0.77	50	മ	0.76	19	В
Warren Avenue	Saturday Midday	0.70	5	മ	0.72	17	മ	0.72	23	O	0.77	6	В
Forest Avenue at	Weekday Evening	0,83	37		0,84	39	Ω	0,95	49	Ω	0.97	36	Ω
Allen Avenue	Saturday Midday	0.77	28	O	0,79	59	O	0.87	37	۵	0.88	31	O
Forest Avenue at	Weekday Evening	66'0	43	Ω	1,02	48	Ω	1,07	58	m	0,86	19	Φ
Stevens Ave/Bishop St	Saturday Midday	0.76	17	മ	0.79	19	മ	0.84	21	O	0.71	12	ш
Allen Avenue at	Weekday Evening	0,58	4	A	0,63	5	A	0.69	9	A	0,69	9	A
Plymouth St/Northfield Green Dr	Saturday Midday	0.57	4	Ø	0.63	9	⋖	0.70	7	∢	0.70	0,70 7 A	⋖
Allen Avenue at	Weekday Evening	0.75	40	Ω	0.77	42	Ω	0,86	48	Ω	0.86	39	Ω
Washington Avenue	Saturday Midday	0.67	33	O	0,71	35	O	0.78	41	Δ	0.80	34	ပ
Allen Avenue at	Weekday Evening										0.90	25	O
Site driveway	Saturday Midday		Па			0/8			n/a		0.89	30	ပ
							phints promote the state of the						

volume to capacity ratio average delay per vehicle in seconds level of service not applicable; intersection is not signalized under these conditions

Unsignalized Intersection Capacity Analyses Summary

			-		ing Conditio	n		2007 No-Bui	ld Condition			2007 Build	Condition		2007 B	uild with M	itigation Co	ndition
Location	Movement		Dem ^a	v/c b	Delay °	LOS d	Dem	v/c.	Delay	LOS	Dem	v/c	Delay	LOS	Dem	v/c	Delay	LOS
Forest Avenue at	EB L/T/R	Weekday Evening	56	0.75	98	F	56	0.82	122	F	56	0.91	154	F	56	0.91	154	F
Newton Street/School driveway	100	Saturday Midday	41	0.30	29	D	41	0.32	32	D	41.	0.36	37	Ē	41	0.36	37	F
	WBL/T/R	Weekday Evening	25	0.77	189	F	25	0.87	233	F	30	1.43	493	F	30	1.43	493	
		Saturday Midday	40	0.49	54	F	40	0.53	61	F	50	0.89	141	F	50	0.89	141	F
Forest Avenue at	WB L/R	Weekday Evening	40	28.87	Err	F	40	41.35	Err	F	40	63.91	Err	F	35	0.15	17	C
Morrill Street		Saturday Midday	10	0.76	460	F	10	1.59	1213	F	10	4.25	Err	F	5	0.13	12	В
Forest Avenue at	WB L/T/R	Weekday Evening	285	Err	Err	F	295	Err	Err	F	315	Err	Err	F	0	0.00	0	
Adelaide St/Read St	Francisco	Saturday Midday	158	4.76	Err	F	156	9.22	Err	F	188	40.59	Err	F	0	0.00	0	A
Forest Avenue at	WB L/R	Weekday Evening	80	0.51	48	E	80	0.56	56	F	80	0.60	64	F	400	1.19	144	
Bell Street		Saturday Midday	45	0.62	70	F	45	0.69	85	F	45	0.75	104	F	238	1.16	132	F
Allen Avenue at	WB L/R	Weekday Evening	30	0.38	64	F	30	0.54	110	F	30	1.89	848	F	30	0.23	34	D
Woodlawn Avenue		Saturday Midday	30	0.41	71	F	30	0.54	111	F	30	11.76	Err	F	30	0.60	118	F
Varren Avenue at	NB L/T/R	Weekday Evening	6	0.08	53	F	6	0.09	57	F	6	0.10	61	F	6	0.10	61	· F
licks St/auto body driveway		Saturday Midday	0	0.00	0	Α [0	0.00	0	Α.	0	0.00	0	A	0	0.00	01	A
	SB L/T/R	Weekday Evening	46	0.20	20	C I	46	0.21	21	С	46	0.22	21	C	46	0.22	21	6
		Saturday Midday	45	0.11	14	В	45	0.11	14	В	45	0.11	15	B	45	0.11	15	В
Allen Avenue at	WB L/R	Weekday Evening	20	0.22	36	E	20	0.24	41	E	583	15.49	Err	F #				
ite driveway		Saturday Midday	1	0.03	34	D [1	0.04	38	E	651	16.47	Err	F		z > n	a	

a demand in vehicles per hour for unsignalized intersections; the demand applies to only the most critical street approach or lane group volume-to-capacity ratio for the critical movement delay of critical approach in seconds per vehicle level of service of the critical movement

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; L = Left; T = Through; R = Right

	-	A	4		Î	1	
Lane Group	- EBT	EBR	WBT	NBL	NBT	SBT	
Lane Group Flow (vph)	146	744	20	515	1122	966	
v/c Patio	0.63	0.74	0.08	0.73	0.39	0.72	
Control Delay	54.5	19.0	37.8	31.3	3.3	28.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	- 0.0	
Total Delay	54.5	19.0	37.8	31.3	3.3	28.2	
Queue Length 50th (ft)	79	263	9	253	90	251	
Queue Length 95th (ft)	#185	439	20	425	112	352	
Internal Link Dist (ft)	445		188		584	705	
Tum Bay Length (ft)		200		250			•
Base Capacity (vph)	273	1123	284=	881	2979	1673	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0.	0	. 0	0	- 0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.53	0.66	0.07	0.58	0.38	0.58	
Intersection Summary							
# 95th percentile volume	exceeds	s capaci	ty, queu	e may be	e longer.		

Queue shown is maximum after two cycles.

	ⅉ	>		*	4	*	1	†	/	>	Ţ	
Lane Group	EBL.	EBT	EBR	WBL	WBT	WBR:	/ NBL	NBT	NBR	_ SBL	SBT	343
Lane Group Flow (vph)	18	18	48	235	248	397	26	1263	644	453	1174	
v/c Ratio	0.13	0.13	0.29	0.69	0.72	0.42	0.21	0.80	0.68	1.06	0.81	
Control Delay	49.5	49.2	18.6	51.9	54.1	13.8	51.6	33.5	13.9	99.8	24.6	
Queue Delay	0:0	0.0	0.5	1.2	1.5	0.0	0.0	66.7	1.0	0.0	4.3	
Total Delay	49.5	49.2	19.1	53.1	55.6	13.8	51.6	100.2	14.9	99.8	28.9	
Queue Length 50th (ft)	12	12	0	154	164	112	: 18	498	195	~361	530	
Queue Length 95th (ft)	33	33	31	242	255	194	46	616	286	#528	#750	
Internal Link Dist (ft)		152			327			304			584	
Turn Bay Length (ft)	75		75			150	75		185	250		
Base Capacity (vph).	150	.158	178	371	371	940	162	1582	953	428	1450	
Starvation Cap Reductn	0	0	0	0	0	0	0	477	122	0	0	
Spillback Cap Reductn	0	0	26	35	35	- 0	. 0	. 0	7 O	0	205	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.12	0.11	0.32	0.70	0.74	0.42	0.16	1.14	0.77	1.06	0.94	

Intersection Summary

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

)	Ť	+	لير	7	
Lane Group	: (EBL)	NBT.	SBT	SBR	NEL	
Lane Group Flow (vph)	133	1421	1071	516	579	
v/c Ratio	0.57	0.68	1.11	0.56	0.89	
Control Delay	53.8	17.2	85.9	16.4	60.0	
Queue Delay	1.1	1.5	96.8	4.3	4.8	
Total Delay	55.0	18.7	182.7	20.7	64.9	
Queue Length 50th (ft),	87	. 333	~854	204	203	
Queue Length 95th (ft)	123	432	#1134	316	#302	
Internal Link Dist (ft)	1038	436	304		1207	
Tum Bay Length (ft)		TONE TO SET FOR THE	energyanis errorrentation	Name (400 to 100 to		
Base Capacity (vph) 📴	TANK AND	2084	968	925	654	
Starvation Cap Reductn	0	0	161	324	0	
Spillback Cap Reductn	38	446	0	0	- 41	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.57	0.87	1.33	0.86	0.94	
Intersection Summary						
 Volume exceeds capa 	icity, que	ue is th	eoreticall	y infinite		
Queue shown is maxin	num aftei	r two cy	cles.			
# 95th percentile volume	e exceed	s capac	ity, queu	e may b	e longer.	
Queue shown is maxin	num afte	r two cy	cles.			

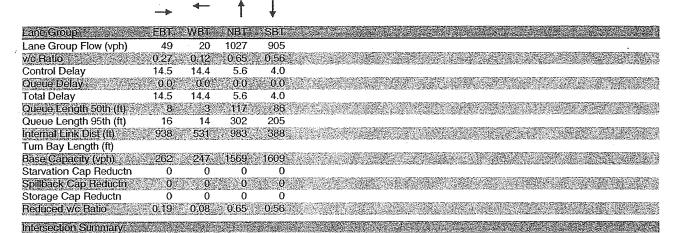
	T	4		T	*	
EBT	EBR	WBF	NBL	NBT	SBT	
151	767	20	531	1178	1012	
0.68	0.74	0.09	0.80	0.43	0.77,	
58.9	19.9	39.1	35.5	3.6	30.0	
0.0	0.0	+0.0	0.0	0.0	0.0	
58.9	19.9	39.1	35.5	3.6	30.0	
-86	294	9	268	91	- 270	
#203	476	21	442	112	367	
445		188		584	705	
	200		250		Control Control Control	
241	1077	240	> 818	2891	1588	
0	0	0	0	0	0	
- 0	0	/ € 0°.	0	0.	. 0	
0	0	0	0	0	0	\$\rm \cdot\rm \cdot\r
0.63	0.71	0.08	0.65	0.41	0.64	
	151 0.68 58.9 0.0 58.9 86 #203 445 241 0 0	151 767 0.68 0.74 58.9 19.9 0.0 0.0 58.9 19.9 86 294 #203 476 445 200 241 1077 0 0	151 767 20 0.68 0.74 0.09 58.9 19.9 39.1 0.0 0.0 0.0 58.9 19.9 39.1 86 294 9 #203 476 21 445 188 200 241 1077 240 0 0 0 0 0	151 767 20 531 0.68 0.74 0.09 0.80 58.9 19.9 39.1 35.5 0.0 0.0 0.0 0.0 58.9 19.9 39.1 35.5 86 294 9 268 #203 476 21 442 445 188 250 241 1077 240 818 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	151 767 20 531 1178 0.68 0.74 0.09 0.80 0.43 58.9 19.9 39.1 35.5 3.6 0.0 0.0 0.0 0.0 0.0 58.9 19.9 39.1 35.5 3.6 86 294 9 268 91 #203 476 21 442 112 445 188 584 200 250 584 241 107.7 240 818 2891 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	151 767 20 531 1178 1012 0.68 0.74 0.09 0.80 0.43 0.77 58.9 19.9 39.1 35.5 3.6 30.0 0.0 0.0 0.0 0.0 0.0 0.0 58.9 19.9 39.1 35.5 3.6 30.0 86 294 9 268 91 270 #203 476 21 442 112 367 445 188 584 705 241 1077 240 818 2891 1588 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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

Queue shown is maximum after two cycles.

۶	-	*	1	4-	*	4	†	-	-	1	
EBL	EBT	EBR	WBL	WBT	WBR	NBL	» NBT	NBR	SBL	SBT	
18	18	48	246	259	418	26	1314	670	483	1215	
0.14	0.13	0.30	0.71	0.75		Cathotic Services	1850 2004 AV	CONTRACTOR OF THE	The state of the s	RESERVATION OF THE PROPERTY OF	
49.8	49.5	18.7	54.0			THE PROPERTY OF A THE PROPERTY OF THE PARTY					
. 0.0	Y THE STATE OF THE STATE OF	ACCOMPANY TO LAKE	ra and the second	Chicago and the same	DESCRIPTION OF THE PROPERTY OF	CHARLES AND	A PART OF THE PROPERTY OF	ENGINEER COLEM	or comments	See and the second second	
49.8	The second secon	and the second s	-			NE OTHER SERVICE AND PARTY.	and the street of the street of the least of the		AND THE PERSON NAMED IN COLUMN TWO IN COLUMN	AND THE PARTY OF THE PARTY OF THE PARTY.	
	Transport to the second	12000 3000	ARCH ZHERRES HALL	of a contract of the party of the contract of	CONTRACTOR SERVICES	63E263592:66554		ere to see the second ser.	THE PERSONAL PROPERTY.	SECTION STATES	
33	manuscrate de la companya della companya della companya della companya de la companya de la companya della comp	31	254	MINERAL MINERA MINERA MINERA MINERA MINERAL MINERAL MINERAL MI	210	46	THE SECOND STREET	307	#573	CONTRACTOR CONTRACTOR	
	152			327			304			584	
			T-40407557451105890	Terest organization (COST)	- was remarked to the						
The second second	CONTRACTOR CONTRACTOR CONTRACTOR	COLUMN TO SERVICE STATE OF THE PARTY OF THE	STATE OF THE PARTY.	ACTOR DESCRIPTION OF THE	Printer and the Country of the Count	STATE TO SHARE FOR	A COLOR OF THE PROPERTY OF THE PERSON		ng Disk Oct 24 and 32	1454	
					-	and the same of the same of the same	CANAL CONTRACTOR MANAGEMENT	THE PROPERTY OF THE PARTY OF TH		U	
0	and the second	The state of the s	1.11.2.2040.331	SERVICE TO LABOUR TO			U.	Part of the part o	经 产品的基础的	Water and Control of the Control	
0		TOTAL TOTAL SECTION AND ADDRESS OF THE PARTY A	-	Towns or the Control of the Control	ONE NAMED INSPECTOR OF TAXABLE	THE THE PARTY OF THE PARTY OF THE	0		and the second second second		
0.12	0.12	0.32	0.76	. 0.80	0.43	U:16	1,26 =	÷ 0.83		0.98	
						1.5					
city: one	ie is the	oreticall	v infinite		66.28		1,000		20 E	1.4	
			Attained section where		eretaldikiyas	sation disease	SPREADWAY STATES AND SPREAD STATES	Cressorona, Saran	SELECTION CONTROL	ALL PROPERTY AND ADMINISTRATION OF THE PERSON	en mente en mente en tress met en manera, et entre brilliër mit de til de til ditte brillie til de til de til d
			e may b	e longer.					307) F 54		
			CONTRACTOR AND	respues serio Maio Serio	Mestalist (1902-61) N	ecratives this service services	Printer and Alberta (BAC).	makan yang yang berhilik mengelebih dalam	AND THE PROPERTY OF THE PARTY O	y www.a.y.evy.2007013.auxi-1-6	n armen paragona par la securita para de majora por directo (COO) della della della della della della della della
	18 0.14 49.8 0.0 49.8 12 33 75 148 0 0.12 city; que	18 18 0.14 0.13 49.8 49.5 -0.0 0.0 49.8 49.5 -12 12 33 33	18 18 48 0.14 0.13 0.30 49.8 49.5 18.7 0.0 0.0 0.6 49.8 49.5 19.3 12 12 0 33 33 31 152 75 75 148 155 176 0 0 0 0 0 28 0 0 0 0.12 0.12 0.32	18 18 48 246 0.14 0.13 0.30 0.71 49.8 49.5 18.7 54.0 0.0 0.0 0.6 2.0 49.8 49.5 19.3 56.0 12 12 0 162 33 33 31 254 152 75 75 148 155 176 364 0 0 0 0 0.12 0.12 0.32 0.76 City; queue is theoretically infinite turn after two cycles. exceeds capacity, queue-may b	18 18 48 246 259 0.14 0.13 0.30 0.71 0.75 49.8 49.5 18.7 54.0 56.5 0.0 0.0 0.6 2.0 2.7 49.8 49.5 19.3 56.0 59.1 12 12 0 162 172 33 33 31 254 #281 152	18 18 48 246 259 418 0.14 0.13 0.30 0.71 0.75 0.43 49.8 49.5 18.7 54.0 56.5 14.2 0.0 0.0 0.6 2.0 2.7 0.0 49.8 49.5 19.3 56.0 59.1 14.2 12 12 0 162 172 125 33 33 31 254 #281 210 152 327 75 75 75 150 148 155 176 364 364 979 0 0 0 0 0 0 0 0 0 0 0 0 0 0 12 0.12 0.32 0.76 0.80 0.43	18 18 48 246 259 418 26 0.14 0.13 0.30 0.71 0.75 0.43 0.21 49.8 49.5 18.7 54.0 56.5 14.2 51.6 70.0 0.0 0.6 2.0 2.7 0.0 0.0 49.8 49.5 19.3 56.0 59.1 14.2 51.6 12 12 0 162 172 125 18 33 33 31 254 #281 210 46 152 327 327 75 150 75 148 155 176 364 364 979 164 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	18	18 18 48 246 259 418 26 1314 670 0.14 0.13 0.30 0.71 0.75 0.43 0.21 0.87 0.73 49.8 49.5 18.7 54.0 56.5 14.2 51.6 39.3 16.5 0.0 0.0 0.6 2.0 2.7 0.0 0.0 117.6 1.6 49.8 49.5 19.3 56.0 59.1 14.2 51.6 156.8 18.1 12 12 0 162 172 125 18 537 208 33 33 31 254 #281 210 46 652 307 152 327 304 75 150 75 185 148 155 176 364 364 379 164 1506 928 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	18	18

	﴾	1	1	لر	<i>*</i>	
Lane Group	EBL	NBT	SBT	≝SBR:	NEL	
Lane Group Flow (vph)	133	1474	1109	538	607	
.v/c Ratio	0.58	0.71	1.15	. 0.58	0.93	
Control Delay	53.9	17.8	101.5	17.0	65.4	
Queue Delay	1-4	3.2	91.4	5.3	12.8	
Total Delay	55.3	21.0	192.9	22.2	78.2	
Queue Length 50th (ft)	. 87	354	~909	217	215	
Queue Length 95th (ft)	123	460	#1191	336	#325	
Internal Link Dist (ft)	1038	436	304		1207	
Turn Bay Length (ft)					manuscon Jaconson de Propinsion	
Basé Capacity (vph)	271	2082	968	924	654	
Starvation Cap Reductn	0	0	148	316	0	
Spillback Cap Reductn	45	490	0	0	50	
Storage Cap Reductn	0	. 0	0	0	0	
Reduced v/c Ratio	0.59	0.93	1.35	0.88	1.00	
Intersection Summary						
 Volume exceeds capa 				y infinite		
Queue shown is maxin	materials a content with restrict the	AT A CONTRACTOR OF THE PARTY OF	CARNOTON CONTRACTOR CONTRACTOR CONTRACTOR	ner en	TATTION GOT THE TOWNS	
# 95th percentile volume	CAST STATE OF THE PARTY AND	DOMESTIC STREET	THE REPORT OF THE PROPERTY OF THE	e may b	e longer.	
Ougus chown ic mavin	num afta	r two cv	rice			



•	ⅉ	-	*	4	1	†	1	1	4	
Lane Group	EBL.	Z EBT	WBL	WBT;	NBE.	NBT:	SBL	∈ SBT :	SBR	
Lane Group Flow (vph)	473	494	140	399	212	951	100	642	347	
v/c Ratio	0.76	0.77	0.57	0.78	0.71	0.79	0.60	0.77	0.40	
Control Delay	54.5	44.1	56.9	48.4	60.5	40.7	68.9	48.1	8.4	
Queue Delay	~ 0.0	0.0	0.0	0.0	0.0	0.0	0.0	. 0.0	0.0	
Total Delay	54.5	44.1	56.9	48.4	60.5	40.7	68.9	48.1	8.4	
Queue Length 50th (ft)	185	347	105	280	158	. 358	77	247	45	
Queue Length 95th (ft)	#280	#559	171	390	259	#496	#159	#350	127	ermykki ja viennik var en
Internal Link Dist (ft)	7.0	854		619		2871		262		
Tum Bay Length (ft)	200		100	A AND ALL OF STREET	100	ensing and distribution because	100	koraneony zawynikanoch	100	
Base Capacity (vph)	684	675	359	654	360	1276	182	919	888	
Starvation Cap Reductn	0	0	0	0	0	0	0	Q	0	
Spillback Cap Reductn	7 7 0	0.	0.	0.) i 0	0	0	0	0.	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.69	0.73	0.39	0.61	0.59	0.75	0.55	0.70	0.39	
Intersection Summary	var er un									
#= 95th percentile volum	e evceed	ls capaci	tv. queri	e may h	e longer	10.6	1		125.73	
Queue shown is maxir				markille.		THE PARTY OF THE	es to observable	er a saaruse ee	to serencondi dell'il	
.,										

	→	1	-	1	T	₩	
Lane Group	EBT	EBR	:WBT	NBL	NBT.	, SBT-	
Lane Group Flow (vph)	151	785	20	546	1234	1076	
v/c Ratio	0.71	0.77	0.09	0.82	0.45	.0.80	
Control Delay	62.2	21.9	39.8	37.5	3.7	31.6	
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	
Total Delay	62.2	21.9	39.8	37.5	3.9	31.6	
Queue Length 50th (ft)	95	355	10	305	97	312	
Queue Length 95th (ft)	#203	503	21	460	120	399	
Internal Link Dist (ff)	445		188:		584	705	
Turn Bay Length (ft)		200		250	o market securior		
Base Capacity (vph)	232	1065	- 231	804	2891	1567	
Starvation Cap Reductn	0	0	0	0	764	0	
Spillback Cap Reductn	0 :	0	0	0	. 0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.65	0.74	. 0.09	0.68	0.58	0.69	
Intersection Summary	70						
# 95th percentile volume	e exceed:	s capaci	ty, queue	e may be	i longer.		

Queue shown is maximum after two cycles.

	ᄼ	>	*	•	4	•	1	Ť	/		1	1	
Movement	2 EBL	EBT.	EBR	WBL	WBT	WBR :	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		ર્સ	7		€\$	- Later Control according to	ኻ	ት ጉ			वी	The state of the s	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900 -	1900	1863	1900	1900	2083	:1900	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	
Total Lost time (s)		3.0	3.0		3.0		3.0	3.0		335	3.0		
Lane Util. Factor		1.00	1.00	TANKETU TANGTADUT	1.00	on description	1.00	0.95	was no professional descriptions	and the second second	0.95	erea energia de la composição do	Social Sections of the Control of th
Fit	1627	1.00	0.85		0.99		1.00	1.00			0.99		
Flt Protected	SAN TERRETORISMONT OF THE SAN TERRETORISMONT OF THE SAN TERRETORISMONT OF THE SAN TERRETORISMONT OF THE SAN TE	0.95	1.00	. 90 E S 9 G E THE CO	0.98	marino so cisara	0.95	1.00		CONTRACTOR OF THE PARTY OF	1.00		
Satd_Flow (prot)	hid (il	1915	1812		1682		1787	3500			3875		18.31
Flt Permitted	e eradamente produc	0.72	1.00	TORREST AND THE STATE OF THE STA	0.87	ea-pest attention of the	0.95	1.00		057720059504	0.93	etrospesiones	
Satd: Flow (perm)		1445	1812		1489		1787	3500	73.5		3624		
Volume (vph)	125	5	675	5	5	1	535	1200	10	10	850	65	
Peak-hour factor, PHF	0.86	0.86		0.55	0.55	CONTRACTOR OF THE PARTY OF THE	0.98	0.98	0.98	0.86	0.86	0.86	And the second of the second
Adj. Flow (vph)	145	6	785 16	9 *** 0**	9 2	2 0	546	1224	10 0	12 0	988	76 0	
RTOR Reduction (vph)		0	A SA SALAMAN AND AND ASSAULT	. 0	ALL AND THE PARTY OF THE PARTY	STATE OF THE PERSON AND ADDRESS OF THE PERSO	- 0	1233	0	0	1071	U	
Lane Group Flow (vph)	0	151 1%	769 1%		18 9%	0 9%	546 1%	1233		1%_	1071	1%	
Heavy Vehicles (%)	5.5 C 1.5 C 1.7 C	Control of the Contro	C. C	Perm	- 9 /o ·	3 /0	Prot	1 /0	STATE AND AND DESCRIPTION	Perm	1.7 0	1 /0	
Tum Type	Perm		pm+ov	Perm	4	SELECTION OF S	210t	2		remi	- 6	47.53 TASSAN	
Protected Phases Permitted Phases	8	8 8	5, 8	4	4		5.9.7 49 24	2	ana ella	6	6		Charlestanics I
Actuated Green, G (s)		11.3	43.3		11.3		32.0	69.2			32.2	Nacit Earl	
Effective Green, g (s)	estanika.	13.3	47.3	90525214550	13.3		34.0	71.2		ar el Burelo	34.2		
Actuated g/C Ratio		0.15	0.52		0.15	92000 DV (1874	0.38	0.79	THE NO.		0.38		
Clearance Time (s)		5.0	5.0	SCHOOL AND A	5.0	AND THE STATE	5.0	5.0		CONTROLLIES.	5.0	verlendensten eine	and a Description of the
Vehicle Extension (s)		2.5	2.5		2.5	3114176	2.5	3.0			3.0		
Lane Grp Cap (vph)		212	1007	CHICAGO STONE AND	219		671	2754		Action and the Control of the Contro	1370	A. C	Company and the Second
v/s Ratio Prot			c0.29				0.31	0.35					
v/s Ratio Perm	alor obelita yeladi 440 kili i ad	0.10	0.14	DELICE STREET, CONTROL	0.01	9. A 4884 - TO 1 18-July 19-V	10-3-2000-4-2000-2000-2000-2000-2000-2000	NORTH SERVICE	PERCENTAGE AND ADDRESS OF THE PERCEN	21/00/2020/www.27.4490.749	c0.30	CONTRACTOR CONTRACTOR OF THE SECTION OF THE	to the product of the production of the producti
v/e Ratio		0.71	0.76		80.0		0.81	0.45			0.78		
Uniform Delay, d1	AND AND A STREET OF STREET OF STREET,	36.8	17.2		33.3		25.4	3.2			24.9		
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00		
Incremental Delay, d2		10.1	3.3		0.1		7.3	0.1			3.0		
Delay (s)		46.8	20.5		33.5		32.7	3.3			27.8		
Level of Service		D	С	MAGRICO CANONICA CANONICA CON CANONICA CON CANONICA CANONICA CANONICA CANONICA CANONICA CANONICA CANONICA CANO	С	V.Postalou The Char	С	Α	principal tipperingens		С	normi folgosan sastrationes, este	PROCESSOR OF THE PROCESSOR OF THE PARTY OF T
Approach Delay (s)		24.8			33.5			12.3		11.25	27.8		
Approach LOS		С			С			В			С		
Intersection Summary													
HCM Average Control De			19.9	Н	ICM Leve	of Sen	vice		В				
HCM Volume to Capacity			0.77										
Actuated Cycle Length (s			90.5		um of los			menty versions the property and the	6.0		SERVICE TENUTS IN	erse mennensessesses er	AND STREET, ST
Intersection Capacity Utili	zation		81.2%	- 10	CU Level	of Servi	ce		D				
Analysis Period (min)	Content of Children and Children	EANUGER WORKSON TO THE	15	economica de la como	Bu Mikathan (Sheki Tarak	n susseriane	and the second	io personale de la company	277 9 750mm2870472	nyttakonsassannaka kathi ti	arwagishos in		
c Critical Lane Group				SWEET.	现设计过程	24 22		a va tari	2-0-2		Section 1	VARIABLE	

	À		*	1	4	•	4	Ť	1	-	1	4	
Movement	.≩ EBE	EBT.	EBR	WBL	WBT.	WBR	NBL	NBT	• NBR	SBL	SBT.	SBR	
Lane Configurations	ሻ	A		ሻ	લે	· 7 ⁴	7	ተተ	7	ሻ	1		
ldeal Flow (vphpl)	1900	1900	1900	2023	2012	- 2261	1900	2496	1900	- 189 7	.1900	1900	
Lane Width	12	12	12	12	12	12	12	12	12	11	11	11	
Total Lost time (s).	3.0	3.0	3.0	3.0	3.0	- 3.0	3.0	3.0	3.0	3.0	3.0		
Lane Util. Factor	1.00	1.00	1.00	*0.99	*0.99	1.00	1.00	*0.79	1.00	1.00	*0.65		,
Fried State Control	1.00	1.00	0.85	1.00	1.00	0.85	≟ 1.00 ⇒	1.00	0.85	1.00	= 1.00 a		
Flt Protected	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Elow (prot)	1805	1900	1615	1884	1883	1884	1805	3944	1599	. 1725	2357.		
Flt Permitted	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	C POPULA POLICA MONTENES POSSONI	
Satd. Flow:(perm)	1805	The state of the state of the state of	1615	1884	1883	1884	1805	3944	1599	1725	2357		
Volume (vph)	15	15	40	595	15	525	25	1205	810	540	970	20	
Peak-hour factor, PHF	0.83	0.83	0.83	0.98	0.98	- 0.98	0.98	0.98	0.98	0.98		-0.98	
Adj. Flow (vph)	18	18	48	607	15	536	26	1230	827	551	990	20	FIXEF SHAPP SANISHED THE RESIDENCE OF THE
RTOR Reduction (vph)	0	. 0	45	0	. 0	77	- 0	0	0.	. 0	AND SECTION SECTIONS	0	
Lane Group Flow (vph)	18	18	3	304	318	459	26	1230	827	55 1	1009	0	
Heavy Vehicles (%)	- 0%	- 0%	0%	1%	other than the control	THE RESIDENCE OF THE PARTY	attoorage and the control	0%	1%	SECTION AND ADDRESS OF THE	1%	- 0%	
Turn Type	Split	THE RESTRICTION OF THE PARTY OF	Prot	Split		pm+ov	Prot		pm+ov	Prot	nation of the second		Sant in the service of the service o
Protected Phases	3	. 3	3	4	4	1	5 ,	2	4	1	6		
Permitted Phases	2 STZNIX (17 1 MINIST	3	**************	905877277274827679	AND AND RECEIVED OF	4	ga sanar ya izawan	2	2	antigraman naka	6	entral designation of the second second	
Actuated Green, G (s)	. 5.4	5.4	5.4	20.2	20.2	47.0	4.2	,39.1	59.3	26.8	61.7		
Effective Green, g (s)	6.9	6.9	6.9	21.7	21.7	50.0	5.7	41.1	62.8	28.3	63.7		
Actuated g/C Ratio	0.06	0.06	0.06	0.20	0.20	.0.45	0.05	0.37	0.57	0.26	0.58		
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.5	4.5	5.0		
Vehicle Extension (s)	140-1	- 3.0	3.0	3.0	3.0	A COURSE OF STATE OF THE STATE	2,0	. 3.0	3.0	Particular and the second	3.0		
Lane Grp Cap (vph)	113	119	101	372	371	908	94	1474	913	444	1365	av tarakravanska saktra	Proposition of the state of the
V/s Ratio Prot	.c0.01	0.01	0.00	0.16	0.17	0.13	0.01	0.31	c0.18	c0.32	0.43		
v/s Ratio Perm						0.11	wanin ka		0.34			Seeraanikanikanik	
V/c Hatio	0.16	Character Concern	0.03	0.82	0.86	0.51		0.83	公司公司公司的 中国公司公司	1.24	0.74		
Uniform Delay, d1	48.8	48.8	48.4	42.3	42.7	21.2	50.2	31.4	21.0	40.8	17.0	Water the English	
Progression Factor	1.00	1,00 0.6	1.00	1.00 13.0	1.00 17.4	1.00 0.2	1.00 0.6	1.00 5.7	1.00 12.3	1.00 126.4	1.00 2.1		
Incremental Delay, d2	0.7 49.5	49.4	0.1 48.5	55.3	60.1			37:1		126.4	2.1 19.2		
Defay (s) Level of Service	49.5 D	49.4 D	46.3 D	,, oo.o∈ E	- 00.1 E	21.4 C	ာပ.၀ D	⇒ວກະເ D	. vo.o. C	107.Z F	: 15.∠ ∍ B		
	U U	48.9			40.9			35.7°			71.4		PERSONAL PROPERTY.
Approach Delay (s) Approach LOS		40.9 D			. 40.9 D			- 33.7 D			617,15 4 65 E	AF 25	
Approach LOS		U			D						L		
Intersection Summary	A MANAGEMENT AND A STATE OF THE					ALANOT MERCHANIST WEEK	197000000000000000000000000000000000000		and the second second				P
HCM Average Control De			48.6	Н	CM Lev	el of Ser	vice	a com Soutebook and a	D	der Whattal, er absorbe som d	- Fritz married (all) distributions	trata nicolaria anno de como de como	
HCM Volume to Capacity			0.95-										
Actuated Cycle Length (s)		· contraction and contraction of the contraction of	110.0			ost time (Eventuration of the	12.0	DESKUN LIVEAMURUSATUR	OF MARIN VEW ADDRESS.	CCCCSSSS or noncomment	Manda Kille Dark Januaria Anale Killer Bankan Pelengan
Intersection Capacity Utili	zation		93.5%	i. IC	U Leve	l of Serv	ce		F				1000
Analysis Period (min)	ONNE ENGINEE VIOLE COM	manufaction and an experience	15	No. State Control of the Control of the Control	sand of the state of the	さんかたのかべちつかべ ・	en e	grandentarioner-b-i	Marting agreement was a secure			Section of the sectio	
c - Critical Lane Group												6.50	

	Þ	•	4	†	↓	لر	1	*	4	
Movement	EBL	EBR 2	ENBL S	NBT -	SBT	SBR S	BR2	NEL	NER -	
Lane Configurations	M			个个	†	7.5		KK4		
Ideal Flow (vphpl)	1900	1900	1900	1917	1693	1900	1900	1900	1900	
Lane Width	12	12	11	11	11	11	11	12	12	entermination of the property of the company of the control of the
Total Lost time (s)	3.0			3.0	3.0	3.0		3.0		
Lane Util. Factor	1.00	AND THE PERSON NAMED IN COLUMN	ACUS INTERNATIONAL SECTION AND AND	0.95	1.00	1.00	CONTRACTOR AND	0.97	A. 64.20 . 30 . 37	NOTES AND
Fd	0.98			1.00	1:00	0.85		1.00		
Flt Protected	0.96	2000 Maria Cara Cara Cara Cara Cara Cara Cara	Service Marriage Transport	1.00	1.00	1.00		0.95		
Satd. Flow (prot)	-X1751			3486	1620	1546		3502		
Flt Permitted	0.96			1.00	1.00	1.00		0.95		
Satd. Flow (perm)	1751			3486	1620	1546		3502	3.0	
Volume (vph)	85	15	0	1450	1070	525	10	580	0	
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.92	0.92	0.92	0.89	0.89	
Adj. Flow (vph)	113	20	0	1526	1163	571	11	652	0	
RTOR Reduction (vph)	0	0	0	0	. 0	1	0	0	9,0	
Lane Group Flow (vph)	133	0	0	1526	1163	581	0	652	0	
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%	1%	0%	0%	
Turn Type						Perm				`
Protected Phases	3			. 2	6			4		
Permitted Phases					6	6		anning can replace to the United States	e da Sa promatago dom signapo.	STATE OF THE PROPERTY OF THE P
Actuated Green, G (s)	12.2			62:0	62.0	62.0°	56	18.0		
Effective Green, g (s)	14.2	personal meson com		64.0	64.0	64.0	enemen maznenter	20.0	SECURIORE METAL NATURAL	
Actuated g/C Platio	0.13			0.60	Automobile to a first of a final	0.60		0.19		
Clearance Time (s)	5.0	CONTROL FOR BUNGE	ewegge der artikolistisken w	5.0	5.0	5.0	TO ACTAL DESCRIPTION	5.0		
Vehicle Extension (s)	2.5			3.0	3.0	3.0	Separate 2	2.5		
Lane Grp Cap (vph)	232	DESKRIJANEN WYCHY YYDWYNAEN YN	MONTH CONTROLLERS AT THE STREET	2081	967	923	national del Village de Per	653	SUL OF ENCIRCUPING	TOK N.N. A. A. M. T. M. A. M.
v/s Ratio Prot	c0.08			0.44	c0.72			c0.19		
v/s Ratio Perm	remean sometiment appear	MANAGEMENTE SOUTH	THE CONTROL OF THE SAME	NETSPETPE LECENSA	JOSEPH CHROSTOPIC	0.38	NEXTERNOSTECAS			
v/c Ratio	≥ 0.57,			NEW MODERNACION FOR NEW YORK	1.20	0.63		1.00		
Uniform Delay, d1	43.7	o in electronic action	NAMES OF STREET	15.5	21.6	13.9		43.6	ECCEPT OF A STATE	
Progression Factor	1.00			1,00	1:00	1.00		1.00		
Incremental Delay, d2	2.8 46.5		252575547 <u>0</u> 2573	2.3	101.2 122.8	1.4 15.3		34.6 78.2		
Delay (s)	or have been accounted to	42:05.400		17.6 B	122.6 F	N. A. P. S. W. S. C. S.	and previous time			
Level of Service	D - 46.5		NEVER AND A	. 17.8	г 86.9	В		78.2		
Approach Delay (s)	46.5 D			- кило В	- 60.9 F			70.2 E		
Approach LOS	U			ь	г					
Intersection Summary	100	a cigar to								
HCM Average Control De	lay		58.2	Н	ICM Leve	el of Servi	ce		Е	
HCM Volume to Capacity			1.07							
Actuated Cycle Length (s		energy active actives	107.2			st time (s)		STREET,	9.0	
Intersection Capacity Utili	zation 👵		95.4%	. j. j(CU Leve	of Servic	e		F.	
Analysis Period (min)			15							
c Critical Lane Group	757 Gale 24			50,000,000	的形数模式		24° 74° 4		o solvan	

	♪	>	*	•	←		4	†	P	-	1	4	
Movement	€ EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT -	NBR	SBL	SBT	SBR	
Lane Configurations		€\$			€\$			44			4		-
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	en characteristics of	3.0	The Control of the Co	COLUMN STREET STREET	3.0	90 JP 37 C 8 4 4 4 4 4 4 4 4 4	The State of the State of State of	3.0	447-7-4F-70-0-74Y-0		3.0	-Sweeters - who will be considerable of the	an and and an an an and an
Lane Util. Factor		1.00			1.00			1.00			1.00		
Frt		0.91			0.91			1.00			1.00		
Fit Protected		0.98			0.98			1.00			1.00		
Satd. Flow (prot)	Central Schedulichen	1700	- OPENION AND A STREET OF STREET	· · · · · · · · · · · · · · · · · · ·	1703	res were now with	e-E0000000000000	1893		Transcau Verbage as in town	1874		
Flt Permitted		0.89			0.94			0.94			0.98		
Satd. Flow (perm)	ON THE PROPERTY OF THE PARTY.	1541	Fa very cuts (where each	THE PARTY COMPANY OF THE PARTY	1627			1782	encia provincia	UNITED AND THE ARMS	1837		
Volume (vph)	. 10	0	20	5		10	40	1000	. 15	15	925	20	
Peak-hour factor, PHF	0.61	0.61	0.61	0.75	0.75	0.75	0.93	0.93	0.93	0.95	0.95	0.95	
Adj. Flow (vph)	16	0.0	33	7	0	13	43	1075	16	16	974	21	
RTOR Reduction (vph)	0	31	0	0 0	12 8	0 3 0	0 	0	0 : 0	0 0	1 1010	0 	
Lane Group Flow (vph)	0% 0%	18 0%	0%	0%	8 0%		0%	1134 0%	0%	1%	1%	1%	
Heavy Vehicles (%)	Perm	U /o	U /o	Perm	U /o	U /o	Perm	U /o	U /o	Perm	1 /0	I /o	
Tum Type Protected Phases	-Penn-	2		rem	2		нени.	1		Perm	1		
Permitted Phases	ം			2	_	12012	20 - 1 2 - 12 - 12 - 12 - 12 - 12 - 12 - 12) (1) (2) (2) (3) (3)		S 41			
Actuated Green, G (s)	ender C el	5.7			5.7	Maria Para	roedal.	76.0		Orașie I. 26	76.0		
Effective Green, g (s)		6.7	15551153		6.7			77.0	200 CT		77.0		70788 NEW Y
Actuated g/C Ratio		0.07		Fightinae)	0.07	y meny daming di	0494781678.2628-2	0.86	TELEGIS SICH		0.86	V2-C) (EX. /X	
Clearance Time (s)		4.0			4.0			4.0			4.0		
Vehicle Extension (s)	\$15.00 \$150 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$2	3.0	en er	antaunt benomenten	3.0	PROCESS AND STREET	Controversa Manager	3.0	PMST-SEE SEE SEE SENTS	PARISTAL SET SE CO	3.0	AND CONTRACTOR OF THE	STATE CONTRACTOR STATES
Lane Grp Cap (vph)	1.135	115			122			1530		6.5	1577	77.75 E. F.	
v/s Ratio Prot	000000000000000000000000000000000000000	ersen viren na tromera art	1:403.0E-50.0E-04	entran neare	enter transportation de sur env	Plant Property at Politics	ALT INTO PERMANENTAL	*****************	CONTRACT BRACKS SEAS	COLOR DAMESTICATION	Area and Telephone and the Control of the Control o	niinen militario (no (no (no (no (no (no (no (no (no (n	######################################
v/s Ratio Perm		c0.01			0.00			c0.64			0.55		
v/c Ratio		0.16			0.07			0.74			0.64		Committee of the Commit
Uniform Delay, d1		38.9			38.6			2.5			2.0		
Progression Factor		1.00	er von Romanne en een z	S TO CONSTRUCTION AND THE CONSTRUCTION AND	1.00		NACH NACHWESTEN	1.00	NO SERVICE DE LA CONTRACTO	TERUT SERVICE THE TRANSPORT	1.00	MATERIAL CHARGES IN CONTRACTOR	T SERVICE STATE OF THE PARTY OF
Incremental Delay, d2		0.7			0.2	Service.		3.3			2.0		
Delay (s)	DATA ANDRESSANCE	39.5	ore succeeded	GCD/WINCONESEN	38.8	en cryptagenous	PORTZRASIYO BUY	5.7	enance carrier du		4.0	G. TASTE FOR HIS TO SERVICE HE SELECT	
Level of Service		D			D.			A			A		
Approach Delay (s)	ARTE ARTERS	39.5 D	ATD-FASSESSES		38.8			5.7		TECHNOLOGIC	4.0		
Approach LOS		U		e Table	L. U.	A American			Altonio de la composición dela composición de la composición dela composición de la		A		
Intersection Summary					400					#7			
HCM Average Control Dela	iy .		6.0	H	CM Leve	l of Sen	ice:		. A ·				
HCM Volume to Capacity r	atio		0.69										- programma (in the control of the c
Actuated Cycle Length (s)			89.7		um of los				6.0				
Intersection Capacity Utiliz	ation	ELFES HAN SELECTION	87.6%	IC	U Level	of Servi	ce	ZOSTOLICZE WOLZZENIA	E	TO CONTROL MORNING THE TAX	TOTAL SISTEMA		
Analysis Period (min)		1.5	15				emaka				SHE W		
c Critical Lane Group													

	ⅉ	-	*	1	-	*	1	1		-	1	1	
Movement	EBL	EBT	EBR	.WBL	WBT:	WBR -	NBL	NBT:	NBR:	SBL/	SBT	SBR.	
Lane Configurations	ሻሻ	ĵ.		4	Þ		7	47		7	ተተ	74	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	representativations of the watering representative for the first
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3,0	3.0	⊬ 3.0 ≥	
Lane Util. Factor	0.97	1.00	MONOR ACTUALISMS MINERAL IN	1.00	1.00		1.00	0.95	KARLET SEE SANSTON	1.00	0.95	1.00	SECTION SECTIO
Fil .	1.00	0.95	antana.	1.00	0.97		1:00	0.99		1.00	1.00	0.85	
Fit Protected	0.95	1.00	WHATE THEORY CARRY	0.95	1.00	NETSYSSE DESYSTE	0.95	1.00	BOD TO THE WORLD	0.95	1.00	1.00	
Said: Flow (prot)	3351	1790		1711	1812	41000.01	1728	3407		1668	3336	1599	
Flt Permitted	0.95	1.00	18500000000	0.95	1.00		0.95 1728	1.00 3407		0.95 1668	1.00 3336	1.00 1599 -	
Satd. Flow (perm)	3351	1790		1711	1812		-	THE PROPERTY OF THE PARTY OF TH	00	A COUNTY OF THE PARTY OF THE PA	Control of Control		
Volume (vph)	475	355	170	125	315	70	235	785	80	95	605 0.95	360 0.95	
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.92	0.92 853		0.95 100	0.95 637	0.95 379	
Adj. Flow (vph)	511	382	183	140 0	354	79 - 0	255 0	853 6	87 0	100	037	379 141	
RTOR Reduction (vph)	0	12	0	articles of the second second	6 427		255	934	0	100	637	238	
Lane Group Flow (vph)	511 1%	553 1%	0 1%	140 2%		0 2%			-	1%	1%		
Heavy Vehicles (%)	ter entitle weeds.	176	1 /0	ACCOUNT AND DESCRIPTION	Z /o - ·	Z/0	SALITON STATE OF THE PROPERTY OF	- I /O	清報1·/0	Prot	THE BOOK OF COLUMN SHOWS	Course Street Street Street Street	
Turn Type	Prot	TENTANIA NI SE		Prot	8		Prot	n n		FIOL	6	pm+ov 7	
Protected Phases Permitted Phases		4		.	0		9.					6	
Actuated Green, G (s)	19.3	39.0		14.8	34.5	.595.65 <u>7</u>	19.4	35.7		94	25.7	45.0	
Effective Green, q (s)	21.3	41.0		16.8	36.5	A CARL	21.4	37.7		11.4	27.7	49.0	
Actuated g/C Ratio	0.18	0.34		0.14	0.31		0.18	0.32	46. A 17	0.10	0.23	0.41	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0	
Lane Grp Cap (vph)	600	617	10182030005-200	242	556	CVLSAL ON	311	1080	7 4.5 25-48 (5.75tg.	160	777	699	NAT! The SET CONSERVE CONT.
Vs Ratio Prot	c0.15	c0.31		0.08	0.24		c0.15	c0.27		0.06	0.19	0.06	
v/s Ratio Perm	60.13	CU.UT	934 (S77.9)		V-67		994.50			F 350 234 71	2944.934	0.09	
v/s Ratio	0.85	0.90		0.58	0.77		0.82	0.86		0.62	0.82	0.34	
Uniform Delay, d1	47.3	36.9	in e salwert	47.7	37.4		46.9	38.2		51.7	43.2	23.9	
Progression Factor	1.00	- 1.00		1.00	1.00	54.7		1.00		1.00	1.00	1.00	
Incremental Delay, d2	11.2	15.5		3.3	6.3	O DESCRIPTION DE POS	15.4	7.4	ENGLISCH ENGLISCHEN	7.4	6.8	0.3	medital desirative desirative de la constantive dela constantive de la constantive d
Delay (s)	58.5	52.4		51.1	43.6		62.3	45.6		59.1	50.0	24.2	
Level of Service	E	D	DE TOURS DE LOS LINES A.	D	D	AND THE PARTY OF T	E	D	See Marie 17, 1779 F. See . W.	E	D	С	par improved programme and described the provided responsibility of a
Approach Delay (s)	110	55.3			45.5			49.1			42:1		
Approach LOS	ACCUS	E	and the state of t	14/40/01/20 14/15/2014	D			D			D		
Intersection Summary													
HCM Average Control De	lay		48.3	Н	CM Leve	l of Ser	vice		D				
HCM Volume to Capacity			0.86										
Actuated Cycle Length (s			118.9		um of los		The same of the sa	egyeste egystere ertik	6.0	*****	SACOTAL SPECIAL COMPANY	entrey year despression was re-	
Intersection Capacity Utili	zation		79.0%	, IC	CU Level	of Serv	ce		, D -				
Analysis Period (min)		SOCIETY CHEROS	15	racerement					1.7.233.4343.13		andre contract		
c : Critical Lane Group									ALISM A				

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Movement	EBL	EBT	EBR	WBL	-WBT	WBR	NBL	NBT.	NBR :	SBL	SBT.	SBR	
Lane Configurations		ર્લ	74		€\$		75	^	****************		र्दी		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1927	1900	1900	2155	1900	
Lane Width	12	14	16	12	12	12	11	11	12	12	11	12	
Total Lost time (s)		3.0	⇒.3.0≒		3.0		3.0	3.0 ′			3.0		
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	erenna i remarkena ere erena	
Fift : 12%		1.00	0.85		0.99		1.00	1.00			0.99		
Flt Protected		0.95	1.00	eren and a second of the secon	0.98	manager and an area.	0.95	1.00			1.00		NACES TO BUILDING THE PROPERTY OF THE
Satd. Flow (prot)		1915	1812		1682		1728	3500			3876		
Flt Permitted	mana destructura della di Salari Salari Salari	0.72	1.00		0.87	CONTRACTOR CARROLIN	0.95	1.00	THE SEPOND PROPERTY OF		0.94	AVSHISHARVEDHOGEN	
Satd. Flow (perm)		1445	-1812		1504	39,000	1728	3500			3626		
Volume (vph)	125	5	675	5	5	1	535	1200	10	10	850	65	
Peak-hour factor, PHF	0.86	. 0.86	0.86	0.55	NEAT-SHEET WAS FREE TO BE	0.55	0.98	- 0.98	the contract of the	0.95	0.95		
Adj. Flow (vph)	145	6	785	9	9	2	546	1224	10	11	895	68	
RTOR Reduction (vph)	0, [0	3	0	2	0	0	1	. 0	0	6	0	
Lane Group Flow (vph)	0	151	782	0	18	0	546	1233	0 1%	0	968 1%	0 1%	
Heavy Vehicles (%)	. 1%	-1%	real two case that is	9%	9%	9%	A THE PROPERTY CONTRACTOR AND ADDRESS.	1 76	170	- Contract C	1.70	170	
Tum Type	Perm		pm+ov	Perm		STATES CONTRACT	Prot		er censevens	Perm			
Protected Phases		8	5		4		5	<u>∠</u>			6		
Permitted Phases	8	8	8	4	4			2 70.3		6	6 24.9		
Actuated Green, G (s)		11.7	53.1		11.7		41.4 42.4	70.3 71.3			25.9		
Effective Green, g (s)	ersterkere	12.7 0.14	55.1 0.61		12.7 0.14		0.47	0.79		/832 0 7=7838	0.29		
Actuated g/C Ratio Clearance Time (s)		4.0	4.0		4.0		4.0	4.0	Association .		4.0	2012/12/E-100E	
Vehicle Extension (s)		2.0	4.0 2.0		2.0		2.0	4.0 2.0		(2019 and 100 st	2.0		
		204	1170		212		814	2773		Total Section	1043	**************************************	Section Control of the Wilder
Lane Grp Cap (vph) v/s Ratio Prot		204 	c0.32		<u> </u>	500000000	0.32	0.35			1043		
v/s Ratio Perm		c0.10	0.12		0.01		120.02	0.99			c0.27		
v/c Ratio		0.74	0.67		0.09		0.67	0.44			0.93		
Uniform Delay, d1		37.1	11.5	i time i si ilika	33.6		18.4	3.0			31.1	MOSTELE POLICIANA	A. T. A. C. A.
Progression Factor		1.00	1.00		1.00		0.55	0.24			1.00		
Incremental Delay, d2	Mark Colors	11.9	1.1		0.1	Z160604417.00	1.0	0.3	Section and configurations.	endertwicker, Co	13.5		MINTER CONTRACTOR
Delay (s)		48.9	12.6		33.7		11.0	1.0			44.6		
Level of Service	aran di magantana	D	В		C	Ly Dogo, est agricultura de actio	В	Α	TENEDO SE DECLINAÇÃO COMENCIA DE COMENCIA	MANUAL DI MANUAL	D	2022/2006/2017/2018 2019/20	-02075425155151515151515151515151515151515151
Approach Delay (s)		18.5			33.7			4.1			44.6		
Approach LOS	erores no crossos esta	В		a Proposition of the Section and	С	MARCON CONTRACTOR	A CONTRACTOR OF THE PARTY OF TH	Α			D	Personal Control of Co	and the second special special second
Intersection Summary													
HCM Average Control De	lay		18.5	Н	CM Leve	of Ser	vice		В				
HCM Volume to Capacity			0.76			- 1							
Actuated Cycle Length (s)		and the second second second	90.0	S	um of los	st time (s)		6.0				
Intersection Capacity Utili			79.6%	: IC	U Level	of Serv	ice		D				
Analysis Period (min)	and the state of t	and the second s	15										
c Critical Lane Group													

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Movement & Vive	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR€	SBL	SBT	SBR	
Lane Configurations	ካ	† .	7.	ች	4	7	7	^	7	ሻ	ŧβ		
Ideal Flow (vphpl)	1900	1900	1900	2181	2169	2339	1900	2147	1900	1900	1900	1900	
Lane Width	11	11	11	11	11	11	11	11	11	11	11	12	man A China Canada Cana
Total Lost time (s)	3.0	3.0	3.0	3.0	- 3.0	-: 3.0	3.0	3.0	3.0	3.0	3.0	20.00	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95		
Fitze	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	-0.85	1.00	1.00		
Flt Protected	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1745	≥1837.:	1561	1884	-1883	1884	1745	3943	1546	1728	3445		
Flt Permitted	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	eriationelessanis	
Satd. Flow (perm)	1745	1837	1561	1884	1883	1884	1745	3943	1546	1728	3445	- 1 March	
Volume (vph)	15	15	40	595	15	525	25	1205	810	540	970	20	
Peak-hour factor, PHF:	0.83	0.83	. 0.83	0.95	0,95		0.97	. 0.97			0.95	0.95	
Adj. Flow (vph)	18	18	48	626	16	553	26	1242	835	568	1021	21	
RTOR Reduction (vph)	÷ 3: 0	0.	35	0	0	. 9		0	57		2	0	And an angle of the second
Lane Group Flow (vph)	18	18	13	313	329	544	26	1242	778	568	1040	0	
Heavy Vehicles (%)	0%:	0%	- 0%	STREET, SECOND STREET,	0%	2%		0%	ACRES CONTRACTOR	1%	1%.	-0%	
Turn Type	Split	MARIONAL PROPERTIES	pt+ov	Split	NATURAL STREET, SALES	pt+ov	Prot	contraction and the	pt+ov	Prot		TO SHEAR TO LINE SHOW	
Protected Phases	3	3	3.5	4	4	4.1	5 5	the way a distribution in	2.4	- 11	6		
Permitted Phases		3	erværævæver			MAKAN PERMANEN		2			6		
Actuated Green; G (s)	0.8	0.8	23.0	16.5	16.5	49.0	18.2	28.2	44.7	28.5	38.5		
Effective Green, g (s)	1.8	1.8	24.0	17.5	17.5	50.0	19.2	29.2	46.7	29.5	39.5		
Actuated g/C Ratio	0.02	0.02	0.27	0.19	0.19	0.56	0.21	0.32	0.52	0,33.	0.44		
Clearance Time (s)	4.0 2.0	4.0		4.0	4.0 2.0	(F): 1347	4.0 2.0	4.0 2.0	PROBONS	4.0	4.0		
Vehicle Extension (s)	Section of the second	2.0	14.0	Company of the Compan	2002-1-000-00-00-00-00-00-00-00-00-00-00-00-	VALUE CONTRACTOR	Contraction or particular services	NAME OF TAXABLE PARTY.	2000		A STATE OF THE PARTY OF THE PAR		
Lane Grp Cap (vph)	35	37	416	366	366	1047	372	1279	802	566	1512		
Vs Ratio Prot	c0.01	· U.U1	0.01	0.17	0.17	0.29	0.01	c0.31	cu.50	ະເບ.ສສູ	0.30		
v/s Ratio Perm	0.54	0.49		0.86	0.90	N. W. C.	0.07	0.97	0.97	400			
v/c Ratio	0.51	A THE CONTRACTOR DESCRIPTION	0.03 24.4	35.0	0.90√ 35.4	0.52 - 12.5	28.3	30.0	21.0	1.00 30.3	0.69 20.3		
Uniform Delay, d1	43.7 1.00	43.6 1.00	1.00	35.0	35.4 1.01	0.95	28.3 0.98	30.0 0.97	1.48	30.3 0.73	20.3 0.71		
Progression Factor Incremental Delay, d2	5.2	3.6	0.0	11.2	16.1	0.1	0.0	0.97 13.6	17.3	29.4	0.71		
Delay (s)	3.2 48.9	3.0 47.3	24.4	46.5	51.7	12.0	27.6	42.6	48.3	29.4 51.5	15.0		
Level of Service	40.3 D	- 47.5 D	C	, 40.5 D	D	, ,∠.∪ B	<i>Z.</i> C	142.0 D	D	D	13.0 B		
Approach Delay (s)		34.6			31.9	D		44.7		D .	27.9		
Approach LOS	1.00	C			C		itely A 1214	D	nia (raile)		C		
• •		_	CONTRACTOR										
Intersection Summary	The state of the s	22, 27, 27	00.0			-1 -1 0		200					
HCM Average Control De			36.0	n Deservation	UN Lev	el of Sen	vice		D	55650000000000000000000000000000000000	erangan selah		
HCM Volume to Capacity			0.97 90.0		MARIE	st time (s			12.0		eranti.		
Actuated Cycle Length (s Intersection Capacity Utili			90.0 93.4%			st time (: Lof Servi			12.0 F				
Analysis Period (min)	zauut	Martin Salah	93.4 /o 15	estracily	o reve	i di Selvi	od .		ing Fig		Alvania A		20.1
c. Critical Lane Group			13 37 38			(72)(65,56) 2							
Continuaritatile offoup	i en mai el					Fare 18th					i deservada d		

	۶	•	4	Ť	1	لر	4	*	4	
Movement	E'EBLS	EBR	NBL.	NBT	SBT	SBR	SBR2	NEL	NER	
Lane Configurations	W			* *	↑ ₽			44		
Ideal Flow (vphpl)		1900	:1900	1917	1900	1900	1900	1900	1900	
Lane Width	12	12	12	11	11	12	12	12	12	A STATE AND A STATE OF A STATE OF A STATE AND A STATE OF A STATE O
Total Lost time (s)	3.0			3.0	3.0			3.0		
Lane Util. Factor	1.00	STREET, STREET, SPECIAL STREET	Separation in the second second	0.95	0.95	(C)		0.97		
Fit (1)	0.98			1.00	.0.95			1.00		
Fit Protected	0.96			1.00	1.00			0.95		
Satd. Flow (prot)	-1751			3486	3282			3502		
Flt Permitted	0.96			1.00	1.00			0.95	All Makes are a resonance on	
Satd. Flow (perm)	1751			3486	3282			3502		
Volume (vph)	85	15	0	1450	1070	525	10	580	0 .	
Peak hour factor, PHE	0.75	0.75	0.95	0.95	0.95	0.95	0,95	0.89	0.89	
Adj. Flow (vph)	113	20	0	1526	1126	553	11	652	0	
RTOR Reduction (vph)	0	0.	0,	0	. 0	0	0	0	0	
Lane Group Flow (vph)	133	0	0	1526	1690	0	0	652	0	
Heavy Vehicles (%)	- 2%	- 2%	1%	1%	1%	1%	1%	0%	0%	
Tum Type		TOTAL STATES				esconores constituento	STEER STORY			
Protected Phases	4.			2	6	arini.		3		
Permitted Phases		en Josephones en profes	ana androne		6	SECURITY SECTION				
Actuated Green, G (s)	CONTRACTOR CONTRACTOR			51.7	51.7		e he hac i	17.7		and the second s
Effective Green, g (s)	9.6	erasasas par		52.7 0.59	52.7 0.59	TOTAL PROPERTY.		18.7 0.21	PART TELEVISION	
Actuated g/C Ratio	0.11	28724537		0.59 4.0	∂ 0.59 ⊹ 4.0			U-∠1 4.0		
Clearance Time (s)	4.0 2.0		esta a pares		2.0	3549834B939		2.0		
Vehicle Extension (s)	VEHICLES SETTING CONTRACTOR	N 100 A 10		A KO SACOLITY OF SHALL	1922			728		
Lane Grp Cap (vph)	187			2041				728 C0.19		
v/s Ratio Prot	c0.08) Section 1		U.44	CU.O I		Still verse	COLIA		
v/s Ratio Perm v/c Ratio	0.71			0.75	0.88	647272300	LENTEN CAR	0.90		
Uniform Delay, d1	38.9			13.7	15.9			34.7		
Progression Factor	1.00	S (2 15 15 15 15 15 15 15 15 15 15 15 15 15		1.00	0.31			1.00		
Incremental Delay, d2	10.1			2.6	3.3			13.3		
Delay (s)	49.0		Treat Lake	16.3	8.2			48.0		
Level of Service	D	aen seksterk	aran tana	B	A			D		
Approach Delay (s)	49.0			16.3	8.2	. I. S. (4 2 5)		48.0		
Approach LOS	D		Leaven auditor	В	Α	1467MAERTANATIONA	parantari dena-era-	D	BELCHNISH	
Intersection Summary										
HCM Average Control De	lay		19.1	Н	CM Leve	el of Ser	vice		В	
HCM Volume to Capacity	ratio		.0.86							
Actuated Cycle Length (s)	and the second s	90.0	S	um of lo	st time (s)		9.0	
Intersection Capacity Utili Analysis Period (min)	zation		78.9% 15	(0	CU Level	of Servi	ce.		D	
c Critical Lane Group										
being received interior enterior of the E-DV-II	P10003.2713.103.403.000		UNIONE WARRANCE	n an and the control of the	a and the rest of the last	carrier and the Market and Colored	CONTRACTOR CONTRACTOR	CONTRACTOR CANADAS AND	(militarios especialistics and selection)	AS AND THE PROPERTY OF A STREET OF STREET STREET OF STREET STREET OF STREET OF STREET STREET, S

	<i>></i>	>	*	*	4	*	4	Ť	1	1	↓	4	
Movement = 2	EBL)	EBT	EBR	WBL	WBT	WBR :	NBL	(NBT	NBR:	SBL	SBT	SBR∵,	
Lane Configurations		4			€₽			₩	-	and the second of the second o	4	CHILDRED THE PAINTING OF THE ANGLE	our tentro de la la la companya de la companya del companya de la companya de la companya del companya de la co
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900	1900.		×1900	Geographic Control
Total Lost time (s)		3.0		-amage-cores managers	3.0	STONE STREET STONE STREET	and the state of the state of the	3.0		TO THE MENT OF THE	3.0	HERETZERVETISCH	
Lane Util. Factor		1.00			1,00			1.00			1.00	San di	
Frt	e serve av erense	0.91	· · · · · · · · · · · · · · · · · · ·	ye aprovidence spring	0.91	ingeneralisme	referensieler (von	1.00	andre venera		1.00	FIGURES ZASIONOMIA	
Fit Protected		0.98			0.98			1,00			1.00		
Satd. Flow (prot)	eran e-greenerez	1700	THE PERSON NAMED IN	ISA MENGANTAN	1703		opverative state	1893 0. 9 4			1874 0.98		
Fit Permitted	1.65	0.89			0.94	a on vision		1782		SECTION AND AND ADDRESS.	1837		
Satd. Flow (perm)	* 0 * 0 * 0 * 0 * 0 * 0 * 0 * 0 * 0 * 0	1541	Total tree Loans	nom a conquesto	1627	and the		1000	15	15	925	20	area area area area area area area area
Volume (vph)	10	0	20	5	0	10	40		0.93	0.95	925 0.95	∪ 0.95	
Peak-hour factor, PHF	0.61	0.61	0.61	0.75	0.75	0.75 13	0.93 - 43	0.93 1075	0.93 16	0.95 - 16	974	0.93	
Adj. Flow (vph)	16	0	. 33	7	0		43 0	୍ୟ ୯ /୨ 0	, 10 0	10 0	1	<i>د.</i> 0	
RTOR Reduction (vph)	0	31 18	0 0	0	12 8 -	0	0	1134	0	0	1010	0	
Lane Group Flow (vph)	0.	18 0%	- 0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	
Heavy Vehicles (%)	0%	0%	U 7o	Perm	U /o		Perm	0 /8	0 /0	Perm	1,70	1,70	
The state of the s	Pem			renn	. 2		remi	1		I CILII	1		
Protected Phases	CONTRACTOR	2			2 Markaterik	10000	7			1			
Permitted Phases	4	5.7			5.7	SEASON A		76.0			76.0		
Actuated Green, G (s)		5.7 - 86.7			5.7 6.7		2 . Z 10 . T. S.	77.0			77.0		
Effective Green, g (s)		0.07		kananan	0.07			0.86		Allen ind	0.86		ia interesta de la composición
Actuated g/C Ratio Clearance Time (s)		4.0			4.0			4.0			4.0		
Vehicle Extension (s)		3.0			3.0	Element III.	1992/14/25	3.0	Servicia da Ma		3.0	a a chine baka basa na m	
		115		Total Tax	122		25.04	1530	34.20		1577		
Lane Grp Cap (vph) v/s Ratio Prot	ALK IT	119									DOM: TOWN	Renteralismos de la como	A CONTROL OF CLASSIC STREET, A
v/s Ratio Perm		c0.01	32640		0.00			c0.64			0.55		
v/c Ratio		0.16	Villadis di Statis		0.07			0.74		are established	0.64		
Uniform Delay, d1		38.9			38.6			2.5			2.0		
Progression Factor		1.00			1.00	ida i provincia de la composición dela composición dela composición de la composición dela composición dela composición de la composición dela composición de la composición dela composición dela composición dela composición dela composición dela composición dela c	553 (James 1950)	1.00	erengen alam en h		1.00	PRODUCE THE THORY CONTO	TECHNOLOGICAL STREET,
Incremental Delay, d2		0.7			0.2			3.3			- 2.0		
Delay (s)	44.031.78504754	39.5		ation with the	38.8		BARTHER TOWNS OF	5.7	Alcoholise version in Alberta	President Control Control	4.0	and which the common comments of the first of the second	CATAMAN STATES AND
Level of Service		D			D			A			A		
Approach Delay (s)	COLUMBIA DI SANTA	39.5		in acide contraction	38.8	# 21 Production of the Partie of the Parties of the	MARKET AND LOSS OF THE PARTY AND	5.7	and you wanted	Ogo Alice Manage Company	4.0		
Approach LOS		D			D.			A			A		
Intersection Summary										41			
HCM Average Control Dela	1200		6.0	- L	ICM Lev	ol of Seni	iice		A				
HCM Volume to Capacity ra			0.69				atendas	THE RESERVE OF THE			els he sealed	one cathless and still	Anna Na Anna Canna Canna Canna
Actuated Cycle Length (s)	410 1101		89.7	/ · · · · ·	Sum of lo	st time (s)		-6.0				
Intersection Capacity Utiliza	ation		87.6%		CU Level			render de Editor	E		oran material de		merco composito del como considera
Analysis Period (min)		C42,54572.4	37.076 37.15										
Critical Lang Group				PORTES PROGRAM					Markita e accesso		ana seribea mendida	and the second	March Company of the

	À		*	1	4		4	1		-	+	4	
Movement 200	EBL	₹ EBT :	EBR	WBL	WBT	WBR	NBL	NBT	NBR :	SBL	∘SBT÷	SBR	
Lane Configurations	ሻሻ	λ		7	ĵ,		آبار	↑ ĵ>		1/4	^	7	
Ideal Flow (vphpl)	1900 -		1900	1900	1900	1900	1900 -	1900	1900	1900	1900 .	1900 :	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00		1.00	1.00	arternas, especial de adapticación.	1.00	0.95	elikeringa kar	1.00	0.95	1.00	anagang ang panggang ang a
Fit (1)	1.00	0.95		1.00	0.97		= 1.00	0.99		1.00	1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	ETREMONTAL CONTRACT	0.95	1.00	1.00	erennen ernnen ernnen.
Satd. Flow (prot)	3351	1790		1711	1812		1728	3407		1668	3336	1599	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	and the contract of the contra	0.95	1.00	1.00	
Satd. Flow (perm)	3351	1790		1711	-1812		1728	3407	1,500	1668	3336		
Volume (vph)	475	355	170	125	315	70	235	785	80	95	605	360	
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	- 0.89	0.89	0.92	0.92	CAN PROPERTY OF PARTY	0.95	0.95	0.95	
Adj. Flow (vph)	511	382	183	140	354	79	255	853	87	100	637	379	AND A TOTAL PROPERTY OF THE SECTION
RTOR Reduction (vph)	$\cdot \cdot \cdot 0$	- 22	, 0	0	- 10	0	0	9	0	0.0	0	104	
Lane Group Flow (vph)	511	543	0	140	423	0	255	931	0	100	637	275	PLANTED WAS ASSESSED AS A STATE OF THE PARTY
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1.1%	Committee of Committee	. 1%	. 1%	
Turn Type	Prot			Prot			Prot			Prot		pm+ov	
Protected Phases	7.	4.		- 3	8		5	2		1	. 6	7	A CONTRACTOR OF THE CONTRACTOR
Permitted Phases	27.00.2.2.2.00.2.2.00.00.00.00							and the second s		wild a service of the	uranes in-rener Artill	6	er per terreture till eller klade och det er v. v. den
Actuated Green, G (s)	12.0	23.9		7.0	18.9		12.0	24.9		4.8	17.7	29.7	
Effective Green, g (s)	14.0	25.9		9.0	20.9		14.0	26.9	THE PARTY AND POST OF THE	6.8	19.7	33.7	
Actuated g/C Ratio	0.17	0.32		0.11	0.26		0.17	0.33		80.0	0,24	0,42	
Clearance Time (s)	5.0	5.0		5.0	5.0	newswarksministerior	5.0	5.0	ongan-no meneria	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		- 3.0	3.0		CONTRACTOR CONTRACTOR	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	582	575		191	470		300	1137	mental and activity of a constitution	141	815	728	NATURAL PROPERTY OF THE PROPER
v/s Ratio Prot	c0.15	c0.30		0.08	0.23		c0:15	c0.27		0.06	0.19	. 0.07	100000000000000000000000000000000000000
v/s Ratio Perm								· versouseur medication (17	TET A MATTERIAN TO THE TOTAL	CONTRACTOR TO THE TOTAL	THE STATE OF THE STATE OF	0.11	CHRESTATION ASSESSMENT STREET STREET
v/c Platio	0.88	0.94		0.73	0.90		0.85	0.82		- 0.71	0.78	0.38	
Uniform Delay, d1	32.5	26.7		34.6	28.8	ALAN BURGUS BURANSHIRT	32.3	24.6		35.9	28.4	16.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1,00		4.00	. 1.00	- 1.00	
Incremental Delay, d2	14.0	24.4	muano melandaggio (mini ili)	13.5	19.6	argue-terretaine operations	19.9	4.7	ACCEPTATION NO.	15.1	4.9	0.3	
Delay (s)	46.5	51.1		48.2	48.5		52.2	29.3		51.0	33.3	16.5	
Level of Service	D	D	contrate the contrate of the c	D	D	280.2003.000.000.000.000.000	D	С		D	C	В	TOO THE TOO TOO
Approach Delay (s)		48.9			48.4			34.2			29.2		
Approach LOS		D			D			С			С		
Intersection Summary	3.0												
HCM Average Control De	lay		38.8	H	ICM Leve	el of Ser	vice		D		A SOURCE OF THE PARTY OF THE PARTY.		TANANA MATAMATANA TANANA TANANA TANANA
HCM Volume to Capacity	ratio		0.86	4,500									
Actuated Cycle Length (s			80.6		ium of lo			estant appropriation and an armount	6.0	managa galagan ana ana ana	SOCKETTE WORK W. L.	e Sangaran sangaran kanan m	ONE OF STREET, WAS A STREET
Intersection Capacity Utili	zation 🤋		79.0%	. [[CU Level	of Serv	ice 🐰		/ / D				
Analysis Period (min)			15			A MORE COLLEGE AND OPPOSE	m. v schroe propagation versi	nich dieser verst der schie	2077/55/02319:75/02	ngenggaga-gray/tikaka-	EL DINTERSON ME		
c Critical Lane Group		364	1	10.000									

	ⅉ	>	*	*	4	*		1	1		+	4	
Movement	« EBL	EBT	EBR	WBL	WBT⊴	WBR	ENBL	NBT	NBR	≓SBL (SBT	SBR	
Lane Configurations		43			र्स	74		र्क		7	Þ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	of the Land State of the Land St.	1900		1900		1900	1900	
Lane Width	12	12	12	12	12	14	12	11	12	11	11	12	ng senggagang nanang protoka
Total Lost time (s)		∜3.0 ∤			3.0	3.0		3.0		3.0	3.0		
Lane Util. Factor		1.00		to divine mode his control	1.00	1.00	COLUMN TO CONTRACT	0.95	THEMSTRASSES	1.00	1.00		
Fit 1882 East 1889		0.93			1.00	0.85		0.96		1,00	(1.00)		
Flt Protected	nonte esta a solve such esta esta esta esta esta esta esta esta	0.98		HULLIAN ON THE OWNER	0.95	1.00		1.00	T-CATALOGE ASSESSED	0.95	1.00		the summore the second
Satd. Flow (prot)		1729			1805	1723		3332		1745	1836		
Flt Permitted	enter en	0.91	GEVANNANDERS		0.76	1.00	52000000000000000000000000000000000000	0.95		0.09 165	1.00 1836		
Satd: Flow (perm)		1610			-1435	1723		3181	440	COLLEGE TRANSPORTED TO THE PARTY OF THE PART	A CONTRACTOR OF THE PARTY OF TH	0	
Volume (vph)	2	0	2	393	0	190	2	955	410	215	745 - 0.95	2 0.95	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	Charles Committee Committee	0.95	0.97	0.97	0.97	0.95	A COMMENT HALLOWS TH	COST CONTRACTOR CONTRACTOR	
Adj. Flow (vph)	2	0	2	414	0 0	200 29	2	985 51	423 0	226 0	784 - 0	2	
RTOR Reduction (vph)	0	1 1	0	0	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	171	0 0	1359	0	226	786	0	
Lane Group Flow (vph)	0 0%	3 0%	0 0%	0 0%	414 0%		_	1339 20%	0%	0%	0%	0%	
Heavy Vehicles (%)	Methodological sovers	U%=	U 70	And a service of the last of the	U/0	Contraction of the second	Perm	- U/O	STATE STATE STATE OF	CONTROL CONTROL TO THE		0.70	
Turn Type	Perm		DESCRIPTION OF THE PERSON	Perm	4	pm+ov	Penn	- n	CO. TAME 1 100	pm+pt	6		
Protected Phases Permitted Phases	4	4		4	1130.49	4	2	<u></u>		6		eran i va	
Actuated Green, G (s)	4	28.2		4	28.2	37.5	<u>_</u>	40.5	E TAKEN	53.8	53.8		
Effective Green, g (s)		29.2 29.2			29.2	39.5		41.5	e e e e e e e e e e e	54.8	54.8	DESTRUCTION OF THE PROPERTY.	ACMO-APACADACTERATOR
Actuated g/C Ratio		0.32			0.32	03.0	18 19 17 17 17	0.46		0.61	0.61		
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	Principles of the same	en et en
Vehicle Extension (s)		3.0			3.0			3.0	NAME OF	3.0	3.0		
Lane Grp Cap (vph)	Charles Ideolog	522	KANADESPARH	Section of the section of the	466	814		1467	A COLOR OF THE PARTY OF THE PAR	281	1118	1 - 10 - 01 - 01 - 01 - 01 - 01 - 01 -	
v/s Ratio Prot						0.02				c0.09	0.43	of the second	
v/s Ratio Perm		0.00		Paragraph Societies	c0.29	0.08	ATTACK AND A STANFARM	c0.43	NOTE OF A CONTRACTOR	0.40	CONTRACTOR DE LA COMP	AUXILIANIST MINISTER	Balancian in Transcalation of the New York
v/c Ratio		0.01			0.89	0.21		0.93		0.80	0.70		
Uniform Delay, d1		20.6	SEALINE SALES AND AREAS.	PATCH CHICATOR MINISTER	28.9	15.6	CARRIED CONTRACTOR SALA	22.8		22.5	12.0		
Progression Factor		1.00			1.00	1.00		0.91		1.00	1.00		
Incremental Delay, d2	CELEBRETORISMAN	0.0	NO ACOMO PLANACION OR STO		18.2	0.1		4.1		15.3	2.0		
Delay (s)		20.6			47.1	15.7		24.9		37.8	14.1		
Level of Service		С			D	В	OPT PARK TERMINAL VICTOR	С	ELICET ENGRAN WHEN	D	В	CONTRACTOR CONTRACTOR	STATE OF THE PARTY
Approach Délay (s)		20.6	0.505		.36.9			24.9			19.4		
Approach LOS		С			D			С			В		
Intersection Summary													
HCM Average Control De			25.4	+	ICM Lev	el of Ser	vice	ACCRECATION TO THE PARTY.	C		SERENCE PER PROPERTY.	erennen senneneren	
HCM Volume to Capacity			0.90	10.00					Sept. 12.				
Actuated Cycle Length (s			90.0			ost time (9.0	ACT AND CHARLES	MANAGES STORT		in in the second second second
Intersection Capacity Util	ization	1	17.3%) li	SU Leve	I of Serv	ice		Н	Short			
Analysis Period (min)	idanas englaban asa ya m	energaansen mees	15	PROBLET PROFES		NAUTONIA STATE		ranga garangan a	errerangere	rvers vetere			national Property of the Comment
c Critical Lane Group										100			达为国际

	*	1	†	1	1	1							
Movement	- WBL	.WBR.	NBT	NBR	SBL	SBTZ							
Lane Configurations	N _p #		† }			र्स							
Sign Control	Stop		Free			Free							
Grade	0%		0%	Managara magasara 140 mata	E light-conscioned and way	0%	an Tanang Salah Perdagan Salah S	Propriessor of Preside	nany kitokak asimbolara kaon di	r waterier in a constitution of the constitution		No. of the State of the Control of the State of the Control of the State of the Control of the State of the S	******
Volume (veh/h)	5	35	1315	10	15	1030							
Peak Hour Factor	0.68	0.68	0.92	0.92	0.93	0.93		arratica arratica	SENSON THURSDAY	VINEDERS I VANDO APAR	ing a state of the	2777 (Die Strigke Control (Sept.)	Tark
Hourly flow rate (vph)	7.	51	1429	11	, 3.16	1108							
Pedestrians		KUTSUKTUKS	20200-1915537		nostanelia:					NACESTA NACES	SERVE ESCENSIO		S
Lane Width (ft) Walking Speed (ft/s)		COUNTY IA		1,000									
Percent Blockage								College Health					1882
Right turn flare (veh)													H
Median type	None												
Median storage veh)		(2000) BANK (1901) BA			too in the lot of the			NEGOS COLLUS COMES		egen (valendelen)	MADELLINE SERVERS		200
Upstream signal (ft)						516							
pX, platoon unblocked	0.42		ESSENCE OF THE SECOND OF THE S	a 04 20000000	A) X (41, 45, 64, 71, 236,		CONTRACTOR DESCRIPTION		A SOUTHWAND THE PARTY OF	0010072/Jackets	OST THE SE VALUE AND ASSESSED.	COLUMN CONTRACTOR CONT	and the same
vC; conflicting volume	2575	:720			1440								
vC1, stage 1 conf vol													
vC2, stage 2 conf vol 🔠													
vCu, unblocked vol	4731	720	Poleti vitti etta Galassa	0.500	1440						energenera		1.09490993
(C, single (s)	6.8	6.9			4.1				44.1				
tC, 2 stage (s)				SS MAN STORE	-00								2000 B
1F.(s)(5)	3.5 0	3.3 86			2.2 97							18.55281.00	
p0 queue free % cM capacity (veh/h)	0	375	Carrier Service	7.55 F. 1	97 467					0.85500.5557£			
V 2000 100 100 100 100 100 100 100 100 10	11 (14 1 4)	AND ASSESSMENT OF THE PARTY OF			40/			iratelen.		Yaran da			
Direction, Lane #	WB 1	NB 1	√NB 2 ::	SB 1								200	
Volume Total	- 59	953	487	1124			100		12				驑
Volume Left	7	0	0	16	757912075437181			pozne najveni povene	COLUMN PROPERTY AND PERSONS	CONTRACTOR OF THE CONTRACTOR O	SVERY QUINTER STAR	eneratamen kansat stand	namer
Volume Right	51	0	11	0									
cSH	2	1700	1700 0.29	467						Selector a Medical Val	Month Control	K. (* 10 m) 10 m 12 m	(2003)
Volume to Capacity	28.87	. U.56 0	0.29	0.03 3									
Queue Length 95th (ft) Control Delay (s)	Err	- 0.0	0.0	- 1.5				E CONTROL OF					
Lane LOS	F		V.U.	A	alentarens					400 (MAN)			
Approach Delay (s)		0.0		15									经票
Approach LOS	F				SALAY CAYS				ening for sality and				alen .
p													

Intersection Summary		
Average Delay	224.9	
Intersection Capacity Utiliza	tion 76.2% ICU L	evel of Service D*
Analysis Period (mín)	15	

	•	•	1	<i>></i>	1	-					
Movement and Establish	WBL	WBR	NBT	NBR :	SBL	SBT					
Lane Configurations	Y		₽		ሻ	†			-		
Sign Control:	Stop		Free			Free					
Grade	0%		0%	TV: SUI SETTIFFE TO SET		0%					
Volume (veh/h)	. 35	45	850	35	20	725					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		THE CONTRACTOR SECTIONS		STREET VALUE TUNKTUR	- ST Fave s DEM #4214 sectors are
Hourly flow rate (vph)	36	47	885	36	21	755					
Pedestrians			THE SHIP SHIPTERS			CASSON SANCTON		OSCILIO SIGNIFICATION DE	PERSONAL TERROLOGISTA DE LA CASA	nijerogenies sandens	
Lane Width (ft)			log tilet		iden.	di Salian					
Walking Speed (ft/s)		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	en e					CHARACTER CONTRACTOR			25/300000000000000000000
Percent Blockage											
Right turn flare (veh)	None	estronoconi									
Median type Median storage veh)	None										
Upstream signal (ft)	F,3485,9400 B									SATE PARKS	
pX, platoon unblocked									224B-07-05-01		
vC, conflicting volume	1701	an <i>a</i>			022						
vC1, stage 1 conf vol		- SOUTH									
vC2, stage 2 conf vol							No.				
vCu, unblocked vol	1701	904		Degradien in	922	en e					
tC, single (s)	6.4	6.2		Leger Control	4.1						
tC, 2 stage (s)	SC NAMED IN CONTROL	Control of the State of the Sta	o e Tomorius (Interna-	blane i kolesto del mancadori		ABROOM VEHICUS BEACH	janita makaba saling langak (1966) d	DE MEDICALES DA TRUMPS DE LA C	TO ENGLASE SECTION OF STREET		en u singspolarenningen om
IF (s)	3.5	3.3			2.2						
p0 queue free %	63	86	Patricia Carabbar No or No. 2008.	ZNI at LC Down and at Persons	97	E. C. American, vo., Eli- al Grace Visualiyat	Company of the Compan	ALT THE MINISTER PROPERTY.	Participal production of the last	WARRIOTANCE DESCRIPTION	Sealer of the sealer of the management of the sealer of th
cM capacity (veh/h)	98	- 336			741						
Direction Lane #	WBT	NB 1	SB1	SB 2							
Volume Total	- 83	-922	21	755							
Volume Left	36	0	21	0		NESS MAN STATISTICS			nter a territorio di la Persono di		
Volume Right	47	36	. 0	0							
cSH	163	1700	741	1700	2017/05/2 2017/05/2017/19/2	LINES AND HAVE A CENTRAL POR	Control Contro	PROPRIES PRESENTATION OF TAXABLE	NO OR MENTAL PROPERTY OF THE PERSON NAMED IN	AMARIA PO SIAN PINCENTO ANGLINA	ant Victoria de la Calantinea de Vic abilia
Volume to Capacity	0.51	0.54	0.03	0.44							
Queue Length 95th (ft)	63	0	2	0			and the second s	LEADING PROCESSION OF THE PARTY	The state of the s	THE PERSON NAMED OF THE PERSON	To the contract the track of the contract of t
Control Delay (s)	48.1	0.0	10.0	0.0							
Lane LOS	E		В								
Approach Delay (s)	A CONTRACTOR OF THE PARTY OF TH	0.0	0.3								
Approach LOS	Ε										
Intersection Summary											
Average Delay			2.4							ATTENDED AND ADDRESS	
Intersection Capacity Util	ization		58.2%	i le	U Level	of Service	e	В			
Analysis Period (min)	Ann Andrews Constitution of the Constitution o	en market en	15	an a Pallace i Substâli	error victori, desercitori dillicito	en anne de la bassación de la colonia de	- Andrews Company of the Company of	ermontanticus resultinos		erangetarbiligi in telebasis	on - recommendation and the second second second

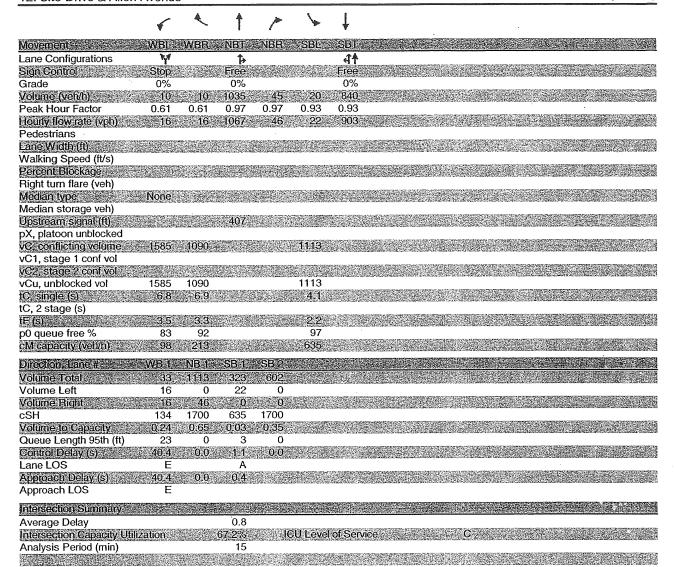
	۶	->	*	1	4	1	4	Ť	~	1	de la constant de la	4	
Movement 1	EBL	EBT	EBR :	:WBL -	.WBT €	WBR	NBL	NBT	NBR.	SBL.	. SBT	#SBR	
Lane Configurations		4			4			€}			. ♠		
Sign Control		Free			Free			Stop			Stop		
Grade .		0%			0%			0%	NAV Proposition and the Proposition		0%		
Volume (veh/h)	55	760	0	- 1	570	5 ·	5	. 0	1.5	5	6 to 6 to 75 to 200 and 200	€ 40 -	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.88	0.88	0.88	0.75	0.75	0.75	n nick novem kindered at mineral servenen ill fill for
Hourly flow rate (vph)	59	817	. 0	1	626	- 5	6	4 0	100 1 00	7.	1.	_ : 53 :	
Pedestrians	-u mato mento commencato			enticipanteiro Salvinianistis	unce more entre	reneron et arrantation or				STEPPE STATEMENTS	THE THE TAXABLE PARTY	Turis dinks (during series no	
Lane Width (ft)													
Walking Speed (ft/s)		THE COMMENTS OF SOME		TOTAL COLUMN COMPANY OF THE COLUMN TO	munus esteromente	CONTROL STORES	er remented av	erantematika			Carares Partiro	TANKTAN SANTAN SANTAN SAN	
Percent Blockage		11.6											
Right turn flare (veh)	THE STREET STREET			ancon unum mare en	BOOTEN STEELE	· NITS OF PERSONS SERVE				inderiamente de la companie de la c		HOMESTER STATES OF	
Median type								None			None		
Median storage veh)			FATONIE ASERS	THE THIN TESTS		THE NAME OF STREET				HEILMONING	Karaden Denerad	NATURE AND PARTIES.	
Upstream signal (ft)					869								
pX, platoon unblocked					SOM WHEN THE SERVE		11 A A A A A A A	4F76	64.7	ELF FOR	:4623S	3026630	
	632			817			/ 16ZT	1570	817	1568	1501	629	
vC1, stage 1 conf vol										945674246933	FRANKSKA SE		
vC2, stage 2 conf vol	632			817			1621	1570	817	1568	1567	629	
vCu, unblocked vol	032 41			41	THE REPORT		7.1				6.5	6.2	
tC, singlé (s) tC, 2 stage (s)	4.1			4.1			as / els	. 0.0			0.0	υ.Δ	
	2.2			- 200	HTEL WAS		3.5	4.0	3.3	3.5	4.0	3.3	
iF (s) p0 queue free %	94	100		100			92	100	100	92	99	3.5 89	
cM capacity (veb/h)	951		200000000000000000000000000000000000000	802			70	105	379	- 86	105	486	
THE RESERVE THE PARTY OF THE PA	NO SOLIDORAN		merena.	002							2000		
Direction, Lane # 24	EB 1	WB 1	NB 1	SB 1			100			ka za	4 17 18 19		
Volume Total	876	633	7	61									
Volume Left	59	1	6	7									
Volume Right	. 0	5	1	53									
cSH	951	802	81	307		n, race process are street account.	Server de Sancher Marie Care.	KARATTANA KATANA ABIZITA	activity with learning by the period	THE THE STATE OF SECTION SHOPS	nord Sweet Waller Control	Nightenborgstown truck	- Internation transmisses constructes are reconstituted
Volume to Capacity	0.06	TARREST MARKETON	0.08	The state of the s									
Queue Length 95th (ft)	5	0	7	18	A Print No. of the American Street, Co.	THE STREET		MANAGEMENT TO THE PROPERTY OF THE PARTY OF T		Market and the Contract of the	THE FOR THE PARTY OF THE PARTY		PERSONAL AND AND SERVICE OF THE
Control Delay (s)	1.6	HULLING LIBERT AND	53.4										
Lane LOS	Α	Α	F	C	AND THE STREET PRINTS	SALES CONTRACTORS	PARTIES TO PROPERTY.	ne a constitue de mantena	North-Scheme at Tours	MONEGO PROGRAMMA TURNOS E	hii saraa muhamua	ON ACMEDICATE OF STREET	ne days come anamonico de companyo de companyo de
Approach Delay (s)	1.6	0.0	53.4	200000000000000000000000000000000000000									
Approach LOS			F	С									
Intersection Summary													
Average Delay			1.9	The same of the same	And a second of the last								
Intersection Capacity Utili	zation			: iC	U Level	of Serv	ce 🗀 .		€ E				
Analysis Period (min)		a) sera la esta da cara de distrib	15	norther Charles (1987)	records stable to detaile the district	enand to tarable dis	a en relative relativativativ	The William Street Stre	marine asserting and considerable	resectivities con Jab 191	r osamiteati edilerkiitikk	ner e sekaran erros anthibito	CONTRACTOR
			1										
Analysis relied (mill)		7 000 0	13										

	۶		V	1	4	1		1	1	-	1	4	
Viovement	SEBL:	.×EBT∞	EBR :	WBE	WBTS	WBR	ENBL)	NBT*	NBR	SBL	SBT	SBR	
Lane Configurations	***************************************	4			4			∯			4		
Sign Control		Stop			Stop			Free			Free		
Grade		0%			0%			0%			0% 735		
Volume (veh/h)	10 0.67	0.67	45 0.67	10. 0.63	0.63	15 0.63	50 0.95	1060 0.95	25 0.95	0.81	0.81	45 0.81	
Peak Hour Factor Hourly flow rate (vph)	0.67			16			53		26	19	907	56	
Pedestrians		ON NAMES AND ADDRESS OF			LLES HILLS					Tour et al Table			
Lane Width (ft)													
Walking Speed (ft/s)	100000000000000000000000000000000000000	9.030.000					and the same of the same of the same of		THE HERE WAS ARRESTED TO	examples of the second	neponencia sur pur	skyraenium opydatryty o tropaky	nation that the entire the contract of the con
Percent Blockage										10 (5 (4) (4) 12 (4) (4) (4)			
Right turn flare (veh)	residence.	None	os akonsansi		None	Valentski					37 (en 1935)	(A. C.	
Median type Median storage veh)		inone			NOTIE -								
Upstream signal (ft)											1.00		
pX, platoon unblocked	(TODAY) ENGAGE	er in Service for the	ata Parina de La constanta		BBF BURGRONDY SLIKT	ettiplipeedaavava	e-modernesien	a katana anta valuenta	an establishment and more	NO THE PROPERTY OF THE PROPERT	NAMES AND ADDRESS OF THE OWNER.	emmissing serving serving order	7.1912/-0-2144-900-7.5-4-5-4-9-9-9-9-9-9-9-9
vC, conflicting volume	2230	2220	935	2274	2234	1129-	963			1142			
vC1, stage 1 conf vol	en erene portugues pende		niconomia e nacionales		et and Island		rome respector respector	CHOCHESTOP STORE	FERRES ASSESSABLES		20060189269858086		
vC2, stage 2 cont vol	2020	0000	935	2274	2234	1129	963			1142		A.C.	
vCu, unblocked vol tC, single (s)	2230 7.1	2220 6.5	6.2	7.1	6.5	6.2	4.1			41			
tC, 2 stage (s)					MES'S E		Cardelies						on Carolina de Paris de Mario
iF (s)	3.5	4.0	3.3	3.5	4.0	-1,-3.3	2.2			2.2			
p0 queue free %	42	96	79	22	100	90	93	CONCLUMNO MADORIDA-VIZAG	CHANGE AND APPLICATION	97	ner vicence at la satis	e programa de la companie de la compa	ON THE WORLD THE WOOD PROTECTIVE AND THE GROUPS
cM capacity (veh/h)	26	40	325	- 20	39	251.	719			615			
Direction Lane#	SEB.1	WB.1											
Volume Total	84	40	1195	981									
Volume Left	15	16	53	19				ver meter		vericus.			
Volume Right cSH	67 102	24 46	26 719	56 615						u sando.			
Volume to Capacity	0.82	0.87	0.07	0.03			G. 60				32244		
Queue Length 95th (ft)	115	88	6	2	in the second		Andrea Maria	6 3 2 6 6 1 1 1 1 1 5 1			AND THE PROPERTY.	建 加入4000年15日10年15日16日	
Control:Delay (s)	121.6	233.1	2.7	1.0									
Lane LOS	F	F	Α	Α	Reconstructure (1975)	and the second s	umiere inventores.	GPRACHESTER AT DEC	NEW MORRES	navenance.	DARRES OF STREET, NAME OF	Control of the Contro	
Approach Delay (s)		233.1	2.7	1.0					18			100 200	
Approach LOS	F	F											
Intersection Summary						(4) Set 5	and the same						
Average Delay			10.2		Negativa est est e								
Intersection Capacity Utili	zation	Z. 151	94.1% 15		U Level	or geryi	ce						
Analysis Period (min)			13			4 2 3 3 6 5						ing a tribal (ta	
	elabelikili.	SOME SERVICE SERVICE		nadir katob			ACHER CONTRACTOR	warder in	and white of	11,4893(\$93H)	mestassas alda	THE PROPERTY OF THE PARTY OF TH	

	۶	-	*	•	4	*	4	1	1	-	1	1	
Movement 4	a EBL	EBT	EBR	WBL	WBT.	WBR.	a NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		€}>		A CONTRACTOR OF THE PARTY OF TH	€\$			€\$		ሻ.	ĵ.		
Sign Control		Stop			Stop			Free			Free		
Grade		0%			0%			0%			0%		
Volume (veh/h)	1.	5	20	10	0	285	10	910	. 10	150	745	5	
Peak Hour Factor	0.69	0.69	0.69	0.75	0.75	0.75	0.80	0.80	0.80	0.95	0.95	0.95	
Hourly flow rate (vph) Pedestrians			. 29	/13	0,	'380	: 12	_1138_	12	158	784	5	
Lane Width (ft)				ENGTERN		######################################			3 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 				
Walking Speed (ft/s)			43.4			eviruise:	2501.0533						
Percent Blockage													
Right turn flare (veh)	elykov sobstantus					energial (en 20	TALEASSE THE SOF	aran da arang		or a district distri	MILISPANICE LE	elikteren	
Median type		None			None								
Median storage veh)	SEASON AND ACTUAL OF			PROBLEM STATE OF THE SAME WAY.	- 2014-481. 2018(PHIOSPO)	48.8 \ 28.0 * \$0.40 *	Mary Art Art Section 1	COCK COLOR OF CHICAGO		- 1 THE REAL PROPERTY AND THE PROPERTY OF THE	mredian water and		CONTRACTOR OF STREET, COLOR DE
Upstream signal (ft)											1018		
pX, platoon unblocked	0.51	0.51	0.51	0.51	0.51	TIONS REPORT OF A THE	0.51						TERROR WITH THE PROPERTY THAT THE
vC, conflicting volume	2651	2278	787	2301	2274	1144	789			1150			
vC1, stage 1 conf vol		01748435181	DEFECTACION	DESKAPEKA:	5000000000		CHINARIA	100 Sec 131 Sec 1			arometra eta e		STORESTANDED
vC2, stage 2 confivol vCu, unblocked vol	4214	3486	585	3532	3479	1144	590			1150			
tC, single (s)	4214 7.1	6.5	6.2			6.2		(1.75) N.W.		4.1			
tC, 2 stage (s)													
tF(s)	3:5	4.0	3.3	3.5	4.0	3.3	2.2			2.2			
p0 queue free %	0	0	89	0	100	0	98		3.1993/25599136251964	74	entikonolarishin	West Drawe Strake, Tarak	
cM capacity (veh/h)	0.	- 2	264	0	2	-246	509			611			
Direction: Lane # as a	EB 1	WB1	NB 1	SB 1	SB 2								
Volume Total	38	393	1162	158	789	(A. 1911)					11.7.7	Carl Carlo	
Volume Left	1	13	12	158	0	kirkin kumanan ing k	i, activity places a secto		SERVICE SELVERSES	endropeda dalla dalla rell'avoltare			
Volume Right	29	380	12	- 0	5								
cSH	0	0	509	611	1700		THE PERSON NAMED OF THE PE	er energical escriptions for the	TOTAL SELECTION OF THE SERVICE	The state of the s	MINISTER PROPERTY OF THE PARTY OF THE	CONTROLLER PROFESSION	
Volume to Capacity		Committee value of the	0.02	0.26	BUT TORREST STORES								
Queue Length 95th (ft)	Err	Err	2	26	0		grown action to be the	A Kramanan	Selective extreme	ween ozamon neo		HANT STORMANNERS IN H	
Control Delay (s)	En .	Er	1.1	12.9 B	. 0.0		refinition of	Carren				11.	
Lane LOS Approach Delay (s)	F Err	F En	A 1.1		A 402563		450-200	NAME OF STREET		escario esci			
Approach LOS	F EU	F F		C.C.							0.00	3,000,000	Charles Services
				nam sam atomari desira.		etropastika periodika periodika per	NAMES OF THE PARTY			AND STREET	and the state of t	Picter between the manner	
Intersection Summary					30,000				TOTAL				
Average Delay		enwartson yn r	Err		COMPRESSION IS	e de la companya de			Janes de Sestado	enero en la la compansión	CESTICAL PROPERTY.	tiriganzi propositi an	Della Balleda Angeline 1997 a
Intersection Capacity Utili	zation	is in tal		lC	CU Level	of Servi	ce 🚧 🔻		Н.	äfileisi			
Analysis Period (min)			15				NEST SELECTION					an isawan	
				Jan 14.					i de la composición dela composición dela composición de la composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición de la composición dela c	SERVICE.		se in the	

	*		Ť	1		+	1
Movement &	WBL	WBH.	NBT	NBR	SBL	SBT	
Lane Configurations	M		ĥ		,	ર્લ	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	15	15	1020	25	,⊱15	845	
Peak Hour Factor	0.84	0.84	0.93	0.93	0.95	0.95	
Hourly flow rate (vph)	18	18	1097	27	. 16	889	
Pedestrians Lane Width (ft)							
Walking Speed (ft/s)					M24054009		
Percent Blockage					500		
Right turn flare (veh)		and the second	Signification of the second	e k. E. Cochar an E. efe		MATERIAL PROPERTY	大学公司 1995年 199 大学公司 1995年 199
Median type	None						
Median storage veh)	- DOLLAR CHARLES AND ASSESSMENT	ENGINE AND STATE	and according to the control of the			3-21-20-21-21-21-21-21-21-21-21-21-21-21-21-21-	
Upstream signal (ft)			- 771 ·			1063	
pX, platoon unblocked	0.83			COTTO TO THE WAY		erendining (edited)	
vC, conflicting volume	2031	1110			=1124		
vC1, stage 1 conf vol			Teather of the	neforeaction		Patronia And	
vC2, stage 2 conf vol vCu, unblocked vol	2242	1110			1124		
tC; single (s)	6.4	6.2			4.1		
tC, 2 stage (s)		2002TOTAL		Marie Britan Miles		a inggrafia ang ang ang	CONTROL DE LOCATION SE LA EXECUTAR MENORMANISMENTON PRINCES AND ENGINEER PROPERTY OF THE PROPE
iF (s)	3.5	3.3			2.2		
p0 queue free %	53	93	COMPANY OF THE PARTY OF	200-200-200-200-200-200-200-200-200-200	97		
cM capacity (veh/h).	. 38	257			625		
Direction, Lane##	WB 1	NB 1	SB 1				
Volume Total	36	1124	905			200	
Volume Left	18	0	16	SEPTEMBER DES SERVICES SE	entreaction realization	STATE OF THE PARTY OF THE PARTY.	(S. 20) (S. 20
Volume Right	18	27	0				
cSH	66	1700	625			eermomas-tookkays	
Volume to Capacity	0.54	0.66	0.03	2.2			
Queue Length 95th (ft)	55 110.3	0.0	2 0.8			errene menten	
Control Delay (s) Lane LOS	F 110.3	U.U	v.o A				
Approach Delay (s)		0.0		-55			
Approach LOS	F			a la Aliri	AGAING E.H.		
				<i>*</i>			
Intersection Summary		34 190 K	2.2	week spile			
Average Delay	totion				NII SOSSI	of Service	e C
Intersection Capacity Utili	zauur.		15		o reve	OF OF VIC	

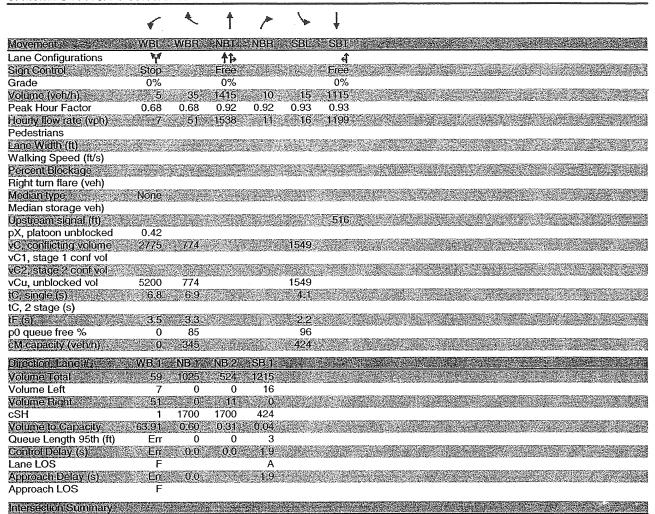
Analysis Period (min) 15



Average Delay

Analysis Period (min)

Intersection Capacity Utilization



209.2

15

	1	*	Ť		-	+						
Movement 3	WBL	WBR.	∮NBT#	NBR	SBL	SBT#						
Lane Configurations	k/f	-	ĵ.		ሻ	ŕ						
Sign Control	Stop		Free	7.34		Free						
Grade	0%		0%			0%		ericis on some agreements grown		THE SHE THAN SO SECTION OF A COURT	e na Bonese Salamana	MANAGES AND
Volume (veh/h)	35	45	915	. 35	- 20	- 785						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	ara status den enymenten is					aeninen
Hourly flow rate (vph)	36	47	953	36.	21	818						
Pedestrians	TAGS STUDENTS OF THE	KE-PERFERENSIA NI	Secondario de la compansión de la compan			55528452655555	DESCRIPTION OF THE PROPERTY OF	TEST CONTROL OF THE		ekselve serves		2005 2005
Lane Width (ft)		ate (S.A.)		fativa	ale tre							
Walking Speed (ft/s)		AND THE PARTY OF T				erneranto.					and the second	
Percent Blockage								46.7				
Right turn flare (veh)		WAR DESIGNATION				1945-00A			nasaa a			
Median type Median storage veh)	None					To Late 14	2.0					
Upstream signal (ft)												
pX, platoon unblocked		armo de 200										
	1831	971			990							
vC1, stage 1 conf vol				544 kg 142 550 22			Variable of School Service	AND THE PROPERTY			Single Section and Section 19	SUMMAN.
vC2, stage 2 conf vol	1.5											
vCu, unblocked vol	1831	971	or Harmital America	istorio interescrio	990	en e	Service and the service and th	SPCSIA SESSIONE SESSIONES	ALC: NO.	apining and a second second	AND REAL PROPERTY OF THE PARTY	non-seen
tC; single (s)	6.4	6.2		1	4.1					7.4		
tC, 2 stage (s)	2900.48/BitSANBOOKINESHII	real personalistic peeps	CONTROL SAN SAN SAN SAN SAN SAN	COSTAN CAR CANADA ON PARTY	ALLONDO UNIVERSAL PROPERTY							
tF (s)	3.5	3.3			2.2							
p0 queue free %	55	85			97	VII. LEI JOHN WAR W. W. T.	THE STREET WAS DESCRIBED AND A STREET OF THE STREET WAS DESCRIBED AND A STREET OF THE	TANGENT TO STAND SECTION AS IN	ements book of scientific in the	en Talan semple uttekni filosoft		Temprene
cM capacity (veh/h)	81	307			699							
Direction Lane#	WB1	NB1	SB 1.	SB 2								
Volume Total	83	990	21	818								
Volume Left	36	0	21	0						er e	Control (1) All to Charles I was Booked	GIO TRES
Volume Right	47	36	0	. 0								
cSH	139	1700	699	1700	SA YEL TO STATISTICAL PROPERTY.	10+101d 45.58+12.25+11.5	Co. Act and the state of the st	THE STATE OF THE PARTY OF	TANK CARRIES STATE OF THE STATE	the file of the second		
Volume to Capacity	0.60	- 0.58	0.03	0.48								
Queue Length 95th (ft)	78	0	2	0	The state of the s							
Control Delay (s)	63.9.	9.0	10.3	0.0								
Lane LOS	F		В				and the second s	maja, Pindi Milipinin kalingan para - ara	THE PROPERTY OF THE PARTY OF TH	era a se companyon de la compa		SVEXCORE
Approach Delay (s)	63.9	0.0	0.3									
Approach LOS	F											
Intersection Summary			And the second		4574							
Average Delay	arrana di Antilo Fatini (C. P. S.)		2.9	A CONTRACTOR OF THE PARTY OF TH								
Intersection Capacity Util	ization		61.6%	IC	U Level	of Serv	ice	:				
Analysis Period (min)	an mi ereminentia	nonethine este de	15	report (Children State (Children of	MA CONTRACTOR	and a second second second	53 min 1986 graph, appeter 24 125 pp. 525 pp.	ero erro (SAS) Ser Samuel III (SE	AND ALL AND RESIDENCE OF THE SECOND	our procession Michigan (see A Proposition 6 I S SINC)	THE STREET STREET, STR	· · · · · · · · · · · · · · · · · · ·
			11.1				100000					(b - 1
E PRODUCE SERVICE CONTRACTOR OF SERVICE SERVIC	one a special characteristic at	PARTICIPATION COMPANY	Annual Constitution of States	en and en fast in her extremely at Felder 1999	u outre amest Mere	eur compensaries un debilion						

	ⅉ		*	•		•	4	†	~	1	-	4	
Movement	EBL	EBT	EBR :	WBL	WBT	WBR.	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		€\$			€\$			€}}			€\$		
Sign Control	100	Free			Free			Stop.			Stop		
Grade	Surface de la Terra de Australia	0%	- Company of the Comp	009eeba800e007e	0%	/#XXXX/#20####\$#\$		0%	FIT OF THE TO A VAND	concensional active to the second	0%	FARRESCO ANTONIO DEL	
Volume (veh/h)	55	800	0	12	600	AND DESCRIPTION OF THE PARTY OF	5	0	1	5	1.	40	
Peak Hour Factor Hourly flow rate (vph)	0.93 59	0.93 860	0.93	0.91	0.91 659	0.91 5	0.88	0.88 0	0.88	0.75 7	0.75	0.75 53	
Pedestrians	. 59	800			055	, J. J.	0	1.00	11 52 7 5				
Lane Width (ft)											S-1960/76		
Walking Speed (ft/s)	er elektronomi		SABABAS S	ed chemic		************					buses in 1992		
Percent Blockage				0.15 (1.45)									
Right turn flare (veh)	CALLSON WITH ALLOW		and the second			200000000000000000000000000000000000000		a Bridge (Market State)	500 3 CA 36 V. L. J. 18 - CA	La La Austra d'Albania de la Calabania de la C	38 (41-11) (-7-12-34-34		to the transfer and the second property of the second seco
Median type								None			None		
Median storage veh)	Carl Supplement of the Con-	NORGE PROGRAMM		MENTANTATORIZZNIKANISK		energia de la como de				MARKINGA SANSARA			
Upstream signal (ft)		47 (5) (4)		A PARAL STATE	869							ELE SE	1,040
pX, platoon unblocked vC, conflicting volume	- 665			860 -			1607	1646	960	16/4	16/2	662	
vC1, stage 1 conf vol								E PHONE		2.1973.3	1040	UUZ	
vC2, stage 2 conf vol													
vCu, unblocked vol	665	againman de Sandana.	IDS STATE OF THE S	860	Section of the Control	Participate Services	1697	1646	860	1644	1643	662	
tC; single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2	
tC, 2 stage (s)	NO. PT TO TAMES OF THE ACTION OF THE	WESTERN ON PARTY ASSESSMENT	and any other parts of the state of the stat	a in the second of the second of the	The Common Common Conference on the Conference o	(contravarence)	note to the second seco	and moves representation	This trade was resident		norto montra de Concorrencio	or success or successive	
tF (s)	2.2			2.2	The state of the		3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	94 924	(1987) - 1985 (1987) - 1985 (1		100 773		STATE OF THE STATE	91 62	100 94	100 358	91 76	99 94	89 46 5	
cM capacity (veh/h)	924			113			0∠_	94 (356	/0	94	400	
Direction, Lane #	AND AND ROOM AND AND ASSESSMENT OF THE PARTY	WB 1:	NB 1	SB 1			di di	N. C.					
Volume Total	919	666	7	- 61	e arausana					100			
Volume Left	59 - 0	1 5	6	7 53						08.870 K ST 3516			56.76.97.26.87
Volume Right cSH	924	773	71	284						e de la composición dela composición de la composición dela composición de la compos	Jan Ive	45.25	
Volume to Capacity	0.06	0.00	0.f0	0.22									
Queue Length 95th (ft)	5	0.00	8	20					ed based and to all	152104071			
Control Delay (s)	1.7	0.0 4		21.2									
Lane LOS	A	A	F	С	CONTRACTOR PROFESSIONAL PRO	E. P. C. CO. S.	NATIONAL PROPERTY.	TO SECURITION STATES AND ADDRESS OF THE PARTY OF THE PART	Annual Confession	THE REPORT OF THE PARTY OF THE	Page Andrews Transport		
Approach Delay (s)	1.7	0.0	60.7	21.2									
Approach LOS			F	С									
Intersection Summary		i jeu			State of the			74-54					
Average Delay	erners and response are on a	o Aco-Bi Pornolinia nare se sa	2.0	on can response to the second of the second	- opp militarities many	ment agent automorphism management and an	nu bergenes vers terteben som	more and the second second	a Carrier of the Assessment of	***************************************	1012 7577 YAWAYIN	- Library and the Assessment	
Intersection Capacity Utiliz	zation		90.4%	, IC	U Level	of Servi	ce		(i) E	ula di d			
Analysis Period (min)	erenenenen (15				SUSSESSES SEE				STEELEN STEEL		
					7.565.5								15 AC 1991-16

Movement See EB EB EB WB WB WB NB NB NB NB SB SB SB
Lane Configurations
Grade 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
Volume (Veh/h) 10
Peak Hour Factor 0.67 0.67 0.67 0.63 0.63 0.63 0.63 0.95 0.95 0.95 0.81 0.81 0.81 Plourly flowrate (vph) 15 1 67 24 10 24 58 1147 32 19 944 56 Pedestrians Eane Width (ft) Walking Speed (tt/s) Percent Blockage Right turn flare (veh) Median type None None Median storage veh) Upstream signal (ft) PX, platoon unblocked VC conflicting volume VC1, stage 1 conf vol vC2, stage 2 conf vol vC1, stage 1 conf vol vC2, stage (s) T.1 6.5 6.2 7.1 6.2 7.
Flourly flow rate (yph) 15 1 67 24 0 24 53 1147 32 19 944 56 Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (yeh) Median type Median storage veh) Upstream signal (ft) Dys. platoon unblocked VC. conflicting volume 2301 2293 972 2346 2305 1163 1000 1179 VC1, stage 1 conf vol VC2. stage 2 conf vol VC. unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (yeh/h) 23 35 309 18 35 239 696 596
Pedestrians ane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked v6 conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tC, single (s) 7.1 6.5 6.2 7.1, 6.5 6.2 4.1 tc, 2 stage (s) If (s) 35 40 3.3 3.5 4.0 3.3 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 ft8 35 239 696 596
Eane Width (ft). Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked v6. conflicting volume vC1, stage 1 conf vol vC2; stage 2 conf vol vC4, unblocked vol c301 2293 972 2346 2305 1163 1000 1179 vC4, unblocked vol c301 2293 972 2346 2305 1163 1000 1179 vC5, single (s) r 1, 6,5 6,2 7,1 6,5 6,2 4,1 4,1 tC, 2 stage (s) iF (s) 3 3 5 40 3 3 3 5 4.0 3 3 3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked v6; conflicting volume vC1, stage 1 conf vol vC2 stage 2 conf vol vC4, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 1179 1179 1179 1179 1179 1179
Percent Blockage Right turn flare (veh)
Right turn flare (veh) Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked vC: conflicting volume vC1, stage 1 conf vol vC2 stage 2 conf vol vCu, unblocked vol cS: single (s) r1, 65 62 71 65 62 41 41 tC, 2 stage (s) F(s) p3 35 40 33 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
Median type None None Median storage veh) Upstream signal (ff) pX, platoon unblocked v6; conflicting volume 2301 2293 972 2346 2305 1163 1000 1179 vC1, stage 1 conf vol vC2; stage 2 conf vol vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tC, single (s) 7.1 6.5 6.2 71 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
Upstream signal (ff) pX, platoon unblocked vG. conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol vCu, unblocked vol vCu, unblocked vol vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol vCu, unblocked vol vC3, stage (s) vC3, stage (s) vC4, vC5, stage (s) vC5, stage (s) vC6, stage (s) vC7, vC6, vC7, vC7, vC7, vC7, vC7, vC7, vC7, vC7
pX, platoon unblocked vG, conflicting volume 2301 2293 972 2346 2305 1163 1000 1179 vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tG, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) iF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
vC conflicting volume 2301 2293 972 2346 2305 1163 1000 1179 vC1, stage 1 conf vol vC2; stage 2 conf vol vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tC single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
VC1, stage 1 conf vol VC2, stage 2 conf vol vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) 7.1 6.5 6.2 7.1 6.2 7.1
VC2; stage 2 conf vol. vCu, unblocked vol. 2301 2293 972 2346 2305 1163 1000 1179 tC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) 1F (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
vCu, unblocked vol 2301 2293 972 2346 2305 1163 1000 1179 tC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
tC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) iF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
tC, 2 stage (s) iF (s) 0
iF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 35 96 78 0 100 90 92 97 cM capacity (veh/h) 23 35 309 18 35 239 696 596
p0 queue free % 35 96 78 0 100 90 92 97 CM capacity (yeh/h) 23 35 309 18 35 239 696 596
Direction, Lane # EB 1 WB 1 NB 1 SB 1.
Volume Total 84 48 1232 1019
Volume Left 15 24 53 19
Volume Right 67 24 32 56
CSH 91 33 696 596 Volume to Capacity 0.91 1.43 0.08 0.03
Volume to Capacity 0.91 1.43 0.08 0.03 Queue Length 95th (ft) 128 131 6 2
Control Delay (s) 153.7 492.9 3.0 1.0
lane LOS F F F A A
Approach Delay (s) 153.7 492.9 3.0 1.0
Approach LOS F F F
Intersection:Summary
Average Delay 17.2
Intersection Capacity Utilization 96.7% ICU Level of Service F
Analysis Period (min) 15

	ᄼ	→	*	1	4-	*	4	†	1	1	1	4	
Movement 2 - 3 - 3 - 5 - 5 - 5	EBL	EBT	SEBR	WBL	WBT	WBR.	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4						€}>		ኻ	ß		300000000000000000000000000000000000000
Sign Control		Stop			Stop			Free		100	Free		
Grade	South Towns about	0%			0%		ATTEMENTAL PROPERTY OF THE PERSON	0%	ACTION OF THE PROPERTY.	E. Calledon Long Problem B	0%	www.cassanana.eus	THE PERSON NAMED IN COLUMN TWO
Volume (veh/h)	9.001	- 5	20	. 0	0	0	10	1245	10	170	775	. 5	
Peak Hour Factor	0.69	0.69	0.69	0.75	0.75	0.75	0.80	0.80	0.80	0.95	0.95	0.95	The state of the s
Hourly flow rate (vph)	-5.54 1	7	29	0	0.	0	12	1556	12	179	816	- 5	
Pedestrians	erosu eronus			onese - Russi - es	Contain Suprescribe Con-	ng gapagan ang karatan ka	san on the coston-va	wide grammage, make the first		Nacional de Marco	TOTAL GUILLIANS W	novembri Schauscher zrandeleinzerbare	
Lane Width (ft)								Go. St.					<u> </u>
Walking Speed (ft/s)	en partines	er en en en en en en		SCHOOL STANDARD						a elektronen	PATRICO PER TENT	STEVENSKE STERNINGE	
Percent Blockage													
Right turn flare (veh) Median type		None			SA PERSON			KWASE KATE	endan deniker			NEW COMMEN	
Median storage veh)		NUITE:		Jane Bark	None								Section 2
Upstream signal (ft)								NG02-4-17-07			1018		
pX, platoon unblocked	0.57	0.57	0.57	0.57	0.57		0.57				NOIO		and the second second
vC, conflicting volume	∴2764		818			1562	821		3.550	156Q			
vC1, stage 1 conf vol		o americano de origina						Part Carpane			in always		
vC2, stage 2 conf vol												6.575.965	
vCu, unblocked vol	4120	4131	679	4173	4125	1562	683	THE CONTRACTOR OF THE PARTY OF T	CHARLES AND AND COLOR	1569	Shit Friidsbire		
tC; single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1			
tC, 2 stage (s)		COOK THE REAL PROPERTY TO THE	Activities and the second		and the second second	Committee (Managed and Assistant			CENCE LANGUAGE CONTRACTOR CONTRACTOR			CAN CENTRAL PROPERTY OF THE PARTY OF THE PAR	e-employed and a series of the
iF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2-			- 2.2			
p0 queue free %	0	0	89	0	100	100	98			58			
cM capacity (veh/h)	0	1.1	257	0	1	139	517			423			
Direction, Lane #	SEB 1	NB.1	SB1	SB 2									
Volume Total	- 38	1581	179	821				- 1 o			14.00		
Volume Left	1	12	179	0				32114594-4610464	derinier er ich		ATEMARIAN (SEP	14.5000000000000000000000000000000000000	
Volume Right	29	12	0.	- 5									
cSH	3	517	423	1700	NAMES OF TAXABLE PARTY.		AN 400 TO VIOLENT DAY.	126 - N. CONTANTANDO CITADON C	and realizable control	NUMBER OF THE PERSON	CARROLINE COLORADA	ombali abili postoji dad	ALL COMMUNICATION SOCIAL COMMUNICATION
	12.72	0.02	0.42	0.48									
Queue Length 95th (ft)	Err	2	51	0									
Control Delay (s)	. Err	3.9	19.6	0.0	per se		31						
Lane LOS	F	Α	С	SADERUKUS KURUN PRINTI KERESA	waternamento	VIVOUS AT LOTO STREET ON A	ATTENNA TO SPECIFICATION	urnsst Einbekreint and Nico	eleminormica and the	ON PRO ASPRESSOR AND PROPERTY.	PATTERNA SADETNAMPS	Jange Carent Inner/Spring Engineering	
Approach Delay (s)	Ε'n	3.9	3.5										
Approach LOS	F												
Intersection Summary													
Average Delay	(75 S000)75 (SGE)81197 + 2***		147.5	AMMEDIAN CONTRACTOR CONTRACTOR	ence of the particular transport of a communication of	and the second second second second second	r Obonius rugios magazinos cos	energenesis and reco			m conservativa com		
Intersection Capacity Utili.	zation	1	21.1%	- IC	U Level	of Servi	ce		. ⊕H_				
Analysis Period (min)			15	erene	erranderen (omer	manuscripture e como	enemana pagana ataura	PERSONAL PERSONAL PROPERTY OF THE PERSONAL PRO	00000000000000000000000000000000000000	arma oreginare su	**************		ENGER STORTE STORT SHEET APPRICATION OF A COMME
									- 61-61-5				



Movement
Stop Free Free Free Grade 0% 0% 0% 0% 0% 0% 0% 0
Volume (ven/h) 15 15 1120 25 15 945 Peak Hour Factor 0.84 0.84 0.93 0.93 0.95 0.95 Flourly flow rate (vph) 18 18 1204 27 16 995 Pedestrians Fane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type Median storage veh) Jpstream signal (ft) DoX, platoon unblocked 0.80 0.67 0.67 VC, conflicting volume 2244 616 1231 VC1, stage 1 conf vol VC2, stage 2 conf vol
Peak Hour Factor 0.84 0.84 0.93 0.93 0.95 0.95 Fourly flow rate (vph) 18 18 1204 27 16 995 Pedestrians ane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type None Median storage veh) Jpstream signal (ft) oX, platoon unblocked 0.80 0.67 0.67 VC, conflicting volume 2244 616 1231 VC1, stage 1 conf vol VC2, stage 2 conf vol
Gurly flow rate (vph) 18 18 1204 27 16 995 Pedestrians Inches
Pedestrians Jane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type Wedian type None Median storage veh) Jpstream signal (ft) DX, platoon unblocked 0.80 0.67 0.67 0.67 0.67 0.1231 0.70
Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type None Median storage veh) Jpstream signal (ft) 364 1075 DX, platoon unblocked 0.80 0.67 0.67 DC, conflicting volume 2244 616 1231 VC1, stage 1 conf vol VC2, stage 2 conf vol
Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type None Median storage veh) Upstream signal (ft) 364 1075 DX, platoon unblocked 0.80 0.67 0.67 UC, conflicting volume 2244 616 1231 UC1, stage 1 conf vol UC2, stage 2 conf vol
Percent Blockage Right turn flare (veh) Median type None Median storage veh) Jpstream signal (ft) 364 1075 DX, platoon unblocked 0.80 0.67 0.67 IC, conflicting volume 2244 616 1231 IC1, stage 1 conf vol IC2, stage 2 conf vol
Right turn flare (veh) Median type None Median storage veh) Jpstream signal (ft) 364 1075 DX, platoon unblocked 0.80 0.67 0.67 IC, conflicting volume 2244 616 1231 IC1, stage 1 conf vol IC2, stage 2 conf vol
Median type None Median storage veh) Jestream signal (ft) 364 1075 DX, platoon unblocked 0.80 0.67 0.67 IC, conflicting volume 2244 616 1231 IC1, stage 1 conf vol IC2, stage 2 conf vol
Median storage veh) Jpstream signal (ft) 364 1075 DX, platoon unblocked 0.80 0.67 0.67 IC, conflicting volume 2244 616 1231 IC1, stage 1 conf vol IC2, stage 2 conf vol
Jpstream signal (ft) 364 1075 pX, platoon unblocked 0.80 0.67 0.67 pC, conflicting volume 2244 616 1231 pC1, stage 1 conf vol 1231 1231 pC2, stage 2 conf vol 1231 1231
oX, platoon unblocked 0.80 0.67 0.67 iC, conflicting volume 2244 616 1231 iC1, stage 1 conf vol iC2, stage 2 conf vol
VC, conflicting volume 2244 616 1231 VC1, stage 1 conf vol VC2, stage 2 conf vol
/C1, stage 1 conf vol /C2, stage 2 conf vol
vC2;stage 2 conf vol
/Cu, unblocked vol 1507 0 844 C, single (s) 6.8 6.9 4.1
C, 2 stage (s)
F(s) 3.5 3.3 2.2
o0 queue free % 80 98 97
M capacity (veh/h) 89 726 528
Direction, Lane: # WB.1: NB.1: NB.2: SB.1.
Volume Total 36 803 428 1011
Volume Left 18 0 0 16 Volume Biolit 18 0 27 0
SH 158 1700 1700 528 Volume to Capacity 0.23 0.47 0.25 0.03
Queue Length 95th (ft) 21 0 0 2
Control Delay (s) 34.3 0.0 0.0 1.0
Lane LOS D A
Approach Delay (s) 34.3 0.0 170
Approach LOS D
ntersection Summary
Average Delay 1.0
Intersection Capacity Utilization 7.1.7% ICU Level of Service C
Analysis Period (min) 15

	>	*	—	1	Ť	1	
Lane Group	EBI	EBR	WBT	NBL	NBT	SBT	
Lane Group Flow (vph)	70	602	49	542	742	870	
v/c Ratio	0.36	0.63	0.21	0.72	0.23	0.68	
Control Delay	47.5	14.4	35.6	26.8	1.6	25.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.5	14.4	35.6	26.9	1.6	25.3	
Queue Length 50th (ft)	33	159	17	235	37	196	
Queue Length 95th (ft)	102	342	51	447	51	359	
Internal Link Dist (ft)	445		188		584	705	
Turn Bay Length (ft)		200		250			
Base Capacity (vph)	237	1207	293	1046	3249	1737	
Starvation Cap Reductn	0	0	0	26	0	0	
Spillback Cap Reductn	0	. 0	0	. 0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.50	0.17	0.53	0.23	0.50	
Intersection Summary		Section 1					
	or authorized by the second	THE RESERVED ASSESSED TO	at responsible to the	A CONSTRUCTION OF THE PARTY OF	AND DAY OF STREET		

J	-	*	•	4-	1	4	†	1	1	1		
rane Group	E SEBT	E EBR	WBU	WBT :	WBR	NBL	NBT	NBR	SBL	SBT		
	0 48	48	250	213	411	33	879	489	440	1030		
v/c Ratio 0.2	9 = 0.33	0.28	0.72	0.76	0.46	0.24	0.77	0.57	0.85	0.57		
Control Delay 58.	.2 59.0	20.0	55.1	60.6	13.8	57.1	37.6	14.7	50.5	15.0		
Quéue Delay 0	0.0 + 0.0	0.1	0.2	0.3	0.0	0.0	-1.3	0.3	0.0	0.1	Σ	
Total Delay 58	.2 59.0	20.1	55.3	60.9	13.8	57.1	38.9	15.0	50.5	15.2	THE RESIDENCE WHEN THE TAX THE	THAT WAS TO DON'T
Queue Length 50th (ft) 2	29 34	0	181	192	136	23	304	- 173	295	284		
Queue Length 95th (ft) 4	17 53		#323	#370	226	59	395	272	396	318		MINISTRALIAN S. STY
Internal Link Dist (ft)	- 152			327	100		304			584		
Turn Bay Length (ft) 7	75	75			150	75		185	250	n water to well the first many	eranari, se internativa e antiga den 1 diction e en accir tem 14	ACTION PROPERTY ACTION
Base Capacity (vph) 13	39 147	169	418	342	912	147	1393	898	658	1945		
Starvation Cap Reductn	0 0	0	0	0	0	0	299	94	0	0		enteres arabasementa
Spillback Cap Reductn	0 < i > 0	7	14:	. 11	0	. 0	0	- 0	. 0	210		
Storage Cap Reductn	0 0	0	0	0	0_	0	0	0	0	0		PV MY ANN RESTAURS
Reduced v/c Ratio 0.2	29 0.33	0.30	0.62	0.64	0.45	0.22	0.80	0.61	0.67	0.59		
Intersection Summary											Land W. St.	
# 95th percentile volume exec	oods cana	city oner	e may h	e longer				100				

Queue shown is maximum after two cycles.

	♪	Ť	1	لير	Ť	
cane Group	EBL	NBT.	SBT	∍SBR⊕	NEE.	
Lane Group Flow (vph)	72	933	931	409	432	
v/c Ratio	0.35	0.48	0.85	0.44	0.62	
Control Delay	51.3	10.4	22.9	10.9	41.1	
Queue Delay	0.1	0.1	6.1	0.7	0.1	
Total Delay	51.4	10.4	29.0	11.5	41.1	
Queue Length 50th (ft)	41	152	420	121	124	
Queue Length 95th (ft)	104	204	636	189	216	
Internal Link Dist (ft)	1038	436	304		, 1207	
Turn Bay Length (ft)	666	-0000	*****	-4400	007	
Base Capacity (vph) Starvation Cap Reductn	229	2302	1300	1106 377	.897	
Spillback Cap Reductn	U -	0 - 249	313	3//	0 29	
Storage Cap Reductn	0	249 0		0	29 0	
Reduced v/c Ratio	. n 20	0.45		0.56		
	V.JC	v.40	0.34		0.00	
Intersection Summary	18.7 .7					

	>	4	T	1	
Lane Group	EBT	WBT	=NBT=	SBT	
Lane Group Flow (vph)	15	44	982	862	
v/c Ratio	0.10	0.26	0.59	0.54	
Control Delay	16.6	14.8	4.2	3.6	
Queue Delay	- 0.0	0.0	0.0	00	
Total Delay	16.6	14.8	4.2	3.6	
Queue Length 50th (ft)	4	. 8	.100	79	
Queue Length 95th (ft)	12	19	206	180	
Internal Link Dist (ft)	938	531	983	, 384	
Tum Bay Length (ft)					
Base Capacity (vph)	237	253	1652	1611	
Starvation Cap Reductn	0	0.	0	0	
Spillback Cap Reductn	0.	0	0	0	
Storage Cap Reductn	0	0	0	0	
Reduced v/c Ratio	0.06	0.17	0.59	0.54	
Intersection Summary			14.7 Se		

	<i>></i> *		1	4	4	Ť		1	4	
ane Group	EBL	(EBT»	WBL	WBT.	NBE :	NBT	SBL	SBT#	·SBR	
Lane Group Flow (vph)	347	468	167	371	189	634	67	517	361	
v/c:Ratio	0.56	0.68	0.60	0.65	0:64	0.63	0.37	0.65	0.40	
Control Delay	43.5	35.1	51.9	35.6	52.5	32.2	53.9	40.2	5.9	
Queue Delay	0.0	. 0.0	0.0	0.0	- 0.0	- 0.0	0.0	0.0	0.0	
Total Delay	43.5	35.1	51.9	35.6	52.5	32.2	53.9	40.2	5.9	
Queue Length 50th (ft)	108	269.	102	207	116	180	42	165	21	
Queue Length 95th (ft)	180	435	197	336	197	239	98	253	91	
Internal Link Dist (ft)		854		619		1014	nagy (die	262		
Tum Bay Length (ft)	200		100		100		100		100	
Base Capacity (vph)	769	798	353	747	370	1295 -	206	1009	932	
Starvation Cap Reductn	0	.0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0.	0	0	0	0	· 0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.59	0,47	0.50	0.51	0.49	0.33	0.51	0.39	
intersection Summary										

	>	*	←	4	1	1
Lane Group	EBT.	EBR	-WBT€	NBL	NBT	SBT-
Lane Group Flow (vph)	70	629	49	563	784	921
v/c Ratio	0.39	0.66	0.22	0.73	0.24	0.71:
Control Delay	50.6	16.0	37.3	28.1	1.6	27.3
Queue Delay	0.0	0.0	- 0.0	. 0.1	0.0	0.0
Total Delay	50.6	16.0	37.3	28.2	1.6	27.3
Queue Length 50th (ft)	37	195	19	270	. 41	233
Queue Length 95th (ft)	102	374	51	471	54	386
Internal Link Dist (ft)	445		188		584	705
Turn Bay Length (ft)		200		250		***
Base Capacity (vph)	220	1174	273	1017	3247	termination and
Starvation Cap Reductn	0	0	0	25	0	0
Spillback Cap Reductn	. 0	0	0	0		, U
Storage Cap Reductn	0	0 0 E 4	0 0 10	U 0 E7	0 0.24	0 0.55
Reduced v/c Ratio	.0.32	0.54	0.18	0.57	U.24	. 0.55
Intersection Summary						

	ⅉ	→	1	1	← —	*	4	1	1	1	1	•
Lane Group	⊭EBL	EBI	EBR	WBL	WET	WBR	NBL	NBT	NBR	SBL	SBT	
Lane Group Flow (vph)	40	48	48	235	249	438	33	918	516	470	1078	
v/c Ratio : **	0.30	0.34	0.29	0.70	0.74	0.48	0.25	0.80.	0.60	0.87	0.51	
Control Delay	59.7	60.6	20.3	55.1	57.1	14.9	58.4	39.5	15.9	53.5	13.7	
Queue Delay	0.0	0.0	0.2	0.4	0.4	0.0	0.0	2:9	0.5	0.0	0.1	
Total Delay	59.7	60.6	20.4	55.5	57.6	14.9	58.4	42.3	16.4	53.5	13.8	
Queue Length 50th (ft)	30	36	- 0	181	192	162	25	337	206	335	248	
Queue Length 95th (ft)	47	53	16	#293	#318	250	59	418	294	431	274	
Internal Link Dist (ft)		. 152			327			304			584	
Turn Bay Length (ft)	75		75			150	75		185	250		
Base Capacity (vph)	134	141	164	403	406	921	142	1363	889	648	2222	
Starvation Cap Reductn	0	0	0	0	0	0	0	324	105	0	0	
Spillback Cap Reductn	0	0	7	20	20	· 7	0	0	ुं 0 ∜	0	256	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.34	0.31	0.61	0.65	0.48	0.23	0.88	0.66	0.73	0.55	
Intersection Summary			0 7 J.C					is at a				
# 95th percentile volume	exceed	s capaci	ty, queu	e may b	e longer.							

•	À	Ť	ļ	لر	7	
Lane Group	//EBL	NBT.	⊹SBT ∞	SBR	+NEL }	
Lane Group Flow (vph)	72	974	973	431	455	
v/c Ratio	0.37	0.48	0.87	0.45	0.66	
Control Delay	54.2	10.3	24.6	11.0	44.0	
Queue Delay	0.4	And Administration of	- 13.8	0.9	0.2	
Total Delay	54.6	10.5	38.4	11.9	44.2	
Queue Length 50th (ft)	A SALES AND A	170	489	138	144	
Queue Length 95th (ft)	104	214	705	203	227	
Internal Link Dist (ft)	1038	436	304		1207	
Turn Bay Length (ft)	TANEKO (NAVENSKI MIROSKI	TIMO CAMPA CONTINUE	NORTH THE TREE TO BE TO	Carrage and the oral transport	Vicuotiamon esseriamon	
Base Capacity (vph)	217	2327	1291 -	1099	861	
Starvation Cap Reductn	0	0	315	398	0	
Spillback Cap Reductn	21	. 439	0	0	54	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.37	0.52	1.00	0.61	0.56	
Intersection Summary						



		Section 1			
Lane Group: 5	EBI	WILL	* NBT	家SBJ編	
Lane Group Flow (vph)	44	44	1035	899	
v/c Ratio	0.24	0.24	0.66	0:57	
Control Delay	14.4	14.5	5.9	4.3	
Queue Delay =	0.0	0.0	-0.0	0.0	
Total Delay	14.4	14.5	5.9	4.3	•
Queue Length 50th (ft)	- /2 6	- 6	117	86 .	
Queue Length 95th (ft)	19	18	258	207	
Internal Link Dist (ft)	938	- 531	983	384	
Tum Bay Length (ft)					
Base Capacity (vph)	273	271	1575	1581	
Starvation Cap Reductn	0	0	0	0	
Spillback Cap Reductn	0.	0.	0	_	
Storage Cap Reductn	0	0	. 0	0	
Reduced v/c Ratio	0.16	0.16	0.66	0.57	
Intersection Summary					
	transfer and the second	7.00 - (*Z.10.X	Mark Rose Tolland	and the same of the same	

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Lane Group	EBL	EBT»	WBL	, WBT	NBL	NBT	-SBL	SBT	· SBR [
Lane Group Flow (vph)	358	489	172	392	195	652	67	533	378	
v/c Ratio	0.61	0.75	0.64	0.70	0.66	0.58	0.40	-0.71	0.44	
Control Delay	45.9	38.4	55.1	38.4	54.3	31.6	56.0	43.0	7.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	45.9	38.4	55.1	38.4	54.3	31.6	56.0	43.0	7.8	
Quêue Length 50th (ft)	120	. 303	114	236	129	197	45	183	40	
Queue Length 95th (ft)	186	460	203	358	202	246	98	262	120	·
Internal Link Dist (ft)		854		619		1014		- 262		
Turn Bay Length (ft)	200	to establishment who shear the	100	The Day San Called Arthropology	100	STATISTICS OF THE STATE OF THE	100		100	
Base Capacity (vph)	704	747	329	707	361	1273	190	935	883	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	z = 0	0	0	0	. 0	. 0	0.	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	
Reduced V/c Ratio	0.51	0.65	0.52	0.55	0.54	0.51	0.35	0.57	-0.43	
Intersection Summary			74. T.							

	→	1	4	4	Ť	 	
Lane Group	EBT	EBR	≨WBT#	NBL	NBT.	SBT	
Lane Group Flow (vph)	70	651	49	579	848	956	
v/c Rátio	0.55	0.71	0.30	0.82	0.27	0.63	
Control Delay	68.1	24.3	44.6	41.2	1.7	29.1	
Queue Delay	0.0	0.0	0.0	0.6	0.0.	0.0	
Total Delay	68.1	24.3	44.6	41.8	1.7	29.1	
Queue Length 50th (ft)	. 52	323	26	387	48	308	
Queue Length 95th (ft)	102	400	51	490	60	421	
Internal Link Dist (ft)	445		. 188		584	705	
Turn Bay Length (ft)	aucora de la companya de la company	200	day day day day a	250	ee oor is well that the resource		
Base Capacity (vph)	. 140 -	966	178	786	3143	1523	
Starvation Cap Reductn	0	0	0	42	0	0	
Spillback Cap Reductn	0	0	0	. 0	, O	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	i 0.50	0.67	0.28	0.78	0.27	0.63	
Intersection Summary							
	PONTE PER STREET	Carried Straight of the Control of t	CONTRACTOR OF THE SECOND	CONTROL OF THE STATE OF THE STA	Marian Selection		200

	ⅉ	-	*	1	4	1	4	Ť	P	1	Į.	1	
Movement *	EBL	EBT.	J'EBR	* WBL	WBT.	WBR.	NBL∮	NBT-	NBR	SBL	SBT	SBR □	
Lane Configurations		ર્વ	7		€\$		J.	† }			413		
Ideal Flow (yphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	
Total Lost time (s)		. 3.0	3.0		3.0		3.0	3.0			3.0		
Lane Util. Factor	CONTRACTOR NAME	1.00	1.00	ere en en en en en en	1.00	CORD-POWERSON POS	1.00	0.95		energo paramen	0.95		
Fig. 3		1.00	0.85	5-2-3	0.96	Light St.		1.00			0.98		
Fit Protected		0.96 1918	1.00 1812	Trecon bases	0.99	iyoodaa isa	0.95	1.00 3564			1.00		72.74-512
Satd-Flow (prot). Fit Permitted		0.69	1.00		1801 0.90	Text Gas	1787 0.95	1.00			3512		
Satd. Flow (perm)		1384	:1812		1640		1787	3564			0.95		
Volume (vph)	60	5	605	10	15	10	550	790	15	5	or transcription of the sales with	100	
Peak-hour factor: PHE	00	0.93	0.93	0.73	0.73	0.73	0.95	0.95	0.95	0.92	775 0.92	0.92	
Adj. Flow (vph)		0.33 5	651	- 0.13 14	21	14	579	832	16	0.9Z- 5	0.9 <u>2</u> 842	109	
RTOR Reduction (vph)	0.5	0	. 26	0	12	0.	0	1.5	10	// Ö	7	0.0	
Lane Group Flow (vph)	0	70	625	0	37	0	579	847	0	0	949	0	
Heavy Vehicles (%)	1%	1%		0%		0%	1%	1%		1%		1%	
Turn Type	Perm	AND BURSHAME	pm+ov	Perm			Prot	CONTRACTOR CONTRACTOR	AND THE RESIDENCE TO	Perm	acting Strategy	AND THE PARTY	
Protected Phases	Jen en inte	8	5		4		5	2			6		
Permitted Phases	8	8	8	4	4			2	i i designi egiti	6	6		
Actuated Green, G (s)		7.6	51.9		7.6		44:3	100.3			51.0		
Effective Green, g (s)	(Propage and Australia Propagation Colleges)	9.6	55.9	CT15-104-14-11 11-18-1 10-18	9.6	e entare in a est with	46.3	102.3	ATT AND ROSE SELECTIONS	CONTRACTOR OF THE CONTRACTOR	53.0	NAMES AND COMPANION OF STREET	ACTION CONTROL CONTROL CONTROL CONTROL
Actuated g/C Ratio		0.08	0.47		0.08		0.39	0.87		1.5	0.45		
Clearance Time (s)		5.0	5.0		5.0		5.0	5.0	AND ALL OF THE ALL OF		5.0	PROPERTY OF THE PARTY OF THE PA	The state of the s
Vehicle Extension (s)		:: 2.5	2.5		2.5		2.5	3.0.			3.0		
Lane Grp Cap (vph)		113	905		134		702	3092			1502		
v/s Ratio Prot	3.40		c0.27				c0.32	0:24					
v/s Ratio Perm	Pacific to constitution of the last	0.05	0.07	etnikoskuluviekov aliseko	0.02	NATES AND STATE OF SHELP AND	PERSONAL PROPERTY AND ADDRESS.	petropoleri un nuri menggapangan	elining and ridental program we as some	THE STREET WATER STREET	c0.28		
v/c.Ratio		0.62	0.69		0.28		0.82	0.27			0.63		
Uniform Delay, d1	AND THE TRANSPORT FOR STREET	52.4	24.2	entressen teathers.	50.9	ES TENTRO DE CRITO	32.2	1.4	KNIP TO GOTOV	THE RESERVE SHOWS	24.9		SPECIAL CONTRACTOR CAMPAGE MAD ANNOUNCE AN
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00		
Incremental Delay, d2		8.4	2.1	ketaka verendara	0.8		7.7	0.2		10000788848888888	0.9		
Delay (s) Level of Service		60.7	26.3 C		-51.7 D		39.8	1.6			25.8		14 - 15 M
Approach Delay (s)		E ∻29.7		CSACTABLET	51.7		D	A 17.1	Eszedelekkei	ersuceren	C 25.8	ekkender ich	
Approach LOS		<i>23.1</i> C			D D	Stant Shall	in dis	т <i>е</i> л В			20.0 C		
	Nacosanie ikomenie ik		MONWANT SOO		D			D.	~~~	-	· ·		
Intersection Summary	COMMENTAL STREET, STRE		edullaro	r in the									
HCM Average Control De		mantani manananan	23.2	H	CM Leve	l of Serv	ice	MONROUS TO POWER MANAGEMENT	C			MEDICAL PROGRAM CONTRACTOR AND CONTRACTOR	
HCM Volume to Capacity			0.72										
Actuated Cycle Length (s)		Children and and	117.9		um of los			NO CONTRACTOR OF THE PARTY OF T	9.0	and the control of th	antony and committee	olderica de Prancisco de Les	
Intersection Capacity Utili	zation		76.4%	rate IC	U Level	or Servic	e		D				
Analysis Period (min)		Partico	15	\$56588558518		eres erezota	1006.0090000		GEORGIA DE ION	etanti obanitan	NAMES OF TRANSPORT		
c : Critical Lane Group						77.E46							

	ⅉ	-	•	•	4	*	1	Ť	-		1	4.	
Movement 3, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	EBL	EBT	EBR-	-WBL	.WBT	WBR	NBE	NBT.	NBR	SBL	SBT	SBR	
Lane Configurations	آر	†	7	ሻ	र्स	7	ሻ	ተ ተ	7	ካ	ት ቕ		A Secretary State And Secretary State and Secretary State Secretary State Secretary Secre
Ideal Flow (vphpl)	1900	1900	1900	1900	en e	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	12	12	12	12	12	12	11	11	11	
Total Lost time (s)	3.0	3.0.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Util. Factor	1.00	1.00	1.00 0.85	0.95 1.00	0.95 1.00	1.00	1.00	0.95	1.00	1.00	0.95	omenment actions	SCHOOL OF A PROCESS OF THE SECTION OF
Flt Protected	0.95	1.00	1.00	0.95	0.96	0.85 1.00	1.00 0.95	1.00 1.00	0.85° 1.00	1.00	0.99		
Satd ₂ Flow (prot)	1805	1900	1615	1698	1710	1599	1805	3610	1615	0.95 1728	1.00 3424		
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm).	1805		1615	1698	1710	1599	1805	3610	1615	1728	-3424	7.00	
Volume (vph)	25	30	30	600	30	580	30	750	665	550	790	50	
Peak-hour factor, PHF	0.92	0.92	0.92	0.98	0.98	0.98	0.98	0.98	0.98	× 0.98	0.98	0.98	
Adj. Flow (vph)	27	33	33	612	31	592	31	765	679	561	806	51	
RTOR Reduction (vph)	. 0	0	31	0	0	-53	0.	0-	0 -	. 0	4	0.	
Lane Group Flow (vph)	27	33	2	313	330	539	31	765	679	561	853	0	o hour has recently the being
Heavy Vehicles (%)	0%,	0%	0%	A VENCTORCUPO PO PROCES	1%	1%	0%	0%	0%	1%	1%.	1%	
Turn Type	Split		Prot	Split		pm+ov	Prot		pm+ov	Prot			
Protected Phases	. 3	3	3	4	4		- 5.	- 2		1	6		
Permitted Phases Actuated Green, G. (s)	4.2	3 4.2		04.0	6-75-5-0-4	4	TOTAL PROPERTY	2	2	TOTAL TERMINA	6	TO PERSONAL PROPERTY OF	
Effective Green, g (s)	4.2 5.7	4.2 5.7	4.2 5.7	21.8 23.3	21.8 23.3	58.9	3.4	30.5	52.3	37.1	64.2		
Actuated o/C Ratio	0.05	0.05 0.05	0.05	23.3 0.21	23.3 0:21	61.9 0.55	4.9 0.04	32.5 0.29	55.8 0.50	38.6 0.34	66.2 0.59		
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.5	4.5	5.0		
Vehicle Extension (s)	3.0	3.0	3.0		- 3.0		2.0	3.0	3.0		3.0		
Lane Grp Cap (vph)	92	97	82	353	355	926	79	1047	804	595	2022	Control of the Control	1990 (1990) (1990) (1990)
v/s Ratio Prot	0.01	c0.02	0.00		c0.19	0:20	0.02			c0.32			
v/s Ratio Perm	2 NO. 01770 P.	CASCASSA CARCAGOS CON C	, and the action of the	Care Comment of the C	MATERIAL SERVICES CONTRACTOR	0.14	Michigan Maria (1879)	wined are bridge	0.24	ruse war mark		48485115115115484	
v/c Ratio	0.29	0.34	0.02	0.89	0.93	0.58	0.39	0.73	0.84	0.94	0.42		
Uniform Delay, d1	51.3	51.4	50.5	43.1	43.6	16.6	52.2	35.9	24.4	35.7	12.5		THE PARTY OF THE PROPERTY OF T
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		
Incremental Delay, d2	1.8	2.1	0.1	22.4	30.0	0.6	1.2	2.7	8.1	23.3	0.1		
Delay (s) Level of Service	53.0 D	53.5 D	50,6 D	65.5 E	73.6⊱ E	17:2 B	53.3	the opening and the	-32.5	59.0	12.7		
Approach Delay (s)	U .	52.3	U U		-44.5	B	D	D _36.1	С	E	B 31.0		
Approach LOS		. <i>32.</i> 3 D			44.9 D	re, dens		D D			O ILU C		
• •			ONE-PERMITTER	aran aran aran aran aran aran aran aran		Salara da S			TO CHARLES AND THE TOTAL AND A		<u> </u>		
Intersection Summary							2 12 15 14						
HCM Average Control De HCM Volume to Capacity		Tag sangeant a	37.2 -0.87	H(UM Leve	el of Serv	rice	- Terrence de la company	D	Territoria	ran oranan aura	CONTRACTOR HOS	SOURCE THE SERVICE OF
Actuated Cycle Length (s)			-0.8 <i>1</i> 112.1		ım of la	st time (s		4.0	10.0				
Intersection Capacity Utili			112.1 35.3% /			st time (s of Service			12.0		Entropped		
Analysis Period (min)		and the second	15		C FEACI	OI OEIVIL	SEN IN	COMM	L.				
c Critical Lane Group							0,67.7%						
CONTROL OF THE PROPERTY OF THE			MINITER SERVICE							acest castle d			

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Movement : 23 - 34	EBL	EBR	NBL	NBT	SBT	SBR	SBR2-	NEL	NER 🕢		
Lane Configurations	¥			414	*	7 ^f		THE			TO SECURE OF THE PARTY OF THE P
Ideal Flow (vphpl)	1900	1900	1900		1900	1900	1900	1900	1900 -		
Lane Width	12	12	11	11	11	11	11	11	11	ور کی کا نام در	
Total Lost time (s)	3.0			3.0	3:0	≥ 3.0 =		3.0			
Lane Util. Factor	1.00			0.95	1.00	1.00		0.97			SAN
Fit	0.98			1.00/	1.00	0.85		1.00			
Flt Protected	0.96	CHEST IN LANGUAGE SEC	and the same of	1.00	1.00	1.00		0.95	logical management of the money		
Satd, Flow (prot)	1787			3452	1818	1546		3385			
Flt Permitted	0.96			0.85	1.00	1.00	MATRICE SERVICES	0.95	DAN POLICIA LA CANTO NO POLICIA DE PAR	en e	erionization retratoriona
Satd. Flow (perm)	1787		-730	2934	Carried Supplement to	1546		-3385			
Volume (vph)	60	10	15	980	970	430	20	450	0	k ANTONO ZINOSSIZ IN ATTINIS NEEMLA PINIT NAMA TEMESEKSE ASSITESA ATTINIS ATTINIS NEEM PARA	ECO I I I I I I I I I I I I I I I I I I I
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.94	0.94	0.94	0.88	0.88		
Adj. Flow (vph) RTOR Reduction (vph)	62 - 0	10 0	16	1021	1032	457	21	511	0		
Lane Group Flow (vph)	72	υ. 0	0 0	0 1037	0 1032	1 477	0	511	0 0		
Heavy Vehicles (%)	72 0%	- 0%	1%		1032	1%	0 1%	511 - 0%	- 0% -		randon producis
Turn Type	· · · · · · · · · · · · · · · · · · ·	U/037	Perm	1 70	L I /o	Perm	1 /0=	::::::U:/0_:::	U /o : : :		
Protected Phases	- -		Penn	2	6	Penn		e de la companya de	500057000143		
Permitted Phases			2	H. 1 6 1	6	6			office F		
Actuated Green, G (s)	5.5			59.5	59.5	59.5		17.3		Program Christian State Sall State State	
Effective Green, g (s)	7.5	ine is formed	Pana ana	61.5	61.5	61.5		19.3	For Wall Co.		A MARKA MARK
Actuated g/C Ratio	0.08			0.63	0.63	0.63		0.20			
Clearance Time (s)	5.0	and the second	aran recommend	5.0	5.0	5.0	S. D. A. P. P. S. A.	5.0	e and make		9577 35 352
Vehicle Extension (s)	2.5			3.0	3.0	3.0		2.5			
Lane Grp Cap (vph)	138			1854	1149	977		671	oranica de la companio	occurrence transfer induces a constitution in account of the constitution of the constitution and the section	MONTH OF THE PARTY OF THE
v/s Ratio Prot	c0.04				c0:57			c0.15			
v/s Ratio Perm	CONTRACTOR STREET, CONTRACTOR ST	eser est construction a	or ver Verlander Jesland	0.35	. 2442 Series (8/2#B/4#B/0/200)	0.31	an in the removal		SENST POST CARASTAPPESOS	and the second state of the second	
v/c Ratio	0.52			0:56	0.90	0.49		0.76			
Uniform Delay, d1	43.2			10.2	15.2	9.5		36.8			e-resident de la companya del companya del companya de la companya
Progression Factor	1.00			1.00	1.00	LULE CARLES OF THE PARTY OF THE		1.00			
Incremental Delay, d2	2.7	GC-CON-FORMING NAMES	and the reserve of the second	0.4	9.4	0.4		4.9	Service Colored Colored		
Delay (s)	45.9			10.6	24.7.	9.9		41.7		and the second	
Level of Service	D	energy contracting	samen variables	В	С	A	neconstruction is obtain	D	a kapangangan pangan	1975 (PD: 10 trisper Set Set Manageber 1970 Control (1974 (Proposition of the Set Set Set Set Set Set Set Set Set Se	CONTRACTOR OF THE PROPERTY AND ADMINISTRA
Approach Delay (s)	45.9			and the second second	20.0			41.7			
Approach LOS	D			В	С			D			
Intersection Summary							1.3				
HCM Average Control Del	ay		21.0	Н	CM Leve	l of Servi	се		С		
HCM Volume to Capacity			0.84								
Actuated Cycle Length (s)			97.3			t time (s)			9.0	- man and the state of the stat	ne menerale province aperille
Intersection Capacity Utiliz	zation	8 F 18 7	8.1%	i lC	U Level	of Servic	e 🗀 🗀		· D		
Analysis Period (min)		in in the Constitution of the	15	NAMES OF THE PERSON NAMES	granica estructor que como	and the state of t	N/Dermaleure Chileseur in 10	Careagner was particular to the	CONTRACTOR CONTRACTOR OF THE CO	ADMINISTRAÇÃO PROPRIOR NA A PROPRIOR PROPRIOR A PROPRIOR DE PROPRI	Annual Company
c Critical Lane Group	Eight Ca			4000							

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Movement	EBL.	EBT	EBB	CWBL	WBT	WBR	NBL	NBT);	NBR	SBL	SBT.	SBR	
Lane Configurations		4			43			43			43		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900:	1900	1900	1900	1900	
Total Lost time (s)		3.0			3.0			3.0			3.0		A SERVICE STORES TO STORES TO STORE STORES
Lane Util. Factor		1.00			1.00			₹1.00			. 1.00		
Frt	× O ×SUE POWEROUS	0.91	STOREST CONTRACTOR SPECIAL SPE	anne salat-nitalista	0.91	TO LONG TO STREET		1.00	TRANSPORT (SOME CANADA SINCE	ir me merenneman er	1.00	n en como a latina de como no socio	
Fit Protected		0.98			0.98			1.00			1.00		
Satd. Flow (prot)		1704			1702	SOCOS - AC	verrances.	1893		610227070 7 6770	1877	roele grows torgytters	
Flt Permitted		0.93 1614			0.93 1607			0.95			0.97		
Satd. Flow (perm)	< 10	1614	20	10		20	60	1810			1821		100 B 100 C 100 B 100
Volume (vph) Peak-hour factor, PHF	0.69	0.69	20 0.69	0.68	0.68	20 0.68	30 0.86	955 0.86	0.86	20 0.94	935 0.94	10	
Adj. Flow (vph)	0.69	0.69	0.69 29	0.68 15	0.68	29	0.86	0.86 1110	0.86 17	0.94	0.94 395	0.94 11	
RTOR Reduction (vph)	0	27	23 0	0	27	. 23 0	ာ 0	0	0	رے 0	993	, ri 0	
Lane Group Flow (vph)	0.05	17.	0 0	0	17	-0	- 05	1162	0.	0	1027	0	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	
Tum Type	Pem	2487216		Perm	160 E C 1 3		Përm	73.76 A \$13.76	0.70	Perm		170	
Protected Phases		2			2			1			1		
Permitted Phases	2,			2			1			1			
Actuated Green, G (s)	NAMES OF THE PARTY	5.7	(Carante Area (Carante	and a company of the	5.7	Tirra Guist et et 1991	ENGLESSEE H.	71.2	D5-852899-8747499		71.2		
Effective Green, g (s)		6:7			6.7			72.2			72.2		
Actuated g/C Ratio		0.08			0.08			0.85	- 4.452 Karry- av E. 746	The second of the second	0.85	of Linds with the second of th	
Clearance Time (s)		4.0			4.0			4.0			4.0		
Vehicle Extension (s)		3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)		. 127.,	4.4		127			1539			.1549		
v/s Ratio Prot		The Control of the Co	Compagnisms	CONTRODUCE PARTE OF THE	e carrenge of the box		W 8600 A 017/42/19/01	chara-m-cremostranous		e tra control district	and extraordinative and		
v/s Ratio Perm		0.01			c0.01			c0.64			0.56		
v/c Ratio		0.14			0.14		Surger Service	0.75		ander and the	0.66	Marke Transference	
Uniform Delay, d1 Progression Factor		36.4 1.00			36.4 1.00			2.7 1.00			2.2 1.00		
Incremental Delay, d2		0.5	Seconomica	2012112-07	0.5			3.5			2.3		
Delay (s)		36.9	ino biship		36.9			6.1			4.4	1000000	
Level of Service	3 5 6 3 5 3				30.3 D	6514500	9,200,000	. A					
Approach Delay (s)		36.9	Transaction and the		36.9			6.1		**************************************	4.4	ichie hierotek	2.5
Approach LOS		D.			D	- 7.Y	Spare Co	A			A		
Intersection Summary			0.00								V	*******	
HCM Average Control Dela			6.6)	CM Leve	ror Serv	ice		A				
HCM Volume to Capacity ra Actuated Cycle Length (s)	IUO	A. B. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	0.70 84.9	· 6	im of los	4 4160 A TO	V	and the second	6.0			45Y5U72Y4UX3Y	5.40.000000000000
Intersection Capacity Utiliza	etion		78.0%		U Level				. ө.ө D				
Analysis Period (min)		1000	, 0.0 /s 15		CLEVE	OI OEI VII							
c Critical Lane Group		usale.s74		124555550446	ula sa Person	CONTRACTOR				3.6 任何政治表	A PROPERTY.		National State (12)
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Movement	EBL	EBT	EBR.	WBE	WBT	WBR	NBL	NBT	NBR	SBI	≓SBT	SBR	
Lane Configurations	ሻሻ	ß		ሻ	ß		ሻ	^ }		ሻ	† †	7	
Ideal Flow (vphpl)	1900	1900	1900	, 1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	A PERSONAL PROPERTY OF STATE O
Total Lost time (s)	3.0	3:0		3.0	3.0		3.0	3.0		3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00	ALTONIA OF SCHOOL STATES
F成了。	.1.00	0.95		1.00	0.98		1.00	0.97		1.00	1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	12. A 10. A 10. A 10. A 10. A 10.	0.95	1.00	1.00	Car VII. 1917 Mile we you have a sand office \$ \$ \$ 1 A wide \$
Satd: Flow (prot):	3385	1804		1745	1861		1745	3370		1668	- 3336	1599	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00	
Satd: Flow (perm)	3385	-1804		↓1745 i	1861		1745	3370		1668	3336	1599	
Volume (vph)	380	355	180	160	345	55	210	405	120	60	475	375	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	- 0.93	0.93	- 0.82	0.82	0.82	0.90	0.90	0.90	
Adj. Flow (vph)	400	374	189	172	371	59	256	494	146	67	528	417	The state of the s
RTOR Reduction (vph)	0	. 15	0.	0-	5	0	. 0	- 22	0	0	. 0	137	
Lane Group Flow (vph)	400	548	0	172	425	0	256	618	0	67	528	280	
Heavy Vehicles (%)	0%	- 0%	0%	0%	0%	0%	0%	○ 0% ×	0% -	1%	1%	1%	
Tum Type	Prot	er til tred misser Villianten i er far finne		Prot			Prot			Prot		pm+ov	
Protected Phases	7	4		. 3	- 8		5	. 2		. 715	6	7	
Permitted Phases	STORE CONTRACTOR	escenti indicato con metro con	Expression amor-	enne verstere en	materimentes escapes as	TOWNS SATER	THE STREET	MANAGEM TOWNS AND AND THE	NO metal programme and the		and white the Control of the State of the St	6	
Actuated Green, G (s)	16.1	34.1		14.1	32.1		16.9	33.1		6.5	22.7	38.8	
Effective Green, g (s)	18.1	36.1	2479330779737	16.1	34.1	Parishan D. Bar	18.9	35.1	A CONTRACTOR DISCOR	8.5	24.7	42.8	e contra l'Esperit, el Piùsale de les contra de l'Esperit contra de l'accessor de l'ac
Actuated g/C Ratio	0.17	0.33		0.15	0.32		0.18	0.33		0.08	0.23	- 0.40	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	SENETRE OFFICE AND COMPANY	5.0	5.0	5.0	PORTUGATOR TO BUT AND
Vehicle Extension (s)	3.0	- 3.0	35.	3.0	Section of the second section of the section of the second section of the section of the second section of the		. 3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	568	604	POLICE CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONT	261	589	TO THE PROPERTY OF THE	306	1097	49 (A. 1708) (A. 1707)	132	764	679	217-91-97-98-97-97-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-97-98-9
V/s Ratio Prot	+ cu.12±	c0.30		0.10	0.23		c0.15	0:18		0.04	c0.16	MEDICAL MEDICAL STREET, STATE	
v/s Ratio Perm		wa ares				ADNO GARDICONO PADO	INT CONCESSOR	PARTICIPATE PARTIES	Name of the State of	encomment of the second		0.11	SOPTIMATO CONTRACTOR C
v/c Ratio Uniform Delay, d1	0.70	0.91		0.66	-0.72		0.84	0.56		0.51	0.69	0.41	
	42.3 1.00	34.2	mentari da	43.3	32.6	Tigation (1150)	43.0	30.0	aur ceisig er	47.6	38.1	23.4	STREET, AND STREET
Progression Factor Incremental Delay, d2	4.0	1,00 17.3	tan laik	1.00 5.9	1.00° 4.4		1.00	1.00		1.00	1.00	1.00	
Delay (s)	46.3	17.3 51.5		5.9 49.2	4.4 37.0		17.7 60.6	0.7 30.7	ROPENSON OF	3.1 50.7	2.7	0.4 23.8	TO THE PERSON NAMED OF THE PER
Level of Service	40.0 D	or.o. D		5.49.2 D	ະ ວ <i>າ.</i> ບ D		ου.ο Ε	. 30.7 C			40.8	the market of the state of the state of	
Approach Delay (s)		. 49.3			40.5	Y 27000000		39.2		D	D 34.4	С	TRACE OF CONTRACTOR OF
Approach LOS	AND BUILDING	43.9 D						ာဗ.Z D			34.4 C		
		U			U			D			C		
Intersection Summary	Market Att Service West Service		V. 2		10.5	1744.4							
HCM Average Control De			40.9	H	CM Level	of Serv	ice		Đ				
HCM Volume to Capacity			0.78				7. c						
Actuated Cycle Length (s)			107.8	Sı	ım of los	t time (s)		9.0				- Carried Carried Carried Carried Control
Intersection Capacity Utili	zation	1	6.6%	· · · ic	U Level o	of Servic	ie .		D		100		
Analysis Period (min)			15										The second of th
c - Critical Lane Group										0.00			

	À	-		*	-	*	1	Ť	1	-	1	1	
Movement	EBL	EBT	EBR	WBL.	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		41	7		€\$	A CONTRACTOR OF THE CONTRACTOR	ሻ	ተ ጉ			ৰক	SH SELECTION SHOWS	
Ideal Flow (vphpl)	:1900	1900	1900.	≟ 190 0		1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	14	16	12	12	12	11	11	12	12	11	12	AND THE PROPERTY OF THE PROPERTY AND
Total Lost time (s)		3.0	3.0		- 3.0 ⊹		3.0	3.0			∹3.0		
Lane Util. Factor		1.00	1.00		1.00	7.	1.00	0.95			0.95		A STATE OF THE PARTY OF THE PAR
Frt. 1. 150		1.00	0.85		0.96		1.00	1.00			0.98		
Flt Protected		0.96	1.00		0.99		0.95	1.00			1.00		The state of the s
Said, Flow (prot)		- 1918	1812		1801		1728	3445			3395		
Flt Permitted	i I Daarous British dasmorans en inches	0.76	1.00	ar - Talanta (Mark), karangan karalanta at ar	0.91		0.95	1.00			0.95		
Satd_Flow (perm)		1531	1812		1656		1728 .	3445		2895	3230		
Volume (vph)	60	5	605	10	15	10	550	790	15	5	775	100	
Peak-hour factor, PHF 🕾	0.93	- 0.93	0.93	0.73	0.73	0.73	0.95	0.95	0.95	0.92	0.92	0.92	
Adj. Flow (vph)	65	5	651	14	21	14	579	832	16	5	842	109	
RTOR Reduction (vph)	0.	. 0	3	0.	13	0	0	111	0 //	0:-	. 9	0	
Lane Group Flow (vph)	0	70	648	0	36	0	579	847	0	0	947	0	
Heavy Vehicles (%)	1%	1%	5.1%	0%.	- 0%	0%	Spirit minute State of The Sales	1%	. 1% .	STREET, STREET, STREET,	1%	. 1% :	
Turn Type	Perm		pm+ov	Perm	MARINE MINISTER DELIVERY OF	ener Tiller mellinga b. von der riner	Prot	210-00-00-0		Perm			
Protected Phases		8	. 5	eceni.	. 4		5	2			6		15-10
Permitted Phases	8	8	8	4	4	regionic katalani Hota	0019999-1187107879799-1198	2	AND DESCRIPTION OF THE PARTY AND ADDRESS.	6	6	ato and attended interception of the	
Actuated Green; G (s)		7.8	48.7		7.8	-91)	40.9	74.2			29,3		
Effective Green, g (s)	OTO STREET MERCLESES	8.8	50.7	ACCESSORED CONTROL	8.8		41.9	75.2		SANDO OFFICERS	30.3	CONTRACTOR SELECTIONS	STANDAR AND SHE STANDARDS
Actuated g/C Ratio		0.10	0.56	Section in	0.10		0.47	0.84			0.34		
Clearance Time (s)	CONTRACTOR	4.0	4.0		4.0		4.0	4.0			4.0	SERVER SECURE ASSESSMENT	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0		
Lane Grp Cap (vph)	eccessores contr	150	1081		162	eder Vilgelies	804	2878	Proposition of the Proposition	Honoren er annere	1087	DIE CHEMINISTER	CON-CONSTRUCTION OF A STATE OF THE STATE OF
v/s Ratio Prot	A. A. A.		c0.28				c0.34	0.25					
v/s Ratio Perm	No videopres	0.05	80.0	ACREE CANTON	0.02	219500705050	~~~	****			c0.29	90364786-4714686476-60	DEST-SATECOMES PROBLEM TOO
v/c Patio Uniform Delay, d1		0.47	∄0.60 ∜ 13.0		0.22		0.72	0.29			0.87		
,,	TPSTERVEN	38.4 1.00	1.00		37.5 1.00		19.3 0.92	1.6 -0.70		Secure de Co	28.0		CHIRLET CHIRCONS
Progression Factor Incremental Delay, d2		2.3	0.9		0.7		2.0	0.70			1.00	Albertan	
Delay (s)		∠.3 ≗40.7	13.9		38.2	autora e e	2.0 -19.8	1.3	28 2 3 E 2 C 2 C		7.8 35.8		
Level of Service		до.7 D	13.9 B		oo.z D		19.0 B	л.о А			ာာ.တ D		
Approach Delay (s)		165			-38 2 ·			8.8			.35.8		
Approach LOS		В	CANADA CAL	New York	D D	S E BOOK 1		A			D		
								ana ang panggana an	e obrzanowania z ne koże	74.147.55 Y 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	************	- Anna version and the state of	
Intersection Summary										1			
HCM Average Control Del		578-54 22 8-58-555	19.2	H(massassassassassassassassassassassassass	CM Leve	l of Sen	rice		В	ON ASTERNACIONALES	enantine ver	MROBEROSAMASTORI	CONTRACTOR AND CONTRA
HCM Volume to Capacity			0.77				Line i sen						
Actuated Cycle Length (s)		raenie veren	90.0		ım of los				9.0		ere er	Prof. Charge Laborator	SERVICE SERVICE SERVICE
Intersection Capacity Utili:	zation		77.2%	, SAIC	U Level	or Servi	ce		D.		(SANO)		
Analysis Period (min)	C. 20071 0 -578160	ETTALECTOR	15	erangerana.				SOME FROM CHARGE			napang atau		
c Critical Lane Group			Company of the			经制度证据	Taria.						经第二次编 数

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Movement	EBL	EBTS	EBR.	WBL	WBT	WBR.	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	A	7	ሻ	र्स	75	ሻ	ተተ	7	7	₹β		
ldeal Flow (vphpl)	1900	1900%	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 -	
Lane Width	11	11	11	11	11	11	11	11	11	11	11	12	The second secon
Total Lost time (s)	. 3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95		
Fit 2	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1745	1837	1561	1641	1653	1546	1745	3490	1561	1728	3424.		
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	W.Charleston Control of The Market Control	
Satd: Flow (perm)	1745	1837	1561	1641	1653	1546	1745	3490	1561	1728	3424		
Volume (vph)	25	30	30	600	30	580	30	750	665	550	790	50	
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	440
Adj. Flow (vph)	27	33	33	625	31	604	32	789	700	579	832	53	AND THE RESERVE OF THE PARTY OF
RTOR Reduction (vph)	0	0	. 24	· 0	0	.32	0.	0	80	. 0	7	0	
Lane Group Flow (vph)	27	33	9	320	336	572	32	789	620	579	878	0	
Heavy Vehicles (%)	0%	0%:	- 0%	CALIFORNIA CALLAND	1%:	.,1%	0%	- 0%	0%	1%	1%	1%	
Turn Type	Split		pt+ov	Split		pt+ov	Prot		pt+ov	Prot			
Protected Phases	3	-3	35	4	4	41	5.	2	24	1.	6		
Permitted Phases		3		manuscriptor and the second			monanter minute all niverbrains. A	2	THE THE PHONE WAS A SERVED AND THE	Comment of the Street Comments	6	DEMONSTRATION OF A STREET	CONTRACTOR SENSOR PROPERTY AND ADMINISTRATION OF THE SENSOR PROPERTY.
Actuated Green, G (s)	2.4	2.4	22.8	20.4	20.4	55.0	16.4	20.6	41.0	30.6	. 34.8		
Effective Green, g (s)	3.4	3.4	23.8	21.4	21.4	56.0	17.4	21.6	43.0	31.6	35.8	Maria and and an and an and an and an	PROFUTER PROVINCE AND
Actuated g/C Ratio	0.04	0.04	0.26	0.24	0.24	0.62	0.19	0.24	0.48	0.35	0.40		
Clearance Time (s)	4.0	4.0	ni e rezistickem kielikei keis	4.0	4.0	w10.6-5-48b3b0.67##/3.4	4.0	4.0	on the transfer of the second	4.0	4.0	THE SHOOT THE PART OF THE PROPERTY.	Marketin allegation and the second a
Vehicle Extension (s)		3.0		CONTRACTOR CONTRACTOR	3.0		CALL SECTION SHARE THE OW	Care Management			3.0	a de la grada	
Lane Grp Cap (vph)	66	69	413	390	393	962	337	838	746	607	1362	METERSKOPKA SINCEMATERA	NATIONAL MANAGEMENT AND
v/s Ratio Prot	0.02	c0.02	0.01	0.19	c0.20	0.37	0.02	c0.23	0.40	c0.34	c0.26		
v/s Ratio Perm		60 de 200 de		BARNESAN ETIKOSISI KA	00000000000000000000000000000000000000		*************	overname ente		· erezerzezen		POSTABLE CONTRACTOR	ACTENTIAL CONTRACTOR ALL DESE
v/c Hatio	0.41	0.48	0.02	A Land of the Control	0.85	Actor and the senter his to be	0.09	0.94	.0.83	0.95	0.64		
Uniform Delay, d1	42.3	42.4	24.5	32.5	32.8	10.2	29.8	33.6	20.4	28.5	21.9	W GOTTO CHOO	
Progression Factor	1.00	1.00	1.00	0.98	0.98	0.88	0.91	0.88	1.05	0:75	The same of the same of	30.00	
Incremental Delay, d2	4.1	5.1	0.0	7.4	9.7	0.5	0.1	17.1	6.5	18.8	0.7	erenamentyseem	TOTOTOTO BEAUTICADO DE LA COMPOSITION DEL COMPOSITION DE LA COMPOS
Delay (s)	46.4	47.6	24.5	39.2	41.7	9.5	27.2		27.8	40.0	18:3		
Level of Service	D	D	С	D	D - 25.6	A	C	D 37.5	С	D	B 26.9		
Approach Delay (s)		-39. 1	alusius		STEP TO THE STATE OF T			್ರು 3/,೨ _% D		Softell	_26.9 С		
Approach LOS		D			·C			D			C		·
Intersection Summary				Arthur (1)									
HCM Average Control Del		nannan en en en en en en	30.5	Н	CM Leve	el of Sen	/ice	engradago a concentral.	C	economica de popular en e	and group of the con-	SASSANI CESTO STORESTONICO	Name (Control of the Control of the
HCM Volume to Capacity	ratio		0.88										
Actuated Cycle Length (s)	BOOK BOOK TO COMP	and the second second	90.0			st time (s		CONTRACTOR AND A	9.0		SECTION APPROXIMENT		Company of the Company of the Party of the P
Intersection Capacity Utiliz	ration		85,3%	ie i IC	U Level	of Servi	çe .	100	E				
Analysis Period (min)	er outstand kan artist	NATURE STREET	15	e Christians	ngari kalang ngaran	nt filmer begelt beden	orement etterno			ecore serve			ANTERNACIONE TRANSPORTANTO
c. Critical Lane Group			nerece.										

	ⅉ	*	4	Ť	1		4	*	1	
Movement &	■ EBL	FBR	NBL	NBT	SBT	SBR	SBR2	NELS	NER	
Lane Configurations	W	MARKET CONSISTS AND A	A PARTY NAMES AND ADDRESS OF THE	41>	ት ጉ	NO.	Commission of the Commission o	ካጒ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	11	11	12	12	12	12	在一个人,我们就是一个人,我们就是一个人,我们就是一个人的,我们就是一个人的人的人,我们就是一个人的人的人,我们就是一个人的人的人,我们就是一个人的人的人,不是
Total Lost time (s)	3.0%			3.0	3.0			3.0		
Lane Util. Factor	1.00			0.95	0.95			0.97		
Fit.	0.98			1.00	0.95			1.00		
Flt Protected	0.96	ADSTRUCTURE VALUE	y dok arrangin mweneng	1.00	1.00	ELEVISION DANCE AND DE	a dia 1900 kaominina	0.95		
Satd. Flow (prot):	1787			3452	3291			3502		
Fit Permitted	0.96			0.92	1.00			0.95		
Satd: Flow (perm)	1787			3175	3291	V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-		3502		
Volume (vph)	60	10	15	980	970	430	20 0.95	450	0	
Peak-hour factor, PHF Adj. Flow (vph)	0.96 62	.0.96 10	0.96 16	0.96 1021	0.95 1021	0.95 453	0.95 21	511 511	0.88 0	
RTOR Reduction (vph)	02		10 0:	1021	THE THE PERSON OF THE PERSON	453 6 0	∠1 0	511 - 0=	0 0	
Lane Group Flow (vph)	72	0	0	1037	1494	0	0	511	0	
Heavy Vehicles (%)	0%			1007		1%	1%	0%	- 0%	
Tum Type		A-11-0-16-0-16-1	Perm	AND THE STREET	gradus Brandson	Paration Control			**************************************	
Protected Phases	4			2	6	S10714-1-7		9		
Permitted Phases	o a la compania de la comp		2	CALCALLY NO CONTROL	6		ed to Singuistra	Mark Control of the Albert	2007/09/2015	
Actuated Green, G (s)	6.1			55.4	55.4			16.5		
Effective Green, g (s)	7.1	CTS************************************	NORAL ACTION (2007) 8400-	56.4	56.4	NO. SUPPLEMENT OF THE OWNER.	Provincial victor and a ser	17.5	2000 CAN BELLEVILLE SAF	von 2004 eta 1942-ben 1940 eta 1940 (1950 eta 1940 eta 1950 eta 1950 eta 1950 eta 1950 eta 1950 eta 1950 eta 1 Ora 2004 eta 1950 eta
Actuated g/C Ratio	60.08			0.63	- 0.63			0.19-		
Clearance Time (s)	4.0		THE PARTY OF THE P	4.0	4.0			4.0	-	
Vehicle Extension (s) = :	2.0			2.0	2.0			2.0		
Lane Grp Cap (vph)	141		-	1990	2062		annone en entre en en	681		
v/s Ratio Prot	c0.04				c0.45			c0.15		
v/s Ratio Perm			estrationske	0.33		CNOSTOCKSEZENCE	ewit Danke	TERRESPONDE	005000000000000	
v/c Patio	0.51			0.52	0.72			0.75		
Uniform Delay, d1 Progression Factor	39.8 .1.00	475474		9.3 1.00	11.5 0.19		PERSONAL PROPERTY OF THE PERSONAL PROPERTY OF THE PERSONAL PROPERTY OF THE PERSONAL PROPERTY OF THE PERSONAL P	34.2 1.00	***********	
Incremental Delay, d2	1.3			1.0	0.8			4.1		
Delay (s)	41.1			10.3	3.0			38,3		
Level of Service	D		and the site	В	A		THE STATE OF	D		
Approach Delay (s)	41.1	17.7		10.3	3.0	e de de de		38.3		
Approach LOS	D .	COULDS STREET STREET	receipt a voice co	В	Α	5414-668098. GRANDS	neranen an arm	D	ATT - BYTT IN TO STATE OF THE STATE OF THE	
Intersection Summary										
HCM Average Control Del	,		12.1	H	CM Leve	of Serv	ice		В	
HEM Volume to Capacity			0.71				Fire			
Actuated Cycle Length (s)		nimajanjenemenom **	90.0		um of los			arang kalangga dalaman arang san	9.0	
Intersection Capacity Utiliz	zation	:	9.0%	, IC	U Level	of Service	e		C:	
Analysis Period (min)	regresione	randa ana ana a	15	55005500500000000000000000000000000000	CONTRACTOR CONTRACTOR	2005/98/2005	SOSSONIA LA CO	and the state of the state of	ye engelengenger der	
c Critical Lane Group								PARTIE N		

	>	-	A	1	4	~	1	T		-	+	4	•
Movement_ &	EBL	EBT.	EBR.	WBE	WBT.	WBR.	NBL	NBT	NBR	SBL.	SBT	SBR	
Lane Configurations		43			4			€}			€}>		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900 🕾	1900	1900	1900	
Total Lost time (s)		3.0	W		3.0			3.0			3.0		
Lane Util, Factor		1.00	1000		1.00		7.	1.00			. 1.00 -		
Frt	epacatacone manares en	0.91	NO NECESSIA MINORIA	72423027077544./2 45 5	0.91	Tracos and characters	NATIONAL PROPERTY AND A PROPERTY AND	1.00	eratorogen motoro		1.00	SECURIC PROTEIN NEW WORLD FROM	
FIt Protected		0.98			0.98			1.00			1.00		
Satd. Flow (prot)	NJEDISEMARKINE.	1704			1702	DECEMBER ANTIFECTURE		1893			1877		
Flt Permitted		0.93	. 45.25		0.93			0.95			0.97 1821		
Satd. Flow (perm)		1614		a suprae some some	1607		ion	1810 -		0.00		4	
Volume (vph)	10	1	20	10	0.00	20	30	955	15	20	935	10	
Peak-hour factor, PHF	0.69	0.69	0.69	0.68 15	0.68 0	0.68 29	0.86 35	0.86 1110	0.86	0.94 21	0.94 995	0.94 11	
Adj. Flow (vph) RTOR Reduction (vph)	14. 0	1 27	29 0	15 0	27	29 0	ာ 0	111U 0	17 0	∠ I 0	993	0	
Lane Group Flow (vph)	· 0	17	. 0		17	0	-	•	0	0	1027	0	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	
Turn Type	Perm			Perm:	11 (1 A)		Pem			Pem:			
Protected Phases	and-water and a second	2		20-mail:220-40-40-40-4	2	LINE DOWN TO THE POST OF		1	South Control of the		1	20.00/10/00 TO	ALCOCATOR ACCUSES SECURE ACCUSES SECURITY OF THE
Permitted Phases	2			∵ 2			1			1			
Actuated Green, G (s)		5.7			5.7			71.2			71.2		
Effective Green, g (s)		6.7			6.7			72.2			72.2		
Actuated g/C Ratio	entende en	0.08		even-evernous removes	80.0	O-SPECIAL DESCRIPTION OF THE PROPERTY OF THE P	ole tuer lateral entre fire that	0.85	NATIONAL PROPERTY AND	TOTAL WE STRONG DOT	0.85	ward (Papelly Contribution	Article (Ministra Institutementary contraphysics
Clearance Time (s)	(4. july 194	4.0			.4.0			4.0			4.0		
Vehicle Extension (s)	errin mar extri 15-ce	3.0	and the second second		3.0	racers and a second	Contract Con	3.0	10 15 cm 10 00 00 00 00 00 00 00 00 00 00 00 00	son comments and only	3.0	ra Vinda-frida di Kupana	NAMES OF THE PERSON NAMES OF T
Lane Grp Cap (vph)		127			127			1539.	40500		1549		
v/s Ratio Prot	Markanis (Markanis		PERSON ENGEN			AND SOUTH TRANSPORT		- 20 6 T			2 6 FA	on continuo annas	
v/s Ratio Perm	20872	0.01			c0.01		100	c0.64			0.56		2.32.00985
v/c Ratio Uniform Delay; d1		0.14 36.4		11.00	0.14			0.75 2.7			0.66		(5.7353579T) 3.5 533
Progression Factor		1.00			1.00			1.00			1.00		
Incremental Delay, d2		0.5		Tealer	0.5			3.5	STREET, DEE		2.3		
Delay (s)	Paring and the	36.9		12026-0-2185	36.9			6.1			4.4		
Level of Service		D.D			D.			A		945 B.W.	A		
Approach Delay (s)		36.9	96.040.000000000000000000000000000000000	e Same Division Medicine	36.9	HANDELLANTER	bolinda Selve Seri	6.1			4.4		
Approach LOS		D.			D			Ā			. A		
Intersection Summary			TO SECURITION					** ***					
HCM Average Control Del	av	****	6.6	Н	CM Leve	el of Serv	rice	446	A	8.0	Section of the sectio		
HCM Volume to Capacity		race cardinal and	0.70	uniterativa	ous substitution and the	eniolenieri kai	er Bussellinisteri	ASSAPAGE TREPAND	nodusus AFCEPSE	erwickenstablik	14.45 (1.15	upadagon Sandida AS	
Actuated Cycle Length (s)			84.9	S	um of to	st time (s) :		46.0°				
Intersection Capacity Utiliz		um other company	78.0%		U Level			2000年6月日 日本	D		entel Segretal Anti-	ur va ettiriti yedanisiliki	er-er serrivers desir iz Mili
Analysis Period (min)			15				12.51						
c Critical Lane Group													A STATE OF THE PROPERTY OF THE

	<i>▶</i>	→	*	V	◄	*		Ť		-	1	4	
Movement	a EBE	EBT	EBR	WBL	WBT.	WBR	NBE	NBT •	NBR.	SBL	SBT.	SBR	
Lane Configurations	ሻሻ	ĵ»		7	1⇒		Ĭ,	∱ β		75	ተተ	7	
Ideal Flow (vphpl)	1900		1900		1900	1900	1900	1900	1900		1900	1900	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00	mate and service resident	1.00	1.00		1.00	0.95	personans da ser est e	1.00	0.95	1.00	ANTESTE ANTEST A
Frigorous	1.00	0.95		1.00	0.98		1.00	0.97		1.00	1.00	0.85	
Fit Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00	errone and the second second
Satd: Flow (prot)	3385	1804		1745	1861		1745	3370		1668.	3336	1599	
Flt Permitted	0.95	1.00	ELFT ON THE ONE TERM TO BE	0.95	1.00	a e marce a programma e	0.95	1.00	NA SANCTON MARKET MET OF	0.95	1.00	1.00	-5772000 Portfolkolová serveszet kölüsi
Satd. Flow (perm)	3385	1804		1745	1861	为达斯	1745	The second second second		1668	3336	1599	
Volume (vph)	380	355	180	160	345	55	210	405	120	60	475	375	
Peak-hour factor, PHF	- 0.95	0.95	0.95	0.93	0.93	0.93	0.82	0.82	0.82	0.90	0.90	. 4 0. 90 ⊈	
Adj. Flow (vph)	400	374	189	172	371	59	256	494	146	67	528	417	
RTOR Reduction (vph)	0	23	0/	$\cdot \cdot \cdot \cdot 0$:	- 8	0.7	- 0	-33	0.	0	0	A TOTAL CONTRACTOR	
Lane Group Flow (vph)	400	540	0	172	422	0	256	607	0	67	528	272	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	: 0%	0%.	- 0%	√.0%	1%	1%	1%	
Turn Type	Prot			Prot			Prot			Prot		pm+ov	
Protected Phases	7	4		3	- 8		. 5	2		1	6	7	
Permitted Phases												6	
Actuated Green, G (s)	10.0	24.5∵		- 8.0	22.5		11.9	21.9		4.7	14.7	24.7	
Effective Green, g (s)	12.0	26.5		10.0	24.5		13.9	23.9		6.7	16.7	28.7	Market Transport of the Company of t
Actuated g/C Ratio	0.15	0.34		0.13	0.31		0.18	0.30		0.08	0.21	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0	and Showed Stein, Tar Straightful 1994	5.0	5.0	nomany encommendation	5.0	5.0	5.0	architectura i contrato de la contrato del la contrato de la contr
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	Check 200 (800 F) 200 (800 C) 200 (800 C)	100
Lane Grp Cap (vph)	514	604		221	576		307	1018		141	704	641	
v/s Ratio Prot	c0.12	c0.30		0.10	0.23		c0.15.	0.18		0.04	c0:16	0.06	
v/s Ratio Perm							THE THEORY OF VALUE OF		enterproperty of the state of t	. CONTRACTOR OF THE CONTRACTOR OF THE	in John was the William A come School (A)	0.11	Name of the Control o
v/c Ratio	0.78	0.89		0:78	0.73		0.83	0.60		0.48	0.75	0.42	
Uniform Delay, d1	32.3	25.0	TO STORE A CIT INAVESTIGATI	33.5	24.4		31.5	23.5		34.5	29.2	19.0	EXXX-4ve Venical March 1891 in the control of
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	7.3	15.6	· DRYSTRADAMENT	15.8	4.8	ion socionitensi kener	17.4	0.9	PROTECTION WAS COLD	2.5	4.5	0.5	
Delay (s)	39.6	40.5		49.2	29.2		48.9:	24.4		37.0	: 33.7	19.4	100
Level of Service	D	D	NOT CONTINUE THE	D	C	entroprintentation of	D	C	PAGAGRAPHO POR CONTRACTO	D	С	В	
Approach Delay (s)		40.1			34.9		and the last of th	31.4			28.1		
Approach LOS		D			С			С			С		
Intersection Summary ,			(4)										
HCM Average Control Del	ay		33.5	H	CM Leve	of Serv	ice		С				
HCM Volume to Capacity	ratio		0.80										
Actuated Cycle Length (s)			79.1	St	ım of los	t time (s)		9.0				
Intersection Capacity Utili.	zation		76.6%	ic ic	U Level	of Servic	e i		D :				
Analysis Period (min)			15										
c - Critical Lane Group													

	Þ	>	*	1	—	*	4	1	1	1	1	1	
Movement	EBL	EBI	EBR#	WBL	WBT	WBR	# NBL	NBT	NBR.	SBL	SBT	SBR	
Lane Configurations		43	ATTENDED TO STATE OF THE STATE		ĄÎ	7.7		र्सके		ሻ	ĥ		
Ideat Flow (vphpl)	1900.	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	
Lane Width	12	12	12	12	12	14	12	11	12	11	11	12	
Total Lost time (s)	V 19	3.0			3.0	3.0		3.0		3.0	3.0		
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00		
Frt		0.93			1.00	0.85		- 0.95		1.00	÷ 1.00 °		
Fit Protected		0.98			0.95	1.00		1.00		0.95	1.00		
Satd: Flow (prot)		1729			1805	1723	1,5	3300		1728	1818.		
Flt Permitted	TO AN ARTHUR THE STATE OF THE S	0.91	eron tillranierilles a discer	· San Carlon Carlo	0.76	1.00	eren erre er er er er er	0.95	work for the year over the property	0.10	1.00	energy and the control of the contro	
Satd. Flow (perm)		1607		7. U.Y	1435	A CALL SAN CONTRACTOR OF THE		3150	1000	173	1818		
Volume (vph)	2	0	2	446	0	205	2	795	450	235	770	2	
Peak-hour factor, PHF	0.95	0.95	∛ 0.95⊈	0.95	0.95	0.95	0.95	0.95	0.95	. 0.96	0.96	0.96	
Adj. Flow (vph)	2	0	2	469	0	216	2	837	474	245	802	2	
RTOR Reduction (vph)	. ≯ 3 0 √	10	0	0	: 0:	. 42	0.	86	0	0	. 0	$z \sim 0$.	
Lane Group Flow (vph)	0	3	0	0	469	174	0	1227	0	245	804	0	
Heavy Vehicles (%).	: 20%	0%	4.0%	0%	0%	0%;	- 0%	* 0%	ONE TO PLOT DESIGNATION OF THE PARTY OF THE	1%	1%	1%	
Turn Type	Perm		a a nama di simono di differente di simono di simo	Perm		om+ov	Perm			pm+pt	DATES TO ST. MARKET ST. TO		valar, «Vira Vira» inmediatoring investoring areas and inves
Protected Phases		4			4	SECTION SECTION SECTION		2		1	6.		
Permitted Phases	4	MARIN ANT PATRICULAR	energia in servicio de la companio	4	oseannenen erars	4	2		and the state of the second	6	NESS CONTRACTOR	maranen aktoren eta 1970-a	nuselium controllum nenguaran galapat t
Actuated Green, G (s)		30.7			30.7	40.0		38.0	er.	51.3	51.3		
Effective Green, g (s)		31.7	emperature entrance	00-50-50-50-50-50-50-50-50-50-50-50-50-5	31.7	42.0		39.0		52.3	52.3	MERCHANISM ESTATA	Verice screening
Actuated g/C Ratio		0.35			0.35	0.47		0.43		0.58	0.58		
Clearance Time (s)	SECONDO CONTRARADO	4.0			4.0	4.0	wadoanaara	4.0	a en	4.0	4.0		
Vehicle Extension (s)		3.0			3.0	(3.0%		3.0		(3.0)	3.0	ar serve	10.00
Lane Grp Cap (vph)	THE STATE OF THE PARTY SEE	566	PARTITION AND AND AND AND AND AND AND AND AND AN		505	862	TV S MENSON PERSONS	1365	enementaries	278	1056		
v/s Ratio Prot						0.02	110273			c0.10	0.44		
v/s Ratio Perm	ne operate de la	0.00			c0.33 0.93	0.08 - 0.20	orania de la composición della	0.39 0.90		c0.41	0.76	********	
v/c Ratio		0.00			Contract of the Contract of th	ent attractions		Link as could define		23.5	0./6 ± 14.2		
Uniform Delay, d1	TANK TERM	18.9			28.1 1.00	14.1 1.00		23.7 1.03		23.5 1.00	14.2		
Progression Factor		1.00 4 0.0			23.4	0.1		4.9	ere com	26.1	3.3		
Incremental Delay, d2		18.9			23.4 51.5	14.3	* * * * * * * * * * * * * * * * * * *	29.3		49.6			
Delay (s) Level of Service	Target Service	10.5 B	etisteks.		D D	н- 3 В		C		. 19. 9.	В		
Approach Delay (s)	MAGESTA ST	. 18.9			39.7			29.3			25.0		
Approach LOS		, цо. з В	in Walk		D			C			C		
					<i>D</i>		* har annual transmit to the same to the		BOTH SHOW ON THE PROPERTY	יישעונדייאר רייל עעשרו			
Intersection Summary	ACT AND ADDRESS OF THE PARTY OF	(4.00) (1.00)			30.00			125					
HCM Average Control Del			30.1	Н	CM Leve	el of Ser	vice	No. 1001-000 Specialist Science	С	ene een uit too taken valtaa	n, w. namana dan dan dan dan kecaman		
HCM Volume to Capacity			0.89			azadi.						671	
Actuated Cycle Length (s)		em herringene men	90.0		um of lo				6.0	- -	SERVAS NOT DESQUARED	ENNINE CONTRACTOR	
Intersection Capacity Utili	zation	1	18:5% ÷	10	CU Level	of Servi	ce 👾		H				
Analysis Period (min)		TREE BOOK SWIFT	15	entanga ang ang ang ang ang ang ang ang ang	negalette et een	andresser are	90000000000000000000000000000000000000			SECOND CONTRACTOR	erangang reproposition	en e	CO DESIGNATION OF THE STATE OF
c Critical Lane Group		SPENCE.											

	•	1	Ť	<i>></i>	-	↓
Movement	WBL	WBR:	NBT	≬NBR	SBL.	SBT _{REE}
Lane Configurations	N/	Williams Income	∱ĵ≽	*************		4
Sign Control	Stop		Free			Free
Grade	0%		0%		entre marketan	
Volume (veh/h)	5.	5	890	10	10	910
Peak Hour Factor	0.83	0.83	0.95 - 937	0.95	0.99	0.99
Hourly flow rate (vph) Pedestrians	6,	6	937	,11	10	919
Lane Width (ft)	METERS OF					
Walking Speed (ft/s)	G-4SCHOOLS					
Percent Blockage		1775				
Right turn flare (veh)		GERTAGET PRO			498,4446	
Median type	None					
Median storage veh)	electrical desirable and the second	CONTROL DE LA CONTROL DE L La control de la control d	PARTIE CONTRACTOR DE TRACTOR CON	Control of the Contro		
Upstream signal (ft)						516
pX, platoon unblocked	0.50				****	
vC, conflicting volume	1881	474			947	
vC1, stage 1 conf vol		NO. AND THE PROPERTY OF THE PARTY OF	ar the control of the	TO SHARE THE PARTY OF THE PARTY	at menings recognised the	
vC2, stage 2 conf vol	lana saras					
vCu, unblocked vol	2754	474	Denomination of the section		947	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s) tF (s)	3.5	3.3		NS GEORGE	22	
p0 queue free %	25	99			<i>≧.</i> 2	
cM capacity (veh/h)		542			726	
TO AND THE PROPERTY OF THE PARTY OF THE PART						
Direction, Lane #	WB 1	NB 1	NB 2	SB,1		
Volume Total	12	625	323	929		
Volume Left	6	0	0	10		
Volume Right cSH	6	1700	alle of the Control of the	700		
Volume to Capacity	16 - 0.76	1700 .0.37	1700 0.19	726 -0.01		
Queue Length 95th (ft)	0.76 47	. u.s. <i>F.</i>	0.19	. U.U I 1		
Control Delay (s)		0.0		0.4		
Lane LOS	F	9.00		A		
Approach Delay (s)	460.0×	:00°	14.6	0.4	10.5	
Approach LOS	F	PARTITION			and the second	
		STATE OF THE STATE OF				
Intersection Summary		36836 4	2.1		en e	
Average Delay Intersection Capacity Utili	Lanas s		3. 1 65.9%		n i zaze	of Service
Analysis Period (min)	zauor	-125	05.9% 15	1000	u Level	OF OPERVICE:
Anaiyolo i ellou (IIIIII)			10			
		346237		in Georgia		

	-	-	T		*	₩	
Movement	. WBL	WBR.	NBT:	NBR	SBL	SBT	
Lane Configurations	ħ		ß		ሻ	*	
Sign Control Grade	Stop. 0%		Free 0%		1.50	Free 0%	
Volume (veh/h)	30	15	795	20.	5		
Peak Hour Factor	0.56	0.56	0.92	0.92	0.95	0.95	
Hourly flow rate (vph)	54	. 27	864	- 22	5.	837	
Pedestrians	TATANS STORESTORES	estrumente de composito de la	NO STATE OF STREET	The contract of the contract o	vilanio de la compositiona della compositiona della compositiona della compositiona della compositiona della	v -b Pathers consumers.	
Lane Width (ft)					525	tradition.	
Walking Speed (ft/s) Percent Blockage							
Right turn flare (veh)				Section of the	Bienerst		
Median type	None	e en w					
Median storage veh)	and the control of th			OR PORT OF THE PERSON OF	TO A LOW CONTROL OF THE PARTY O	- CONTRACTOR OF THE CONTRACTOR	
Upstream signal (ft)							
pX, platoon unblocked	4706	0.75			000		
vC, conflicting volume : vC1, stage 1 conf vol	1722	8/5			886		
vC2, stage 2 conf vol					45.6		
vCu, unblocked vol	1722	875			886		
tC, single (s)	6.4	6.2			4:1		
tC, 2 stage (s)	or or Linux successful to the		MORE CONTRACT OF THE PARTY OF				
tF(s)	3.5	3.3			2.2		
p0 queue free % cM capacity (veh/h)	46 - 99	92 351			99 768		
CONTROL OF THE PARTY OF THE PAR		delig Theres	Artsur,		/08		
Direction, Lane #	The state of the s	NB,12	SB 1	SB 2	A. A.C.		
Volume Total	INTO THE PROPERTY OF THE	886	5	837			
Volume Left Volume Right	54 27	0 22	5 0	0			
cSH	130	1700	768	1700	N 65 42 62		
Volume to Capacity		0.52	0.01				
Queue Length 95th (ft)	80	0	1	0	and a second second second second	Zell Alemento de de la composition della composi	
Control Delay (s):	70.0	0.0	. 9.7	0.0			
Lane LOS	F		A	eran Besselven	encongraphen and a	ANTENNA PER PER PER	
Approach Delay (s)	. 70.0 F	0.0	0.1				
Approach LOS	r						
Intersection Summary					N.		
Average Delay			3.1		rump menseen	over the second	SE EN DESCRIBERTAR FENT FOR BESTEFF IN PRESSED FOR ALTER AND THE SECOND PRINCIPLE OF A PROMISE AND A
Intersection Capacity Util Analysis Period (min)	ization		3.1% 15	i, i, iC	U Level o	ot Servi	ce A
Analysis Period (min)			10				
			u ang ang ang			a subtain	

	ⅉ		*	•	4-	*	1	†	<i>></i>	-	1	4	
Movement	EBL.	EBT	EBR.	WBL .	WBT	WBR.	² NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		€\$			€}			4			43	-	
Sign Control		Free			Free			Stop			Stop		
Grade		0%	50.5454545 <u>4</u> 0074		0%		engrapher waters	0%		PETERNISH CHICAN TON	0%	. TO CONTINUE TO SHARE TO ALL	PERSONAL SECTION OF THE PROPERTY OF THE PERSONS AND THE PERSONS ASSESSMENT OF THE PERSONS ASSESSMENT ASSESSMENT OF THE PERSONS ASSESSMENT OF THE PER
Volume (veh/h): Peak Hour Factor	30	625	0.00	0: 0.92	620	5	0.00	. 0	0	0	0	45	
Hourly flow rate (vph)	0.82 37	0.82 - 762	0.82	0.92	0.92 674	0.92 5	0.92	0.92 0	0.92	0.92	0.92 0-	0.92 49	
Pedestrians	esiyili.	102	2.3.0	V.,	. 0/4.:			, U	Mark Mark	· · · · ·	U	43	
Lane Width (ft)									THE SE				
Walking Speed (ft/s)	POLICE STREET, THE YEAR	AND SERVICE SE	Intridus discussion	Nacional Company			andres et en		i XIII-2020-A FESS TOS			an sahan dari	
Percent Blockage									188				
Right turn flare (veh)	MANAGEMENT THE STREET THE STREET											- Andrews	AND THE RESIDENCE AND ADDRESS OF THE PARTY O
Median type:				10.00	Service.			None			None		
Median storage veh)					*******				SPECTAL DISTRICT		ZOSESNATUSAS	etert temestruser	ASSET DESIGNATION OF THE PROPERTY OF THE
Upstream signal (ft) pX, platoon unblocked		a sale de		¥.8.	- 869			11.000	5 4 6 N			5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
1	679			~ 762			1561	1515	762	1519	1510	677	
vC1, stage 1 conf vol				34.4YA.6			1001		1947			· • • • • • • • • • • • • • • • • • • •	
vC2; stage 2 conf vol								7.17		107527658			
vCu, unblocked vol	679	SEE STORY SEE VERSE	APPARE GRAPHER SETTING BEHAVIOR	762	Unicedana Actor (1864)	September 1 Sep	1561	1515	762	1512	1512	677	
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2	
tC, 2 stage (s)	and the second of the second second	CMACAMATCA SOCIAL MA	TIANTINA PRINCIPALANDA	The article commence of the co			NAME OF THE OWNER, THE						
iF(s)	2.2		1.0	- 2.2			3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	96 91 8			100	en on a	Paraera como	100	100	100 408	100	100	89	
cM capacity (veh/h)	910		44.464.253	850		11.75%	- 80	116	.408	95	115	453	
Direction, Lane #	EB 1	ACTION AND PROPERTY.	NB T	SB 1				1				2.1	1000
Volume Total	799	679	0.	49									
Volume Left	37	0	0	0		***************************************		Service of the Service	Marian de la companya de la company La companya de la co		andre consistent	ANTENE PROTESTA SE LO COMPO	- Proper President's transportant and the
Volume Right	3.0	5	0.	49					10.70		la de la composición dela composición de la composición dela composición de la composición de la composición dela composición dela composición de la composición de la composición dela composición de la composición dela composición dela composició		
cSH Volume to Capacity	918 - 0.04	850 0.00	1700 0.00	453 - 0.11	**************************************								
Queue Length 95th (ft)	3	0.00	0.00	9			Lancon	de de la compa			F1.00		
Control Delay (s)	1.0			13.9				54 C.					
Lane LOS	A		A	В					ostanie.				
Approach Delay (s)	1.0	0.0	0.0	13.9									
Approach LOS	THE WAY TO SERVICE THE		Α	В		COLOR OF STATEMENT SHIPS	STREET, STREET, STREET, STREET, ST			DOG PERMIT	*************	TO A DATE OF SHIRM SERVICE SPACE	and the second s
Intersection Summary												***	
Average Delay	OWN ON THE REAL PROPERTY OF THE PARTY OF THE	water some state of the	1.0	and white the control of the control		uneret entre på de	A THE WAY THE PROPERTY OF LESS			TINGTON WE THE	The state of the s		
Intersection Capacity Utiliz	ation:		37.3% (e	: IC	U Level	of Servi	ce :		C				
Analysis Period (min)		A STANSON CONTRACTOR	15	water company and a second	carcostatistica in terminal	engani ata 2005, Panjuni da 100 met	nama 70 (1002) SV-2 (120)	PERIOD AND SALES OF THE	ender Witters - 1984 (1984)	CONTRACTOR CONTRACTOR	over sensitive	COLUMN TRANSPORTER	
		art ve	1.4								3		

	→	>	-	1	4			1	1	-	1	4	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	.NBT⊴	NBR	SBL	SBT	SBR	
Lane Configurations		43-			4			₩			4		
Sign Control		Stop			Stop			Free			Free		
Grade Volume (veh/h)	10	0%	30		0% - ₹ 0	20		0% - 610	- 20		0% - 650	45	
Peak Hour Factor	0.64	0.64	0.64	20 0.58	0.58	20 0.58	45 0.98	0.98	∠0 0.98	10 0.85	0.85	. 15 0.85	
Hourly flow rate (vph)	16	2	47	34	0.00	34	46	622	- 20	12	765	18	
Pedestrians	(Cocs-10-6 Tere Chialateria)	ne production factor to de production	elleriti somma offensammense e	entralistica especialistica especialistica especialistica especialistica especialistica especialistica especial	PRODUCTORS, 465-1745	ers termine er flestille som		and Street Hotels Street		atharist terrisasi			
Lane Width (ft)													
Walking Speed (ft/s)										ALTERNATURE DE L'ARTERNA	enten erkenes		
Percent Blockage Right turn flare (veh)	LW275es		62 Jak							Estado.	e in the inte		
Median type		None			None								
Median storage veh)				Participation (Control of Control		50160.37037-51						DAY-TENNED SE	
Upstream signal (ft)													
pX, platoon unblocked								NEW TORREST AND STATES			anderen er en en en		
vC_conflicting volume vC1, stage 1 conf vol	1556	1532	1/4	1569	1530	633	782			643			
vC2, stage 2 conf vol													
vCu, unblocked vol	1556	1532	774	1569	1530	633	782			643			
tC, single (s)	7.1	6.5	6:2	7.1	. 6.5	6:2	4.1			4.1			
tC, 2 stage (s)								retarat e trades					
IF (s) p0 queue free %	3.5 t 81	. 4.0 99	3.3 88	3.5 54	4.0 100	3.3 93	2.2 95		2000	-22 99	i kanana		
cM capacity (veh/h)	82	110	402	74	100	480	836			942			
Direction, Lane #	EB 1	WB.1	NB 15	SB 1.7									
Volume Total	64	69	689	- 794						Arena hi		tore make	
Volume Left	16	34	46	12					EVERS EXE				
Volume Right	47	34	20	18									
cSH	199	129	836	942	ECONOCIA DE ANTE	***************	entral desirence del Charles		NEW TRANSPORT	Processors also	Better and the course of the	THE STREET	STEERING NO. TO SECURE AND ADDRESS OF THE PROPERTY.
Volume to Capacity	0.32 33	0.53	0.05	0.01								22	
Queue Length 95th (ft) Control Delay (s)	- 31.5 - 31.5	64 61.2	4 1.4	1 0.3	a de la compa				7. S.				
Lane LOS	D	F	A	0.0 A						2010146			
Approach Delay (s)	31.5	61.2	1.4	0.3									· 1000
Approach LOS	D	F					(V-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	,				200 May 1980 May 1990	edulinat trombonia. Oktobrobar vandiri, delp velikiansyk (pane)
Intersection Stimmary				261									
Average Delay			4.6									757 00-00 100 3764 97	
Intersection Capacity Utiliz	ation	7		IC	U Level	of Servic	ė		C				
Analysis Period (min)			15		Part de Fart								
				No. Para Para						en e		Sezzo.	

•	-	~	T .		-	+	
Movement	WBL	WBR	NBT	NBR	SBL	√SBT=	
Lane Configurations	K/F		∱ β			4	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	5	. 5	930	10	10.	950	
Peak Hour Factor	0.83	0.83	0.95	0.95	0.99	0.99	
Hourly flow rate (vph) Pedestrians	6	6.	⊕979.	11	10 .	960	
Lane Width (ft)							
Walking Speed (ft/s)							A COMMAND A MANDER OF THE AND A COMMAND AS A STATE OF THE AND A COMMAND AS A COMMAN
Percent Blockage							
Right turn flare (veh)	ELE TREEX PROPERTY OF THE		TO THE RESERVE AND	1207502500000000000000000000000000000000	V-1 (F-1964) (CV-8070) (State		
Median type	None				5.452		
Median storage veh) Upstream signal (ft)					CORRECTES	STEPAST	
pX, platoon unblocked	0.45					516	
vC, conflicting volume	1964	495			989		
vC1, stage 1 conf vol				R.M. N.			
vC2, stage 2 conf vol.							
vCu, unblocked vol	3149	495		era Periebber	989	alkene Teller	
tC, single (s)	6.8	6.9			4.1		
tC, 2 stage (s)				and on one approximate		C. CARLOT PROVINCES AL. TO	CONTROL OF THE PROPERTY OF THE
tF (s)	3.5	3.3			2.2		
p0 queue free %	0	99	CONTROL OF THE CASE		99	TERROPORADER PRE-	
cM capacity (veh/h)	4.	526		9 38 7	700		in Asian Carlo
Direction, Lane #	WB 1	NB,1-	.NB.2.∞	SB 1			
Volume Total	12	653	337	970			
Volume Left	6	0	0	10			
Volume Right	6	0	. 11	0.			
cSH	8	1700	1700	700	and the court of the last	MANAGEMENT OF THE SECOND OF	
Control of the contro	1.59	760620000000000000000000000000000000000	0.20	0.01			
Queue Length 95th (ft)	61	0 	0 0.0	1 -04			
Control Delay (s) Lane LOS	1212.6 F	0.0	0.0	U.4 A			
Approach Delay (s)	-	0.0		0.4			
Approach LOS	F						
		ana emperativ					
Intersection Summary	1981 (2.18 6.47)	DOMESTIC: E	7.0	1 4 24	ALC: USE	A 4 4 5 5	
Average Delay Intersection Capacity Util	ization		7.6	ne s in	U Level	of Const	e C
Analysis Period (min)	izauuri	Paris A	⊍o.∪ /o 15		O ECVEL	OF OCTAIN	G. C.
	350		13				
		CE COLUMN TO THE	COASCRETE S	TOTAL TRACTA	norskinskinskil	under Period	

Analysis Period (min)

	*		†	/		1					
Movement 2	WBL	WBR*	NBT :	NBR :	SBL	SBT.					
Lane Configurations	N/A		ĥ			र्स					
Sign Control	Stop		Free			Free					1000
Grade	0%		0%			0%					
Volume (veh/h)	- 20	10	875	. 15	. 15	865					
Peak Hour Factor	0.84	0.84	0.93	0.93	0.95	0.95					
Hourly flow rate (vph)	24	12	941	16	16	//911					
Pedestrians	On Commission was a 12 commission of		erikker enisterligen man en wen								
_ane Width (ft)											
Valking Speed (ft/s)	CONTRACTOR OF THE PARTY OF THE	INI NO STABILATA TARANTINA		de visas autorios	Sport at the second second was second		OCTUBORICE PROPERTY IN A POTENTIAL TO	en en sanconnectamen era esta com	CONTRACTOR AND AND TO THE OWNER.	PTERSPATEL CONTRACTOR	w Len pre-
Percent Blockage											
Right turn flare (veh)		neskurskereneren	and the second seco	er opraktive trener		macentos vigotorna		COLON TO POST TO SERVICE OF THE SERV	TAMANAMAN AND THE TRANS		0.000
/ledian type	None										
Viedian storage veh)	*******	25 SUN GLANCOST ***			THE WATER COLUMN TO THE PERSON OF THE PERSON	ingrawsziernien			LEPACED SECURITIES	az van Prosepholomiko	1161
Jpstream signal (ft)			771			1063	i i i i i i i i i i i i i i i i i i i				×
X, platoon unblocked	0.82	ware transferences	NET BANKÉ NET WOMEN SERVE	Zeronowenowa Zeronowenowa	150-0160-1100-1	**************************************	TECHNOLOGICAL AND		STATE VEIL OF STATE	70110000000000000000000000000000000000	01435
C, conflicting volume	1891	949	11.0		957					100	
C1, stage 1 conf vol	eneren og aten	05 6 896590 3150	enterature en en en		3000.000 VII. 1000 V		4.76 (27 (28 (27 (28 (27 (28 (28 (28 (28 (28 (28 (28 (28 (28 (28			manasan ara-	YER
C2, stage 2 conf vol											
Cu, unblocked vol	2087	949			957	**************************************		CHEVENORF CHIEFOCH	ara menenggangan kan	MENTERSON OF THE	585
single (s)	6.4	6.2	946	(Aabee)	4.1						
, 2 stage (s)				edenne och							1623 1623
(s).	3.5	3.3	and the same		2.2						S.
queue free %	50 47	96 319			98						049
/I capacity (veh/h)	4,6	319		Stalin	- 723						
ection, Lane#	WB1	NB 1	SB.1		100						
olume Total	36	957	926	24.5	f. G. Stor			in the second	4-164	50.00	Ŷ,
olume Left	24	0	16	virus announteral (20)	econolis (California Sept. 2	AND THE PROPERTY OF THE PROPER	- Harmon Control Control Control Control		AND THE PROPERTY OF THE PARTY O	HARLING BERTHARD BERTHARD	w-909
olume Right	12	16	0								
SH	66	1700	723				A STATE OF THE PARTY OF THE PAR				
olume to Capacity.	0.54	-0.56⊱	0.02					1000			
Queue Length 95th (ft)	56	0	2								
ontrol Delay (s)	111.4	0.0	∮ 0.6 ∰			V.					No.
ane LOS	F		Α								
pproach Delay (s)	NAME OF TAXABLE AND POST OF TAXABLE PARTY.	0.0	0.6								
Approach LOS	F										
ntersection Summary											
verage Delay	1000 SERVE STOTE SERVE		2.4		oteckkiese nie ki	roetskaagsliffe	FREC SERVICES OF SECTION	CONTRACTOR OF STATE			634
ntersection Capacity Utili	ization.	6	2.4 37.5%	. Sa In	III evel	of Servi	കാ	· · · · · ·			
nelsection capacity of in	LUUUI		11.J/0 1E		C ECACK	O' OCIVI				astales so	

15

Movement		*	*	†	<i>P</i>	1	
Sign Control Stop Grade Free One Free One Free One Grade 0% 0% 0% 0% Volume (veluh) 1 0.889 5 1 885 Peak Hour Factor 0.25 0.25 0.85 0.96 0.96 Houry Jiow rate (vph) 4 0 1047 6 1 922 Pedestrians Freenet Blockaig Flight turn flare (veh) Freenet Blockaig Flight turn flare (veh) Median type None Median storage veh) None Median storage veh Upstream signal (ft) pX, platoon unblocked 407 pX, platoon unblocked VC2, stage 1 conf vol VC2, stage 2 conf vol VC2, stage 2 conf vol VC2, stage 2 conf vol VC2, stage 3 4.1 tc, 2 stage (s) 6.8 6.9 4.1 tc, 2 stage (s) 6.8 6.9 4.1 tc, 2 stage (s) Free (s) 96 100 100 Mcapacity (veith) 113 227 663 Dir	Movement	-WBL	WBR	.NBT	NBR	SBL	SBT
Grade 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%							44
Volume (veh/h)				THE PARTY OF THE P			
Peak Hour Factor 0.25 0.25 0.85 0.96 0.96 Hourly flow rate (vph) 4 0 1047 6 1 922 Pedestrians Eane Width (it) Walking Speed (lt/s) Percent Blockage Right turn flare (veh) Median type None Median storage veh) Upstream signal (it) pX, platoon unblocked 513 1050 1053 vC1, stage 1 conf vol vC2, stage 2 conf vol vC2, stage 2 conf vol vC2, stage 2 conf vol vC3, stage 3 6,8 6,9 4,1 tC, 2 stage (s) 6,8 6,9 4,1 tC, 2 stage (s) 100 100 tF (s) 3,5 3,3 2,2 p0 queue free % 96 100 100 Mcapacity (veh/h) 113 227 663 Direction, Lane # WB 1 NB 1 SB 2 Volume Left 4 0 1 0 Volume Left 4 0 1 0 Volume Lock 4 0 1 0 Volume Lock 4 0 1 0 Volume Lock 4 0 1 0 Wolume Lo		0%					
Hourly flow rate (vph)		1			The state of the s	1	
Pedestrians							
Eane Width (it) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type None Median storage veh) Upstream signal (it) Upstream signal		4	0	1047	6	1	922
Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked vC; conflicting volume vC1, stage 1 conf vol vC2; stage 2 conf vol vC2, stage 2 conf vol vC4, unblocked vol 1513 1050 1053 vC5, single (s) 6.8 6.9 4.1 tc, 2 stage (s) H (s) 3.5 3.3 2.2 p0 queue free % 96 100 100 eM capacity (veh/h) 113 227 663 Direction; Lane # WB 1 NB 1 SB 1 SB 2 Volume Total Volume Left 4 0 1 0 Volume Right 0 68 0 0 Volume Right 0 68 1700 Volume Right 113 1700 663 1700 Volume to Capacity, 004 0.62 0.00 0.36			enganen erre		erafinerettee		
Percent Blockage Right turn flare (veh) Median flype None Median storage veh Upstream signal (ft) 407				wite i			
Right turn flare (veh) Median type None None Median storage veh			POST STATE			SETTOS TO SECULO	
Median storage veh) Upstream signal (ft) 407 Dr. platon unblocked VCI, stage 1 conf vol VC2, stage 2 conf vol VC2, stage 2 conf vol VC2, unblocked vol 1513 1050 1053 IC, single (s) 6.8 6.9 4.1 IC, 2 stage (s) IF (s) 3.5 3.3 2.2 p0 queue free % 96 100 100 663 Direction, Lane # WB 1 NB 1 SB 1 Volume Total 4 1053 308 615 Volume Eight 0 6 0 0 CSH 113 1700 663 1700 Volume Right 0 663 1700 Volume Capacity 0.04 0.62 0.00 0.36	Pight turn flore (yeh)	Ba Barry		Laurian's		1960	
Median storage veh) Upstream signal (ft) 407 pX, platoon unblocked 1513 1050 1053 vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol 1513 1050 1053 vCu, unblocked vol 1513 1050 1053 iC, single (s) 6.8 6.9 4.1 iC, 2 stage (s) IF (s) 3.5 3.3 2.2 pO queue free % 96 100 100 cM capacity (veh/h) 113 227 663 Direction Lane # WB 1, NB.1, SB.1, SB.2 3.908 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0.04 0.62 0.00 0.36		Nicoo					
Upstream signal (ft) PX, platoon unblocked VG, conflicting, volume 1513 1050 1053 1050 1053 VC1, stage 1 conf vol VC2, stage 2 conf vol VC2, stage 2 conf vol VC3, stage 2 conf vol VC4, unblocked vol 1513 1050 1053 IC, single (s) 6.8 6.9 4.1 IC, 2 stage (s) IE (s) 3.5 3.3 2.2 2.		ivone;		22.574.0			
pX, platoon unblocked VC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol 1513 1050 1053 IC, single (s) 6.8 6.9 4.1 IC, 2 stage (s) E (s) 3.5 3.3 222 p0 queue free % 96 100 100 cM capacity (ver/h) 113 2227 663 Direction, Lane # WB 1 NB 1 SB 1 SB 2 Volume Left 4 0 1 0 Volume Left 4 0 1 0 Volume Right 0 663 1700 Volume Right 0 663 1700 Volume to Capacity 0 044 0.62 0.00 0.36				407			
VC, conflicting volume 1513 1050 1053 vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol 1513 1050 1053 tC, unblocked vol 1513 1050 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 100 <td></td> <td></td> <td></td> <td></td> <td>estal Albania (1</td> <td>Carrie</td> <td></td>					estal Albania (1	Carrie	
VC1, stage 1 conf vol VC2, stage 2 conf vol VCu, unblocked vol 1513 1050 1053 IC; single (s) 6.8 6.9 4.1 IC, 2 stage (s) IE (s) 3.5 313 2.2 p0 queue free % 96 100 100 eM capacity (veb/h) 113 227 663 Direction Lane # WB 1 NB 1 SB 1 SB 2 4 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 Volume Right 0 6 0 0 Volume Right 0 663 1700 Volume to Capacity 0 004 0.62 0.00 0 36		1513	1050			1053	
VC2, stage 2 conf vol VCu, unblocked vol 1513 1050 1053 IC, single (s) 6.8 6.9 4.1 tC, 2 stage (s) 4.1 4.1 IE (s) 3.5 313 2.2 p0 queue free % 96 100 100 6M capacity (veb/h) 113 227 663 Direction Lane # WB 1 NB 1 SB 1 SB 2 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 CSH 113 1700 663 1700 Volume to Capacity 0.04 0.62 0.00 0.36		nda a a	V.11.7.7.78.00		en a samuel de la companya de la co		
vCu, unblocked vol 1513 1050 1053 iC, single (s) 6.8 6.9 4.1 tC, 2 stage (s) 4.1 4.1 IE (s) 3.5 3.33 2.2 p0 queue free % 96 100 100 cM capacity (veb/h) 113 227 663 Direction Lane # WB 1 NB 1 SB 1 SB 2 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0:04 0.62 0:00 0.36	vC2, stage 2 conf vol						
tC, 2 stage (s) IF (s) 3.5 3.3 2.2 p0 queue free % 96 100 100 cM capacity (veh/h) 113 227 663 Direction Lane # WB 1. NB 1. SB 1. SB 2 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 CSH 113 1700 663 1700 Volume to Capacity 0.04 0.62 0.00 0.36		1513	1050	AND THE RESERVED AND THE SERVE	erekertstydd i dide	1053	
IF (s) 3.5 3.3 2.2 p0 queue free % 96 100 100 cM capacity (veh/h) 113 227 663 Direction Lane # WB 1: NB 1: SB 1: SB 2: W Volume Total: 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0.04 0.62 0.00 0.36	tC, single (s)*	6.8	∞ 6.9 %			4.t	
p0 queue free % 96 100 100 cM capacity (veh/h) 113 227 663 Direction Lane # WB 15 NB 1 SB 1 SB 2 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0:04 0.62 0:00 0:36		- Carlo Company and American	******************	an in the second second second	Contraction of the Contraction		
cM capacity (vervh) 113 227 663 Direction Lane # WB 1 NB 1 SB 2 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Capacity 0:04 0:62 0:00 0:36		A The College Court of the College				2.2	
Direction Lane# WB 1 NB 1 SB 2 Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Capacity 0:04 0.62 0:00 0:36				Without the Children School	artis timentalassis and rotat		
Volume Total 4 1053 308 615 Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0:04 0.62 0:00 0.36	cM capacity (veh/h)	113	227	in I		663	
Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0.04 0.62 0.00 0.36	Direction, Lane #	WB 1	NB 1	SB.1	SB 2		
Volume Left 4 0 1 0 Volume Right 0 6 0 0 cSH 113 1700 663 1700 Volume to Gapacity 0:04 0:62 0:00 0:36	Volume Total	- 4	1053	¥:308	₹615		
CSH 113 1700 663 1700 Volume to Capacity 0.04 0.62 0.00 0.36						Security and the second	
Volume to Capacity 0.04 0.62 0.00 0.36	Volume Right	0	6	0	0		
						The second secon	THE PROPERTY OF THE PROPERTY O
		THE PARTY OF THE P	0.62	0.00	0.36		
Queue Length 95th (ft) 3 0 0 0			_		_		
Control Delay (s) 38.2 0.0 0.1 0.0		THE PROPERTY OF THE PROPERTY OF	0.0	O' The Street William Portion Promite	0.0	1.12	
Lane LOS E A			***************************************		TOTAL TANK YAP	be when it were me	**************************************
Approach Delay (s) 38.2 0.0 0.0			0.0	0.0			
Approach LOS E	Approach LUS	E					
Intersection Summary	Intersection Summary			100			
Average Delay 0.1							
Intersection Capacity Utilization 57.1% ICU Level of Service B		ation		57.1%	IC!	U Level o	of Service B
Analysis Period (min) 15				15			2 To 1 To

	*		1	1	-	1	
Movement .	. WBL	WBR	NBT	NBR	∦SBb,	SBT	
Lane Configurations	¥	-	↑ }	DOMESTIC SECTION		र्भ	
Sign Control Grade	Stop*		Free 0%			Free . 0%	
Volume (veh/h)	5	, F	990	101	10	1005	
Peak Hour Factor	0.83	0.83	0.95	0.95	0.99	0.99	
Hourly flow rate (vph) Pedestrians	6	6	1042	11	- 10	1015	
Lane Width (ft) Walking Speed (ft/s)						7.44	
Percent Blockage Right turn flare (veh)							
Median type Median storage veh)	None	in law.	•				
Upstream signal (ft) pX, platoon unblocked	0.40			1		516	
vC, conflicting volume vC1, stage 1 conf vol	- 2083	526			1053		
vC2, stage 2 conf vol- vCu, unblocked vol	3687	526			1053		
tC, single (s) tC, 2 stage (s)	⊕ 6.8 ₁	6.9			4.1		
tF (s). p0 queue free %	3.5 0	3.3° : 99			2.2 98	est of feetings of A	
cM capacity (veh/h)	1.0	501			663		
Direction, Lane # 5 x Volume Fotal	WB 1;	NB 1.	NB 2 -	SB 1 1			
Volume Left Volume Right	6 6	0	0 11	10 0			
cSH	3	1700	1700	663			
Volume to Capacity Queue Length 95th (ft)	. 4.25 Err	0.41 0	0.21 0	. 0.02 1			
Control Delay (s)	Err	0.0	0.0	0.5			
Lane LOS	F			Α	TOTAL TRANSPORT OF THE PARTY OF		
Approach Delay (s) Approach LOS	. Err F	0.0	5.00	0.5	senide est d		
Intersection Summary		100					
Average Delay Intersection Capacity Utili	zation		57.9 70.9%	ic.	U Level.	of Sena	
Analysis Period (min)			15		M. H. V. V. V.	O. OC. VII	×
					1.00		

	1	1	†	<i>></i>	1	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Ϋ́		Î >		ሻ	†
Sign Control	Stop		Free			Free
Grade	0%	energy and the state of	0%			0%
Volume (veh/h)	30	15	865	20	5	860
Peak Hour Factor	0.56 - 54	0.56 27	0.92	0.92	0.95	
Hourly flow rate (vph). Pedestrians	- 54	21 ZI	940	22 7	5	905
Lane Width (ft)	-0.53 5-5 8-23		en e			
Walking Speed (ft/s)		369,400,000		11. A. S. S. S. S.		
Percent Blockage						
Right turn flare (veh)		24123C14502	interación de la composition della composition d	and to over	remark with	
Median type	None					
Median storage veh)	ALTO MICHIGAN CONTRACTOR CONTRACT	96.1 (0.000.3-63-24.000.000.24.94	V ACCUPATION OF THE	CADMATANGAMAN PAR		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	<:1867 <i>-</i>	951			962	
vC1, stage 1 conf vol	ESTERAL PROPERTY CONTROL	40073-05-05-05-05-05-05-05-05-05-05-05-05-05-	Proceedings of the second	narrianiamanakanar		
vC2, stage 2 conf vol	4007					
vCu, unblocked vol tC. single (s)	1867 6.4	951 6.2	PERKER E		962 4.1	
tC, 2 stage (s)	0.4	0.2			4.1	
tF (s)	3.5	3.3			20	
p0 queue free %	33	92			99	
cM capacity (veh/h)	80	318	153		720	
Direction, Lane #	WB 1	NB 1	on as	e come		
Volume Total	80	962	50 ls.	- 905		
Volume Left	54	962 0	5	905		
Volume Right	27	22	. O.	0		
cSH	107	1700	720	1700		
Volume to Capacity	0.75	0.57		0.53		
Queue Length 95th (ft)	102	0	1	0		
Control Delay (s)	103.6	0.0	10.0	0.0		
Lane LOS	F		В			
Approach Delay (s)	103.6	0.0	0.1	- 100		
Approach LOS	F					
Intersection Summary						
Average Delay			4.3	· · · · · · · · · · · · · · · · · · ·	* CONTRACTOR OF THE PERSON	
Intersection Capacity Utiliz	ation	Ę	6.7%	ici	J Level	of Service B
Analysis Period (min)	The second of th		15		and the second s	
	San St					

	۶	→	*	1	4	1	1	†	<i>></i>	-	1	4	
Movement	EBL	EBT	EBR	WBL	WBT.	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		43			€\$			43	110-1600		4		
Sign Control		Free			Free			Stop			Stop		
Grade	Francia international action	0%	NEW RELIGIONS ASSESSMENT ASSESSMENT	0.7 340.034.07.000.00	0%			0%			0%		AND THE PERSON NAMED AND PROPERTY OF THE PERSON NAMED AND PARTY.
Volume (veh/h)	30	670	. 0	0	-660	- 5	. 0	0	0	. 0	0	45	
Peak Hour Factor	0.82	0.82 817	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	FORWARD OF STREET
Hourly flow rate (vph). Pedestrians	37	817	. 0	0	717	5	0	0)	∜ 0⊹	. 0	6.40	49	
Lane Width (ft)	24500404		STEP SHIPE	55.604-559		ST 25 - 15 - 16			esiketula	HEFADELDIK SPACE		\$ 5000 000 000 4 5 1 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0	
Walking Speed (ft/s)		ASTE STATE											
Percent Blockage							· ·						
Right turn flare (veh)	-444 PANSAR (M. 1974)	antari grendarian a	AND AND ASSESSED.	#101015-1695056		STATE OF THE OWNER.						61.09 X 42 X 44 X	
Median type							17.7	None			None		
Median storage veh)						20° 21.0° 48.0800 47.0 40.0840.2	ALE TO APPARENTE UP	Contract Contract (Contract (Contrac	COLUMN SECTION SECTION	er-Andreas Salah dari Person		erear acceptances	THE CONTRACTOR OF MINISTER PROPERTY.
Upstream signal (ft)					869								
pX, platoon unblocked			and the second	SELEKT ELEKTRE	SA ARKO KATATATA MATAKA		ve transmining	NO WY STOR THE S	organisa marena e ricinera-	THE PERSON OF THE PERSON OF THE PERSON		SISSE SPINIS OUT WINDS	TATAL CALL CALL CALL CALL CALL CALL CALL
vC; conflicting volume	723	La la		817			1659	1613	817	1610	1610	720	
vC1, stage 1 conf vol vC2, stage 2 conf vol						Reservation		TERRORE SERVICE		THE SECTION			
vCz, stage z com vor vCu, unblocked vol	723			817			1659	1613	817	1610	1610	720	
tC, single (s)	4.1	1.2		41			7.1	6.5	6.2	71	6.5	6.2	
tC, 2 stage (s)		an subject of the	Kabupat Kabupat				ASYMPTONIA	Mariyaya (16)				9.43	210 2
tE (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3	70.8
p0 queue free %	96	a manufacture year of	ESPECIAL SALES	100	AN AND AND TOTAL STATE OF LAND AND ADDRESS.	OD TOWNSTONE ON	100	100	100	100	100	89	richten Baltistell Distallen ogs
cM capacity (veh/h)	884			811			67	101	379	. 81	100	428	
Direction, Lane #	EB 1	WB I	NB 1	SB1									
Volume Total	854	723	0.3	49	100	4.			100			COL CO	1 15 21 1
Volume Left	37	0	0	0	artosco-tante-calestos			BUANANT TURA (1880)	CONTROL SONO	C0000000000000000000000000000000000000	and the second	Schenolin (E	
Volume Right	⇒ 0	5.	0.5	49									
cSH	884	811	1700	428							Car Th to Divine And Mark Date Season and	of Personal Control of Control	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
Volume to Capacity	0.04	0.00	0.00	0.11									
Queue Length 95th (ft)	3	0	0	10		general enteren		engles energy troppe	Marie Carlo Como	ONE SAME HEADERS		is en veres	
Control Delay (s) Lane LOS	1,1	0.0	0:0	14.5						140	envis je		
Approach Delay (s)	A . 11	 0.0	A 0.0	B 14.5					vereace:		NATO HENZUN		
Approach LOS		9.0	A A	н.у. В	11.19 (2011)								
			SCHOOLSHINGSHING	********	V TOTAL IS BROWN AS			IS PROTEIN SECTION	C. No. (2000) Company			Martin and National Confession of Assession	
Intersection Summary												le de le	
Average Delay Intersection Capacity Utiliza			1.0	Particological Commence	110000000000000000000000000000000000000	66				MUNICOLWEIX	TO GO THE PARTY OF	CAMPING SERVING	
Analysis Period (min)	auOn .		69.6% 15	· J. IC	U Level	or Servic	e		ي نا	SALES .			
, maryoto i criod (min)			io Valend					resterati			Z 100		
	25000000	THE RESERVE						ALC: YES					

Movement EBL EBT EBR WBT WBR NBL NBR SBL SBT SBR Lane Configurations \$\daggerap\$ \$\daggerap\$ \$\daggerap\$ \$\daggerap\$ \$\daggerap\$ \$\daggerap\$ Sign Control Stop Free Free	
Lane Configurations & A A A A A A A A A A A A A A A A A A	
Sign Control Stop Stop Free Free	_
	200
Grade 0% 0% 0% 0%	WEG.
Volume (veh/h): 10 1 30 30 0 20 45 645 30 10 690 15	
Peak Hour Factor 0.64 0.64 0.64 0.58 0.58 0.58 0.98 0.98 0.98 0.85 0.85 0.85	
Hourly flow rate (vph) 16 2 47 52 0 34 46 658 31 12 812 18 Pedestrians	意
Lane Width (tt)	55
Walking Speed (ft/s)	55 65 65
Percent Blockage:	ii.
Right turn flare (veh)	33
Median type None: None.	
Median storage veh)	oze,
Upstream signal (ft):	
pX, platoon unblocked	949
vC conflicting/volume 1644 1625 821 1657 1618 673 829 689	
vC1, stage 1 conf vol vC2, stage 2 conf vol	gjë
vCu, unblocked vol 1644 1625 821 1657 1618 673 829 689	Ž
tC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1	2
tC, 2 stage (s)	2
IF(s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2	
p0 queue free % 78 98 88 19 100 92 94 99	2.2
cM-capacity (veli/h) 70 96 378 64 96 455 802 906 //	2
Direction, Lane #. EB 1 WB 1 NB 1 SB 1	
Volume:Total: 64: 86: 735: 1841:	± 55
Volume Left 16 52 46 12	36
Volume Right 47 34 31 18	300
cSH 177 97 802 906	
Volume to Capacity 0.36 0.89 0.06 0.01	300
Queue Length 95th (ft) 38 126 5 1 Control Delay (s) 36.5 140.4 1.5 0.4	Ø5
Control Delay (s) 36.5 140.4 1.5 0.4 Lane LOS E F A A	
Approach Delay (s) 36.5 140.4 1.5 0.4	72
Approach LOS E F	ä
<u></u>	55
Intersection Summary Average Delay 9.2	2
Average Delay 9.2 Intersection Capacity Utilization 75.3% ICU Level of Service D	3
Analysis Period (min) 15	200

	À	-	-	*	4	*	4	1	1	-	1	1	
Movement 2	EBL.	EBT	EBR	WBL	WBT.	WBR .	NBL	NBT	NBR :	SBL	SBT	SBR .	
Lane Configurations		43						€\$		ኻ	₿	3000 30 0000 10000	
Sign Control		Stop			Stop			Free			Free		
Grade		0%			0%		AND THE PERSON OF THE PERSON O	0%	and the second s		0%	5-0-44 s-21-11-12-22-21-0-0	The management of the second second
Volume (veh/h)	2	1,	- 5	. 0	· 0	0	- 11	1030	10	167	845	5	
Peak Hour Factor	0.50	0.50	0.50	0.80	0.80	0.80	0.96	0.96	0.96	0.92	0.92	0.92	
Hourly flow rate (vph)	4	2	. 10	0	0	. 0	. 11	1073	10	182	. 918	. 5	
Pedestrians	Newson of General		ng rag regardency	ander takk til som mener	908-899-883-890-786-981		amenda i dell'Allindia	particular in a particular	NO AND PROPERTY AND PROPERTY.	Marine Straight on the control	acidalis i distance e e		
Lane Width (ft)													
Walking Speed (ft/s) Percent Blockage		everances		orene e		WINTER STATE				- Tours			
Right turn flare (veh)					aryene.				254 12	See of Section		.dkd.se	
Median type		None		ingrester	None	N-278-322-3	03/20/04/6						
Median storage veh)		INCLIC		i enema	HOHE	e de la composição de l		HACHIGAN					
Upstream signal (ft)		7 7 T									1027		
pX, platoon unblocked	0.59	0.59	0.59	0.59	0.59		0.59			See Institution	101251		
vC, conflicting volume	2385	2390	921	2394	2388	1078	924			1083			
vC1, stage 1 conf vol		Anais (Anii 1273)	and designation of the party of	Section accurate the Control	121-02-02/49307765	Markovenska se	ienskiinen en	cemental and the	an arangarangarah	neral library	en region de la como d	was and but the	
vC2, stage 2 conf vol.	L. S.												
vCu, unblocked vol	3334	3343	867	3348	3339	1078	872	276, 2012 4-92 2204	- 00 00 00 00 00 00 00 00 00 00 00 00 00	1083	and the second second second	or arrange of state of the party	P in the with some only instruction, attracts
tC; single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1			
tC, 2 stage (s)	and the state of t		us i care e reconsensor	nin susumatem union who chem	COM CONSCIPATION OF A	annen monte en en en en en en	CONTRACTOR OF THE PARTY	many and a second property of the	Con the designation of the last	THE STATE OF THE S			
tF(s)	3.5	- 4.0	3.3	3.5	4.0	3.3	2.2			2.2	ja ja		
p0 queue free %	0	41	95	100	100	100	98		CIRCLES COMPANY	72		NOTE THE PERSON OF THE PER	
cM capacity (veh/h)	2.	-3	211		- 73	<u>-</u> 268	462			648			
Direction: Lane #	AEB 1	and the state of t	SB 1	SB 2									2746
Volume Total	16	1095	182	924									
Volume Left	4	11	182	0	ers, under Schwerzswere Heigereine	e NASIL DOWN TRANSPORTER AND AND		mains no almost decimbers					
Volume Right	. 10	TO A COLUMN TO THE A STREET	0	5									
cSH	7	462	648	1700	SECULE PER LICEN		CENTRAL TRANSPORT	erentron de la		IGPECTEN STORY	NAME OF TAXABLE PARTY.		
Volume to Capacity	2.45	0.02	0.28	0.54									
Queue Length,95th (ft) Control Delay (s)	78 1723.7	2 1.0	29 -12.7	0				niscionistis			Sales of the sales		
Lane LOS	1140.1 F	1.U	1 <i>2.1</i> B	· U.U									
Approach Delay (s)							200 TO 200	part vers					
Approach LOS	F				er i Sfat								
			77635307111111171	an and the same of		a security and a security							
Intersection Summary		ett saara	AVAIN TO										
Average Delay	BETATER PROPERTY		14.0	Testeursene is			STOROL MARCHIO	eleganolikaletakitken	TRATUSTE ET ERSONE	ON THE PERSON OF	energy and the second		ninkinusia saamaa paritamen
Intersection Capacity Utili.	zation	an salt	13.5%		u Level	of Service	e		Н	tsanaa		real 25 i	
Analysis Period (min)		- 13.50°04°4	15	963533333								GS/ANTENA	
The state of the s	moderate.	hare States		Maria de Caractería de Car Caractería de Caractería d		Meye edi	Part State		H-91701639	SERIES			

	•	1	Ť	<i>></i>	>	ļ	
Movements = 3 a a a a	WBL	WBR	NBTO	NBA :	SBL	SBT	
Lane Configurations	M		^ }			र्स	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	20	10	985	15	15	985	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.97	0.97	A STATE OF THE STA
Hourly flow rate (vph)	- 27	14	1159	18∉	15	1015	
Pedestrians Lane Width (ft)			SEDERT CARE		Governances	racurranes accinas	
Walking Speed (ft/s)					52.54	r Charle	
Percent Blockage:		150 22446			THE SAME		
Right turn flare (veh)				Constitution			
Median type	None					W2062E	
Median storage veh)	inorio in			isanda a			
Upstream signal (ft)			364	197 F. (1)		1048	
pX, platoon unblocked	0.67	0.73		an enament	0.73		
vC, conflicting volume	2214	. 588			1176		
vC1, stage 1 conf vol	SPANCES AND ASSESSMENT	POLICIA ALCORATION	in del la la companie de la companie	S priche wit allering at the first	ali ku kasa ku kasa sabik da 1	MODEL AND RESTRICT	
vC2; stage 2 conf vol							
vCu, unblocked vol	1807	68	THE STATE OF THE PARTY OF THE PARTY.		873	Street, the distriction	
tC, single (s)	6.8	6.9			. 4.1		
tC, 2 stage (s)							The state of the s
tF(s)	3.5	3.3			2.2		
p0 queue free %	42	98	COMPANIENCE SANCE	sa namena mera	97	CONTRACTOR OF THE	
cM capacity (veh/h)	47	722			566		
Direction, Lane # 🚉 🐇 🗦	WB.t	NB.1	NB 2	SB 1			
Volume Total	(41)	773	1 404	1031			
Volume Left	27	0	0	15	A-1000/24/1/19/2/61	Benation - Proceeds with	
Volume Right	14	0	CA Printed and the second	0			
cSH	68	1700	1700	566			
Volume to Capacity	0.60	0.45	STATE OF THE PARTY	0.03			
Queue Length 95th (ft)	65	0	0	2		movement in con-	TO THE PERSON NAMED AND PARTY OF THE
Control Delay (s)	Service Control of	0.0	0.0	Mark To the last with the			
Lane LOS	F	. Alama		Α	earnear constitution	errugeraser	
Approach Delay (s)	117.8	0.0		0.9			
Approach LOS	F						
Intersection Summary							
Average Delay			2.6				
Intersection Capacity Utiliz	ation	7	73.8%	, ici	J Level c	of Service	ce D
Analysis Period (min)	The Million and the William of the Comment		15				The state of the s
		$\mathcal{L}_{\mathcal{L}}$					

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Viovement	EBL	EBT	EBR.	WBE	WBT.	WBR	NBL	NBT	NBR 1	SBE	SBT	SBR	
Lane Configurations		€			4			4			ቆ		
Sign Control		Free			Free			Stop			Stop		
Grade Volume (veh/h)	00	0% 670	0	- A	0%		See See See See	0% • 0	essene a do		0%	SANCON TERROR	
Peak Hour Factor	- 30 0.82	0.82	0.82	0 0.92	660 0.92	5. 0.92	0.92	0.92	0.92	0.92	0.92	45 0.92	
Hourly flow rate (vph)	37	817	0.02	0.32	717	0.52	0.32 1 0	0.32 	0.32	0.32 2 0	0.32	49	
Pedestrians		er-Teleber				Halles Tim	entantar Tari			rativisti Seri		- CONTRACTOR	
Lane Width (ft)						1							
Walking Speed (ft/s)					THE COM. CHILD STREET		and reflection at the requirement of	AUCES - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1		Description of the Control of the Co	(Carried Colors of Co.	en i i dilimitar naturali El tri i di Carilla della	CONTRACTOR STANCES
Percent Blockage :													
Right turn flare (veh)									KIND PARKET	andern been	, regressive mense	offer Children of the Co	
Median type Median storage veh)			5,000					None			None		37.2
Upstream signal (ft)			345375		862						E 1132,5X4	19.65 75 (138)	
pX, platoon unblocked					- 100 <u>6</u>								
vC, conflicting volume	723			817			1659	1613	817	1610	1610	720	
vC1, stage 1 conf vol		A SECURE OF THE PROPERTY OF THE SECURE OF TH	Andrews Andrews	HELICOLOGICAL SICTION PARK SAN	CONTRACTOR OF STATE	anan Alberta da Sana			and the constant of	rest un entendere sitt	2007 - Frank (2007)		
vC2, stage 2 conf vol													
vCu, unblocked vol	723	STORES HORATO HATE		817	TTM/UNIVERSE 4 No.	graficitorio beginno exception	1659	1613	817	1610	1610	720	
tC, single (s)	4.1	i y		4.1			7.1	6.5	6.2	7.1	6.5	6.2	
tC, 2 stage (s)	2.2			22			3.5	4.0	0.0	**************************************		S G A	
tF (s) p0 queue free %	2.2 96			100			ა.ა 100	100	3.3 100	3.5 100	4.0 100	3.3 89	2861
cMicapacity (veh/h)	884			811			67	100	379	81	100	428	
Direction Lane #24	e en anti-	(A) DO		ATTENDED BY MANAGEMENT									
Volume Total	854	WB 1 723	0 0	SB 1 49		4.4							24400
Volume Left	654 37	- 123 0	0 0	49 0									
Volume Right	200	5	0	49					(1775)				
cSH	884	811	1700	428			ASAGESTS		Salasan ve				
Volume to Capacity	0.04	0.00	0.00	0.111						100 P			
Queue Length 95th (ft)	3	0	0	10					2000 0000 000		A CONTRACTOR OF LINES AND	TH-10 100 100 100 100 100 100 100 100 100	CONTROL CONTRO
Control Delay (s)	THE RESERVE TO SECOND	0.0	0.0	14.5									
Lane LOS	Α		A	В		INCOMETA WAY			en reaching aging	COMPLETE PROPERTY	ARCHIEN PROPERT	TENNING KOMPAN	
Approach Delay (s) Approach LOS	1.1	0.0	0.0 A	14.5 B									
			A	D									
Intersection Summary					36 32 107								
Average Delay	average values		1.0				er erenen en en er		Non-Regulation and	igrecarne 7400mm	MORNECO DE LA MARCONIO	STANTIGACITOR TO PART	
Intersection Capacity Utiliz	zation		69.6%	IC	U Level	ot Servi	ce		. C				
Analysis Period (min)			15	2.70									
Carrie 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Taribasi (1								an Carin				

	•	1	†		-	+					
Movement:	WBL	WBR.	NBT	NBR	SBL	SBT:		111-11	12.7		
Lane Configurations	ሻ	7	ĥ		肾	†					
Sign Control	Stop		Free			Free					
Grade	0%		0%	AND COMPANY OF THE PROPERTY.		0%		(Williamsking assessment of the	sakratera estrenomento ca	an santanan maka saka sa	Y Jahr Terri Stat Funds of State (Albigotopic commencers)
Volume (veh/h)	. 52	Section 1997 and design	865	20	5.	860	ar a company				
Peak Hour Factor Hourly flow rate (vph)	0.56 93	0.56 332	0.92 940	0.92 - 22	0.95 5	0.95 905			TARREST S		
Pedestrians	. 90	SOZ s	940	- ZC	J	900					
Lane Width (ft)	SE S		3	300 S 100 S 100 S							
Walking Speed (ft/s)						er en					
Percent Blockage			3,13	1,500							
Right turn flare (veh)		8		arener en el celebro.	arabeter eretak				AND ENGINEERS OF STREET		
	None										
Median storage veh)											and the second of the second o
Upstream signal (ft)									A .		
pX, platoon unblocked			THE RESIDENCE OF THE PARTY OF T	CONTRACTOR OF STREET						energations accommission	
vC, conflicting volume	1867	951			962	1		4			
vC1, stage 1 conf vol vC2, stage 2 conf vol		***********				acares esta			Market Control		
vCu, unblocked vol	1867	951			962	Table 10			Contract Con	and the same	
tC, single (s)	6.4	62	12000		41						TO SELECT THE
tC, 2 stage (s)					. 150. E. 150. E. 150. E. 150					edianis in principal	
IF (s)	· **:3.5	3.3			2.2						
p0 queue free %	0	0			99					The second secon	
cM capacity (ven/h)	- 80	318			-720						
Direction, Lane #	WB 1	NB 14	SB 1	SB 2							
Volume Total	425	962	5	905		5.212.00				0.00	
Volume Left	93	0	5	0	eroene on the contract of the con-	SA MERINE KAN	NO POLENCES CHIEF CHIEF CONTRACTOR		Philippine Control of the Control of	er er en	
Volume Right	332	- 22	0.	0							
cSH	367	1700	720	1700	THE RESIDENCE OF THE PARTY OF T	Col screen arrespensations			and the state of t		
Volume to Capacity	1.16		STANDS STREET, ST	0.53							
Queue Length 95th (ft)	420 131.4	0 0 0	10.0	0	W W TANK A						
Control Delay (s) Lane LOS	∵ I31.4 F) ;U.U.; =	10.0 B	0.0							
Approach Delay (s)	131.4	กัก	0.1		451840166						
Approach LOS	F					o constanting					
		NAME OF TAXABLE PARTY.									
Intersection Summary *	CHE STATE					1500		A 25 年 10 年 10 日 10 日 10 日 10 日 10 日 10 日 10			E PERSON
Average Delay	224124	nga gasangan	24.3 64.9%							STEEL VERNEN STREET	
Intersection Capacity Utili Analysis Period (min)	ization .		64.9% 15	JC .	u Level	of Servic	e	ener C			12.045.011
Analysis renou (mill)			13								
		s alterior de la constante de		Bandar Pira I	cace ve si		wa seleta in Seleta in Seleta				

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viovement, and	WBL	WBR	NBT &	ENBR	SBL	SBI	
Lane Configurations	W	Property and the second	ት ው		resurement of the second	4	
Sign Control	Stop		Free			Free	
Grade	0%	in the second	0%	ingangé dan panunyahaya	SANASTA SANAS		Paragraphic Programme Prog
Volume (yeh/h)	0.	5 .	- 990	10	10	1005	
Peak Hour Factor	0.83	0.83	0.95	0.95	0.99		revenuence en en
Hourly flow rate (vph)	0	6.	1042	311	10	-1015	推荐至
Pedestrians					e de la compa		SUSPENTATION
Lane Width (ft)							
Walking Speed (ft/s)			VAQENES AT SE				department.
Percent Blockage							
Right turn flare (veh)	None						
Median type Median storage veh)	ivorie						
Upstream signal (ft)						516	
pX, platoon unblocked	0.79			intalia.		910	
vC, conflicting volume		526			1053		
vC1, stage 1 conf vol					1000		
vC2, stage 2 conf vol		TPACKET.					
vCu, unblocked vol	1461	526			1053		
tC, single (s)	6.8	6.9		n-en en en	7 4 1		
tC, 2 stage (s)	neuropean de la company de	i di Mada seritara		indraigh i Fioreach			
tF (s)	3.5	3.3			2.2		
p0 queue free %	100	99	Service (1825) 12 20 Microry 2016 (MCMMM CITY BOX	98		LUMPHONE STATE
cM capacity (veh/h).	95	501			663		
Direction, Lane #	WB 1	NB 1	'NB 2	SB 1	SB 2		
Volume:Total	6	695	358	348	677		Access at the
Volume Left	0	0	0	10	0		MENTAL
Volume Right	6	0	11	ő	0		
cSH	501	1700	1700	663	1700	的。 1965年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1966年,1	104000000000000000000000000000000000000
Volume to Capacity	0.01	0.41	0.21	$0.02 \pm$	0.40		
Queue Length 95th (ft)	1	0	0	1	0	COMPANY OF THE COMPAN	BRANCH CONSULA
Control Delay (s)	12.3	0.0	0.0	0.5	0.0		
Lane LOS	В			Α			NAME OF THE OWNER OWNER OF THE OWNER
Approach Delay (s)	12.3	0.0		0.2			
Approach LOS	В						
Intersection Summary							
Average Delay			0.1			-:	
Intersection Capacity Util	zation		44.8%	. ↓ IC	U Level	of Service A	
Analysis Period (min)		encentral research according	15	AND SHOULD SHOW	E CALIFORNIA MATERIA CONTRACTOR C	SUCCESSION OF STOREST CONTROL OF STOREST CONTROL OF STOREST CONTROL OF STOREST AND STOREST CONTROL OF STORES	

,	1	*	†	1		1						
Movement Estates	WBE	WBR.	NBT	NBR	SBL	SBT						
Lane Configurations	ķø		(Î			414						
Sign Control	Stop.		Free			Free						
Grade	0%	**************************************	0%			0%			CORRECT CAR OSCIDEN		VS COMMERCIAL COM	
Volume (veh/h) Peak Hour Factor	446 0.95	205 0.95	795 0.95	450 0.95	235 0.96	770 0.96						
Hourly flow rate (vph)	469	216	837	· 474	245	802						
Pedestrians		30 32 33 3			eranid Kaba				inano A			
Lane Width (ft)			100									
Walking Speed (ft/s)					rrcstszcznomere	ikolimining (ayan)		out moreovers se	errones encomentence	Name of the second seco		
Percent Blockage: Right turn flare (veh)												
Median type	None			000 TO 750	60 S6F25-2							
Median storage veh)		±akee > ang		usik a sati					2002.5		100000000000000000000000000000000000000	
Upstream signal (ft)			407					1 - Table				
pX, platoon unblocked					CALCON STREET,	an Bookers was come.	Personal M. College Co. College Colleg		13612-5470/HI 912554540/9442	AND CONTRACTOR OF THE STATE OF		
vC, conflicting volume	1964	1074			1311							
vC1, stage 1 conf vol						NEW PROPERTY OF	reserva (- en modera (es e			(-150 × S1)	ener in the second	
vCu, unblocked vol	1964	1074		APRIL .	1311							
tC, single (s)	6.8	6.9			4.1						5	
tC, 2 stage (s)	Control of the Contro	medical line in 100 published the	er account to a memory	CONTRACTOR CONTRACTOR OF	Section of an efficient	THE THE PERSON NAMED IN	ACTOR OF WHAT CONTROL OF CAROLINAS	Sur Staggie and Participal	eservica de la composition della composition del			
tF (s)	3.5	3.3			2.2			PIT 2				
p0 queue free %	0	1	SCHOOL SERVICE		54 529							
cM capacity (veh/h)	: JU	219.			529					100	2.4.2	
Direction, Lane #	₩B.t.	NB 1	SB 1	-SB 2								
Volume Total Volume Left	The second second second	1311	512	535								
Volume Right	469 216	0 474	245 0.5	0 0	5.VF04.VF24			- 15 C.				
cSH	42	1700	529	1700		数単心への						
Volume to Capacity	×16.47	0.77	0.46	0.31								
Queue Length 95th (ft)	Err	0	60	0		220000000000000000000000000000000000000	activities (1) C. Calabi in the second secon		***************************************	THE PARTY NAMED OF THE PARTY OF		**************************************
Control Delay (s)	: Er	0.0	13.4	0.0								
Lane LOS Approach Delay (s)	F En	0.0	B 6.6	4.45		#2555####					(-08a	
Approach LOS	F	0.0	76. O.O.					3.285 Y.C.				
• •												
Intersection Summary (a) Average Delay	er en	2	254.2			ne e t					2.18-97	
Intersection Capacity Util	zation			· Fic	III evel	of Servi	<u>م</u>	Н	PTE IN COLUMN	1.0		
Analysis Period (min)	artalia de la comoción de la comoció		15									DECEMBER SECTION
							# E E E					
										AND AND TO REAL PROPERTY SERVE	error error agener 62360	euro es dictionados espaigativas

	1	*	Î	1	-	1					
Movement	WBL	WBR	NBT 2	NBR	SBL	SBT					
Lane Configurations	R/F		λ			4					
Sign Control	Stop		Free:			Free					
Grade Volume (veh/h)	0% 20 \	10	0% 985	15	15	0% 985		COMMUNICATION OF	oerve Nazasi		
Peak Hour Factor	0.84	0.84	0.93	0.93	0.95	965 0.95					
Hourly flow rate (vph).		12		16	16	1037					
Pedestrians		2.100				and the second of the					end to make house a state of a c
Lane Width (ft)					76						
Walking Speed (ft/s) Percent Blockage			STACTAGES								
Right turn flare (veh)						X Z Z Z Z Z				cosmon and a second	
Median type	None										
Median storage veh)											The state of the s
Upstream signal (ft):			771			1063					a dise
pX, platoon unblocked vC, conflicting volume	0.42 2136	1067	factories		1075						
vC1, stage 1 conf vol	2100				1073	(28/350)					
vC2; stage 2 conf vol											
vCu, unblocked vol	3735	1067		NAMES OF TAXABLE PARTY.	1075	***************************************	THE PERSON NAMED AND DESCRIPTIONS				
tC, single (s)	6.4	6.2			4.1						
tC, 2 stage (s) IF (s)	3.5	3.3		ander viv	2.2		• 1-70X				
p0 queue free %	0	96	Yes Laterak	Alex Downsta	98						
cM capacity (veh/h)	2	272			- 652						
Direction Lane #	WB 1	NB 1	SB 1								
Volume Total	36	1075	1053				3435				
Volume Left	24	0	16		TO HAS VIOLENCE OF THE	KESSKASESKA KA		MANAGER SAME TO SEE THE			
Volume Right	3 12 3	16 1700	652								
	11:76	0.63	0.02	50 1. 51. 5							
Queue Length 95th (ft)	Err	0	2	estecicile est flui		4/4/06/00/09/00/00/00 -				. 1450-1982-11-42	
Control Delay (s)	Err	0.0	. 0.8∜.								
Lane LOS Approach Delay (s)	F	0.0	A - 0.8		TERROTANA			Market Control			
Approach LOS	F		U.O -		Andreas			ide areas	1.2		
Intersection Summary		176 - N.D. 776 - T									
Average Delay			165.4	Harris III				SCALL STOCKS		and the second	
Intersection Capacity Utiliz	zation		73.8%	a le	U Level	of Servic	e	D.		NI STATE OF THE ST	
Analysis Period (min)		no word was propositioned	15	en constitution.		nek-ludin (sudin			erender i Verster aus Stadt de	aransaru) in Artificia	CONTRACTOR 12: 11: 3

	夠		-	*	-	1	4	Ť	/	-	1	4	
Movement 🕒 💮	Z EBE	EBT	EBR	. WB⊡/	WBT	WBR#	NBE	NBT	NBR	∛ SBL ∻	SBT,	SBR	and the
Lane Configurations		ቆ			4			€}>		ሻ	₽		· · · · · · · · · · · · · · · · · · ·
Sign Control		Stop			Stop			Free			Free		
Grade		0%	erowenseroweno compre		0%		v summinem ten Husse	0%	eneraterizertekonskiz-e-	an angersamente en arran arrans	0%	on the state of th	
Volume (veh/h)	2.	1	5	17	12,123	170	10	860	10-	. 167	845	5	i i kilor
Peak Hour Factor	0.50	0.50	0.50	0.80	0.80	0.80	0.96	0.96	0.96	0.92	0.92	0.92	
Hourty flow rate (vph)	4	2	10	21	1.0	212	10	896	10	. 182	918	- 5	
Pedestrians				CESENAMY	Yanka kana					er en	ar a character		
Lane Width (ft) Walking Speed (ft/s)			19234	22.00									
Percent Blockage						*C1272***	75 TO SAC			2000 - CE			
Right turn flare (veh)													
Median type		None			None				58565			7.56	
Median storage veh)						arte Historic		and Carlotte					
Upstream signal (ft)						10.27					1027		
pX, platoon unblocked	0.49	0.49	0.49	0.49	0.49	HA DAR PERMANENTA	0.49		vranska slike (2. 112)	A 1 1000 E 400 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NO SALVESTON DE LE	No. 1. Gradina September	
vC, conflicting volume	2419	2211	921	2214	2209	901	924			906			
vC1, stage 1 conf vol	\$4 (TA MENTAL SERVICE CONTRACTOR	NAMES AND STREET	Mary to Free 2-0 may be	round or or an area of the control o	DESCRIPTION OF THE PROPERTY.	30,000,000,000,000	HARMAN CHARLES A TOMAN	40 PM-44-0000000000000000000000000000000000	ART CONTRACTOR OF THE	ASSESSED TO COMPA	- An interest of the second of the second	
vC2; stage 2 conf vol													
vCu, unblocked vol	3869	3448	841	3455	3443	901	846			906			70 Francisco (1900 10 10 10 10 10 10 10 10 10 10 10 10 1
tC; single (s)	7.1	6.5	6.2	7,1	6.5	6.2	4.1			4.1			
tC, 2 stage (s)	S CONTRACTOR OF THE STATE OF TH	Fig. swampersymmetrical	O OFFICE CONTRACTOR OF THE SECOND CONTRACTOR O	STEENING ACTIVISATES	EDET L VII DOTLING CONTROL		KIARING WITH DISTRIBUTION	WALK REPUTERS A CONTROL	No entro-herritorio de la institución	ed and which is the contribution to	walan menang atau	namin'ny diamandrona	
IF (s)	3.5	4.0	3:3	3.5	4.0	3.3	2.2			2.2			
p0 queue free %	0 0	22 ```3	95 182	0	5 1	37	97			76			
cM capacity (veh/h)	U	. 3.	182		3.	340	393			755			
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2								
Volume Total	16	235	917	182	924								
Volume Left	4	. 21	10	182	0								A PARTY MANAGEMENT OF THE PARTY
Volume Right	10	212	10.	0.	5								
csh	1	6	393	755	1700	ATTENNO (FINANCE	Marina and a second	u.) no construit il fractiona maggio	CONCENTED LINEAR SYMPHO	TOOR THEW SHARES WISE	. N. e Period Decimal Statement		
	23.11	PROPERTY AND PROPERTY	0.03	0.24	0.54								
Queue Length 95th (ft)	Err	Err	2	23	0	gererowers only relate				*************	*********		
Control Delay (s)	En			11.3	0.0								
Lane LOS	F	F	A 1.0	B 1.9		and a first trans						1107-0025-110-200	
Approach Delay (s) Approach LOS	F	F	99 I.U	1.9				All Comments					
	Г	Г											
Intersection Summary													
Average Delay			105.4										
Intersection Capacity Utili.	zation	1	13.7%	· / IO	U Level	of Servi	ce :		H				
Analysis Period (min)	Personal Personal State of the	TO SECURE AND A SECURE ASSESSMENT	15	gangagaga katawana	a to the second second				Contract to the second	and security and security of the security of t		godi si gozganana memi	
			No.									11.77	

	A	→	*	€	←	*	4	1	<i>></i>	-	ţ	4	
Movement	EBL.	EBT	EBR	∘ WBL.	WBT	WBR:	NBL	NBT \$	NBR	SBL	SBT	SBR	
Lane Configurations		ቆ			4 }>			€}			€}>		
Sign Control		Stop			Stop			Free			Free		
Grade		0%	TO CAST		0%		ekvarenze	0%		erenenga <u>n</u> anga	0%	ON THE PERSON NAMED AND ADDRESS OF	
Volume (veh/h) Peak Hour Factor	10 0.64	0.64	- 30 0.64	30 0.58	0 0.58	20 0.58	45 0.98	645 0.98	30 0.98	10 0.85	690 0.85	15 0.85	
Hourly flow rate (vph)	16	0.04	0.04 47	0.56 - 52	0.56	0.58 34	0.98 46	658	0.98 31	0.85 312	0.85 812	0.85 18	
Pedestrians	, io			5.7 4 6	V.		40		۔ باری	14	012	10	7.00
Lane Width (ft)			XXXX				(T			T. VICTOR			
Walking Speed (ft/s)	ing kadasing dan sa	managariteteti 24 fak	oenga yaza basan	KSCK#BBBB	Wewstersen		ek ett skille ett et	BELLYET ENGLANCE	North Control	RASKARISKA K			
Percent Blockage													
Right turn flare (veh)											0212	ware an action of the leader of the	A CARAMANANTAN CALABANA
Median type		None :			None								
Median storage veh)		i de la composition	Dardenber (1980)	CHECKS SIENOR		SECTION OF			986/925005,04055323	THE STATE OF THE STATE OF	PROGRAMOR MONOR PROGRAM		OF THE STATE OF TH
Upstream signal (ft)									0.0				
pX, platoon unblocked vC, conflicting volume	1644	1625	001	1067	1016	676	829	256.857.557.557	iore e e e e e e e e e e e e e e e e e e	coo	obies over	en e	
vC1, stage 1 conf vol	1044	10204)	821	₁1657	: 1010-c	673	629			689			
vC2; stage 2 conf.vol							17.61			CHT STORAGE	4,57,7		
vCu, unblocked vol	1644	1625	821	1657	1618	673	829			689	3.432.64 F		
tC, single (s)	7.1	6.5	6.2	7.1		6.2	4.1			4.1			
tC, 2 stage (s)	ar American State Control of Control		SATURDA MATURISMOS	ACASE TEMPOREN	Delega i de sela esperado de			valeuriaten et Plane	######################################	CONTRACTOR OF CALLER	ANGERIA STERRESS		
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2		1977	2.2			
p0 queue free %	78	98	88	19	100	92	94			99		and some an agreement	AND AND THE PROPERTY OF THE PR
cM capacity (veh/h)	70	96	378	-64	96	455	802			906			
Direction, Lane # 2000	EB 1	WB1	NB 1	SB 1									
Volume Total	64	86	735	841	12-18-18	1-0-10		100			e e		****
Volume Left	16	52	46	12	POWERS THE SECRET HOUSE, TO	Control and a	POCKURSON SECTION AND AND AND AND AND AND AND AND AND AN	ARANDA ARANDA TIMO ARANDA		See al Miles and State of	PARTICIPANT TO LEGAL		
Volume Right	47	34	31	′ 18			4.4						
cSH	177	97	802	906									Control of the Contro
Volume to Capacity	0.36	0.89	0.06	0.01									
Queue Length 95th (ft)	38	126	5	1	en la la mai senantican		a to the same of t	na na manana manana	COECUTO NOTA		THE WILLIAM STATES		
Control Delay (s). Lane LOS	36.5	140.4 F	1.5 A	0.4				CAE:					
Approach Delay (s)	E	-	A 1.5	A 0.4							na seren		
Approach LOS	E	F	, L.J.	0.4				SHEETER					
	_			A Section Commence of the Comm		THE RESIDENCE STREET		OCCUPANISH STREET	White To produce	ander Frank errenne			nostes vinas republica
Intersection Summary				e de l								7,546	
Average Delay	ognogations see al		9.2		Color Color Color	eren Arrennea		BRANCH MANAGEMENT	STREET, STREET		and the part of the second		
Intersection Capacity Utiliz	ation 🖟	J	5.3%	,⊹,⊹, lC	U Level	ot Service	e 💹		D.				
Analysis Period (min)		TO PERMIT	1 5		4 50 45 445		15.77 S/251E4	GENERAL STATE SOUTH	DELINENTE ANCE		of the second		
				75.078. <u>25</u> 5.5				14				0.5247	

	﴾	→	*	*	4-	*	4	Ť	/	-	1	4	
Movement	EBL.	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		43			43			44			€\$>		
Sign Control		Free			Free			Stop			Stop		
Grade		0%		ere, has also property	0%		Committee or the train of the control	0%		NATIONAL PROPERTY AND A CONTROL OF	0%		
Volume (veh/h)	30	650	0	0	645	5	0	0	0	0	0	45	
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	37	793	0	0	701	> √5⊆	0.	U	. 0	0.	. 0	49	
Pedestrians Lane Width (ft)						eekimeen		7 N. W. W. W. W. W.			ciewse i		
Walking Speed (ft/s)		e de la compa	Partie (1)						ALC: 15				
Percent Blockage													
Right turn flare (veh)				arene ila illi					4724564674				
Median type								None			None		
Median storage veh)	NEK TENNYE DINE PENTA	ta, the establish the group role	Tare Character of the Control of the	ORD SHORT PROPERTY	than to a control of the state of the	(Tab Martin Mart	AND AND ALCOHOLOGY AND	ne and the state of the same and the	A STATE OF SHIPS	utrium transcriptum et en en en en	CATHER STANDARD STAN	lektor ton kil ov ov tingsperionele	A STATE OF THE PROPERTY OF THE
Upstream signal (ft)					869								
pX, platoon unblocked										***************************************		WINGSTER COMPANY IN COMPANY	
vC, conflicting volume	707`	100		_793 -			1619,	1572	≥793 -	1570	1570	704	
vC1, stage 1 conf vol		iguster et en		es e	PROPERC OSSESSE			ONTERNAMENTAL	*****		S-05 TG/88 57	eren arelase	
vC2, stage 2 conf vol	707			793			1619	1572	793	1570	1570	704	
vCu, unblocked vol tC, single (s)	707 4.1			793 - 41	700 may 2		7.1	6.5		7.1		704 6.2 %	
tC, 2 stage (s)		51/2000003						0.0	0. 2	as Atha	·		
iF(s)	2.2	(1) (E)	7.5	2.2	Alek		3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	96			100	en er britisk beried.	XXXXX XXXXX	100	100	100	100	100	89	
cM capacity (veh/h)	- 896			828			72	107	392	87	106	437	
Direction: Lane #.	EB1	WEE	NB to	CR 1							(4. A.E. 3.47)		
Volume Total:	829	707	0	49	10.00	Maria de		Salas de la companya	46		THE RESERVE		
Volume Left	37	0	0	0				Tiensouten	AND ASSESSED				
Volume Right	0	5".	- ō	49									
cSH	896	828	1700	437	Kirikasa Pasa Kirika	Nagodathe Arek	to the transmission of the second of	MAINTENANCE - CONTACTS	SAAC ARREST AND CONTRACTOR	Microsoft Maria Petroli Producti di Angel	and the second second	The state of the s	Commercial Children Commercial Co
Volume to Capacity	-0.04	0.00	0.00	0.11							74-7		
Queue Length 95th (ft)	3	0	0	9								V-10000	
Control Delay (s)	1.1.	0.0		14.3									
Lane LOS	Α		A	В	e verkooning sin		COMPANY COMPANY	SANTAS ANTAS ANTAS	ungaren ar	4 5 20 40 40 40 60 60 60 60 60 60 60 60 60 60 60 60 60	OF THE PARTY OF TH		WILLIAM TO THE PROPERTY OF THE PARTY OF THE
Approach Delay (s)	1.1	0.0	0.0	14.3									
Approach LOS			Α	В									
Intersection Summary			1977										
Average Delay	autorial ortainant ottakhalistor	da Sandania - igi oʻzinda ir sacini	1.0	oużerowane			SSTEEL STEEL S	Berger Digital Sections	CHARGE AND DURING WHEN	numbras censorecens	THE PARTITION OF THE PA	584504000 BH\000 \$4.550	THE PROPERTY OF THE PARTY OF TH
Intersection Capacity Utiliz	ration, =		68.6%	≀r∦∷ IC	U Level	of Servi	ce		C				
Analysis Period (min)		De la grande de la company	15	TOSSESSO SURVEY	ng paggaranes	NEW MARKET STATE				ISSECTION	5475057753	S/CIO	
									HEREN		在民间的		

	*	1	Ť	1	1	ļ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Ry#		ĵ»		7	†	
Sign Control	Stop∻		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	30	15	830	. 20	- 5	830	
Peak Hour Factor	0.56	0.56	0.92	0.92	0.95	0.95	
Hourly flow rate (vph)	- 54	27	902	22	5	874	
Pedestrians	The ANGEL STREET OF THE PROPERTY OF THE PARTY.	TITLE ATTEMPTS ATTEMPT.	the EAST CONTRACTOR STORMS AND		ANTENNA P. NO. NOV. 107 mg 110, ert 1	enemanistra e estadores	
Lane Width (ft)						15	
Walking Speed (ft/s)		6829000000000000000000000000000000000000	NACO SERVICIO DE MARIO DE CO		OF THE PROPERTY OF THE PARTY OF	ASSESSED TO THE PARTY OF THE	· OBS OF PERSONNELS SELECTION OF SECURIC SECURITIES AND
Percent Blockage							
Right turn flare (veh)	eretinative rec	Pictoria espectación			CONTRACTOR AND	at winders to both	
	None /						
Median storage veh)			STREET, WINE		STATUSTICA TURB		
Upstream signal (ft)						and a second	
pX, platoon unblocked				ereconeensor		en speniere i	
	1797	ะ.ยาง			924		
vC1, stage 1 conf vol		extractives of			1406004403040		
v€2, stage 2 conf vol	4707	010		27.5945	004		
vCu, unblocked vol tC, single (s)	1797 6.4	913 6.2			924 4.1	STREET FREE	
tC, 2 stage (s)	0.4	0.2			4.1		
tF (s)	3.5	3.3					
p0 queue free %	39	92	TELESCO.		99		
cM capacity (veh/h)	89	334			744	and the second	
Direction, Lane #	WB to	HELICAN SHOP MADE	SB1	SB 2			
Volume Total	80	924	5	874			
Volume Left	54	0	5	0	mand the residence designs		
Volume Right	27	22	0	0.1		1 2 2 7 3	
cSH	117	1700	744	1700	MANAGE AND RESERVED.	nananan merenan	
Volume to Capacity	0:69	0.54	AND THE PROPERTY OF THE PROPER	0.51			
Queue Length 95th (ft)	91	0	1	0			
Control Delay (s) Lane LOS	THE REPORT OF THE PARTY OF THE	0.0	* TATAL STATE OF THE PARTY NAMED IN COLUMN TO SERVICE OF THE PARTY NAMED IN COLUMN TO	0.0			
	F	0.0	A	SASSESSE STATE	BERTON TOTAL		
Approach Delay (s) Approach LOS	: 65.Z F	- U.U	U. I				
Approach LOS	Г						
Intersection Summary			4 建原				
Average Delay			3.7				
Intersection Capacity Utiliz	ation 🕝		54.9%	illia IC	U Level	of Servi	ce A rolling
Analysis Period (min)	-		15				100 mm m m m m m m m m m m m m m m m m m

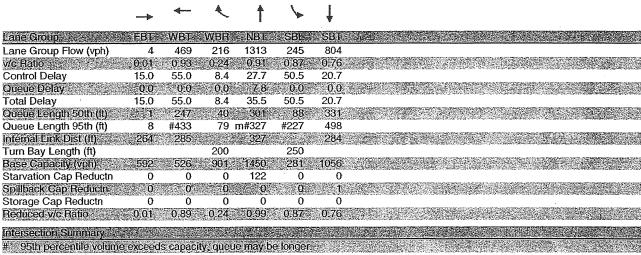
	ᄼ	-		· √	4 —	*	1	1	<i>></i>	1	1	1	
Movement : :: 4	EBL	EBT.	XEBR	WBL	Wete	WBR	NBL	NBT	(NBR	SBL	SBT	SBR	
Lane Configurations		4			€\$			43		ሻ	ĵ»		
Sign Control		Stop			Stop :			Free			Free		
Grade Volume (veh/h)		0%	9468987 2 38		0%	145		0% 825			0%		
Peak Hour Factor	0.50	0.50	5 0.50	0.80	0.80	0.80	10 0.96	- 6∠5 0.96	10 0.96	147 0.92	815 0.92	5 0.92	
Hourly flow rate (vph)	0.50	0.50	10	21	0.00	181	10	859	0.50 22.10	160	886	0.32	
Pedestrians		a da da Tig			two sens (1220)						ar salas sa		South State of the
Lane Width (ft)										100			
Walking Speed (ft/s)	atrougher as more recover	none registry through turn	CONTRACTOR ISSUE TUNGO	CONTRACTOR CONTRACTOR AND THE			NAMES OF PERSONS ASSESSED.	an interpretation and the second	T-PROPERTY OF THE A-				
Percent Blockage		, V						A.C					
Right turn flare (veh)		None			(Kradara		Section 1.						netanto na manda de la como de la Como de la como de la
Median type Median storage veh)	: 430 E / 13	None			None								
Upstream signal (ft)	76.26									J. 200	1027		
pX, platoon unblocked	0.54	0.54	0.54	0.54	0.54	TOTAL STREET	0.54	ist, Portschile	WIATERALIE SIN		error and an expension		Section of the sectio
vC, conflicting volume	2275	2099	889	2102	2096	865	891			870			
vC1, stage 1 conf vol	N. T. P. COLON P. COLON P.	en e		en andre en de participation de la constant de la c		analawa wa wa wa wa	CERTIFICATION AT NAVE	TO A THE TAX PROPERTY.	er e-mail-t-ver-poste vi-c.		CHARLESTON HOUSE OF	ADDRESS A FRANCISCO	None and the second sec
vC2, stage 2 conf vol	2050	0000	704	0000	0005	005	700	4.5		070			
vCu, unblocked vol IC, single (s)	3356 7.1	3030 - 6.5	794 6.2	3036 7.1	3025 6.5	865 6.2	799 4.1		Wasan F	870 4.1			
tC, 2 stage (s)		- U.J	UZ		- 0.0	0.2	4.U.S			4,6	3.3		
iE(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			-2.2			
p0 queue free %	0	64	95	0	78	49	98	ing a same a	anaciani ne en	79			
cM capacity (veh/h)	1.	6	212	-3-	6	356	448			°-779			
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2								
Volume Total	16	204	880	160	891	1475	100		121815	11000			7.00
Volume Left	4	21	10	160	0	CAS SHOWN BURNESS	AP - December 1985 Constitution	Data Medical Concess.	Salestian Constitution (Con-	9 KDE # # 20 KD		TOTAL BOOK SPECIES	STATE OF THE STATE
Volume Right	10	181	10	0	5			60.00					
cSH	3 5.09	22 9.22	448 0.02	779 0.21	1700 0.52			esanakaten kay			47.8389489583		
Volume to Capacity Queue Length 95th (ft)	5.09 Err	9.22 Err	. U.U2 - 2	0.21 19	. ∪.52 0								
Control Delay (s)	Em	En		10.8	_								
Lane LOS	F	F	A	В	er e		e i de ante da						
Approach Delay (s)	Err	Em.	0.8	1.6		1						1	
Approach LOS	F	F			and the property of	The second of the second							THE PROPERTY OF THE PROPERTY O
Intersection Summary			17.72 4							an e			
Average Delay	A STATE OF THE STA	1	022.6	or in the second section of the	ere e temanike	unu serien serien bereit bis de	THE RELEASE DEPOSIT	The state of the s		- A CONTRACTOR OF THE PARTY OF	ou tronder (Sinda	erineral and the second	
Intersection Capacity Utiliz	ation	1	08.8%	ie	U Level	of Servi	ce .		G	4 1 4 3 1 4			
Analysis Period (min)	TOWN TO A THE PROPERTY OF A LOCAL	N. Marianton and A.	15	ion Challengowski was	an handrag against an an	mark Charles and Service		OPENSANDURES	NAME AND ADDRESS OF THE PARTY O	the teathers was recovered.	and the second constitution of the second constitution of the second constitution of the second constitution of		NAME OF THE PROPERTY AND THE PROPERTY OF THE P
	17.									40 and 50	10.00		

	1	1	Ť	<i>></i>	1	-								
Movement	WBL)	.WBR€	NBT	NBR	SBL	SBT								
Lane Configurations	N.		ĥ			414								
Sign Control	Stop		Free	7.13.2		Free	# P							
Grade	0%	TO THE STATE OF TH	0%		erezani irenyene ener	0%	PRATTAMENTAN TARRETAN	NATIONAL PROTECTION AND AND AND AND AND AND AND AND AND AN			NOTE OF HIS TABLES AND A SECOND SECON	LWFA/SANGARATINATURE IN	and the second s	**************************************
Volume (veh/h)		0.	840	5	1.	840								
Peak Hour Factor	0.25	0.25	0.85 988	0.85 6	0.96	0.96 875							**************************************	SPECIES
Hourly flow rate (vph) Pedestrians	4.	. U.	988	0.11		8/5			A. 4.35. 79.0				Caralta.	
Lane Width (ft)	The American				HENRY CO.							40 EV. 186		
Walking Speed (ft/s)	n Talaka		Kariyasa			50005000							Totalisi	
Percent Blockage			FF7536					Fig. 7						
Right turn flare (veh)		in and the state of the state o	ala nerranda	Na telika esteka i	itan nomben en	endatar+++		ANTE CATAGO		DESCRIPTION OF	(3553 8975388 89)			THE SE
Median type	None	()												
Median storage veh)		CONTROL CONTRO	COCKS TO CASTALOGUE	CONTRACTOR CONTRACTOR	SPECIAL SECURITION SECURITION		1.000 to 1000 to 1000 to 1000	JOHNSON CONTRACTOR	Case and Active Service	a vertebento de distribue	Competition and a second	- COLUMN CONTRO	- Ann interpretating p	personal c
Upstream signal (ft) 💼			407									1.56		
pX, platoon unblocked	ROSE INTO THE RESERVEN		SEA, SERVICE SERVICE SERVICE	NAMES AND DESCRIPTIONS OF THE PARTY OF THE P	n commontor of		ia estratoria		THE PROPERTY OF THE	****************	Marketalari arada as	TO A SECURE AND A SECURE OF THE	Lid Först regering break vil som	menency.
vC, conflicting volume	1431	991			994									
vC1, stage 1 conf vol					na Turkatura				etimoskiego	uran eret		ভালে লাক্ত থা ক		1920TA-62
vC2, stage 2 conf vol vCu, unblocked vol	1431	991	42.0		994									9.50
tC, single (s)	6.8	6.9	7.74		334 34.1									
tC, 2 stage (s)							1001942E238				1000000	260.18	66.00 7 62.00	RE13
tF (s)	3.5	3.3	1777		22									
p0 queue free %	97	100	AND AND A STATE OF THE PARTY AND ADDRESS OF THE	STREET, SHIPS AND AND ALL STREET, COMPANIES	100	TO COMPANY OF THE STATE OF THE	STEAN STOP (SEE A)	Haller Committee of the Committee of the	HINESE CARREST CA	*	ADTONIA PERSONA	PART CARROLLE STERNING	eranio amend	###SPERT
cM cápácitý (veh/h)	127,	248			698									
Direction Lane #	WB 1	NB 1	SB1	SB2										
Volume Total	4	994	293	583		T.					4 2 2			5 2
Volume Left	4	0	1	0	and and an							2.01836724		
Volume Right	0	6	0	0.0	776									
cSH .	127	1700	698	1700						and the second		the collection of the color of	- Armin Arth Arthur Charles	200 3000 000
Volume to Capacity	0.03	the second designation of		0.34										
Queue Length 95th (ft)	2	0	0	0					mentana ana	Karamanan mengangan dalam	WANTED SALAN	A LENGTH OF THE PARK	Y millering with produce and white an	ersentance
Control Delay (s)	34.2	0.0	0.1	0.0										
Lane LOS Approach Delay (s)	D	0.0	A	X 74 C 37 T 27 T 34		SEVEN SEES			DAYS THE WA					CENTERS
Approach LOS	., 34.2 D	0.0	U.U.							ni di	ravast.			
Intersection Summary														
Average Delay	NAMES OF THE PARTY.	2308G25	0.1		atalens (file)	ok sa			are stilling	estant ver	(#YZY###)#	"" 苏公林的经验	osa selaga	3163
Intersection Capacity Utilia	zation		0.1 54.5%	וחו	Llevel	of Servic	10		Δ					
Analysis Period (min)			15		7.45Y51	or oer AK				aryment i		118451		MALES.
	24.42.00 Ph 4100	MANUFACTURE				MENTERS SELVE	30000000000000000000000000000000000000		HIPATE CHIEF CHI	979805 F 24F06	e-Brandolthiotenic	Micensia ann	SSSERS/CHESOR	CONTRACTOR OF THE PARTY OF THE

	*	*	Ť			1	
Movement	WBL	WBR	NBT	NBR:	SBL :	SBT	
Lane Configurations	N/F		Ĵ⇒			4	
Sign Control	Stop		Free			Free	
Grade	0%		0%	no oznaci zaviene	and responsible for the second second	0%	
Volume (veh/h)	20-	10	825	15	15	820	
Peak Hour Factor	0.84	0.84	0.93	0.93	0.95	0.95	
Hourly flow rate (vph)	24	12	88/	16	-,16	863	
Pedestrians Lane Width (ft)							
Walking Speed (ft/s)				elita.		(# 32 ₆ 31	
Percent Blockage							
Right turn flare (veh)				raellin keraran ker			
Median type	None:						
Median storage veh)	DAG GARAGES CARACTERS CO.	ALDROCKS COMMISSION	THE POST STATE STA	(American Provinces)	AT BUILDING AND A	OWNERS CA TERRETORISM	TO AND
Upstream signal (ft)			771			1063	
pX, platoon unblocked	0.87		COLUMN TO SOURCE	and the second second	TABLE OF STERRITORY OF STRUMENT	an and the second	
vC, conflicting volume	1790	895			903		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol	1911	895			903		
vCu, unblocked vol tC, single (s)	64	62	The Company		903 4.1	5,77577974	
tC, 2 stage (s)	0.4.	J. O.Z.			T. I		
tF (s)	3.5	3.3			2.2		
p0 queue free %	63	97			98	acultinaturi de	
cM capacity (veh/h)	64	342			757		
Direction, Lane #5.	WB 1	NB 1	SB 1				
Volume Total	36	903	879				
Volume Left	24	0	16		26.2		
Volume Right	12	16	0				
cSH	88	1700	757		and a second		
Volume to Capacity	0.41		0.02				
Queue Length 95th (ft)	41	0	2				
Control Delay (s)	71.2	0.0	0.6				
Lane LOS	F	RANGE CONTRACTOR	Α		TAIMPEE AND SALE		
Approach Delay (s)	71,2	0.0	0.6				
Approach LOS	F						
Intersection Summary			9.0				
Average Delay			1.7				
Intersection Capacity Utili	zation	(Principle of the Committee of the Commit	: IC	U Level i	of Servic	e C
Analysis Period (min)			15	and sold sold sold sold sold sold sold sol			

	≯	>	1	*	4	*		†	1	-	1	1	
Movement	EBL'	EBT:	EBR	WBL	WBT	WBR	- NBLs	NBT	NBR	SBL	SBT	SBR.	
Lane Configurations		43		-	€}}			44	211 111 22 23 24 25 25	ሻ	î>		
Sign Control		Stop			Stop			Free			Free		
Grade		0%	ena manadinamento o	an trues received the	0%	THE RESIDENCE OF THE PARTY OF T	entre de la constante de la co	0%	MANAGEMENT *** SYANITED TO	TOTAL CONTRACT - MARKET	0%		
Volume (veh/h)	2	1	5	17	1.	140		±∋790	10	142	780	. 5	
Peak Hour Factor	0.50	0.50	0.50	0.80	0.80	0.80	0.96	0.96 823	0.96	0.92 154	0.92 848	0.92	ng ang sanggarang an
Hourly flow rate (vph) Pedestrians	- 4	2.	10	21	1.	175	10	- 823-	10	154	848	. .	
Lane Width (ft)						16.555.77							
Walking Speed (ft/s)		in en			11.12 (1.10 (1.12			e de la companya de La companya de la co					
Percent Blockage													
Right turn flare (veh)	AMERICAN SALEMAN	electrolicidade problem	early security of the Control	Car den American Properties	STANTA TOTAL STANTANTON	ACCIAN SACRESANDO ARRA	Environment and residence	LONGO ACES OLICONIA	Maria	MOVER - SECURE ACCORDING	EUR A THE P. C. S. S. T. S. S.	Contractive April - April Cartin	Control of the Contro
Median type		None.			None *								
Median storage veh)			STOREST STORES	eranasan marka		SERVICE SERVICE	egenetic supplied grad		ewiters named	TOWN PROPERTY AND A	97.00.000 000000	navertuige en	
Upstream signal (ft)			20.50	0.50	0.50		0.50				1027		
pX, platoon unblocked vG; conflicting volume	0.58 2184	0.58 2013	0.58	0.58 2016	0.58 2011	000	0.58 853			833			
vC1, stage 1 conf vol	2104	ZUIO	001	2010	2011	020	-000			000			
vC2, stage 2 conf vol						**	10.00						
vCu, unblocked vol	3039	2746	743	2751	2741	828	747		obyce Nacial de To	833			CONTROL CONTROL CONTROL
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1			
tC, 2 stage (s)										-		Witness territoria de la compositorio	
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2			
p0 queue free %	0	79 9	96 243	0 5	87 9	53 374	98 - 503			81 804			
cM capacity (veh/h)	2 Z	9	_{(1.} 243 -		9.9.	3/4	503			- 8U4			
Direction: Lane #	EB 1	The Control of the Control	NB 1	SB 1	SB2								
Volume Total	. 16	198	844	, 154	853								
Volume Left	4	21	10	154	0					DETERMINATION		THE SIX SETTINGS	
Volume Right cSH	+ 10 7	175 41	10 503	0 804	5 1700				F52.03				
Volume to Capacity	240 ·	4.76	0.02	0.19	0.50		72. THE ***					CRAFFILL E	
Queue Length 95th (ft)	78	En	2	18	0.00							554.0655	
Control Delay (s)	1684.2	Err			0.0								
Lane LOS	F	F	A	В	EDREADY CONTROL NO. CONTROL OF CONT	references substitution and prob	the second second second second	A TANADA MANANCA A PRINCESA	Calgoric Calgorite (April 1994)	AND REPORT OF THE PROPERTY.	day of Local property (No.		
Approach Delay (s): 2	1684.2	Section 12 and the second	0.6	1.6									
Approach LOS	F	F											
Intersection Summary													
Average Delay			970.5		eve 2000-200 (2000-2000)		No. Not concess to the	AL NORTH A WALL OF THE REAL PROPERTY.		Carrier Supplied by the Arriva	MU A TRANSPORTER		
Intersection Capacity Utili	zation	1 7 1	Print District area for	- IC	U Level	of Servi	ce		G.				
Analysis Period (min)	HERE SICHON SER		15	enecio repor			MATERIA DE LA CASA DE		io kalendario anno		in Project (mage) who		CASCOCIONES CONTRACTOR DE LA CONTRACTOR DE
						17676				HE WAS			

	۶		*	•	4-	4	1	†	1	-	1	1		
Movement	EBL	EBE	EBH	(WBE)	WBT -	WBR .	NBL	NBT	NBR /	SBL	≽SBT≱	SBR		C)regio
Lane Configurations		€}>	-		€}>			<₽			43			ž
Sign Control		Stop			Stop *			Free			Free			3000
Grade Volume (veh/h)		0%	00.5	F-1700	0%			0%	*********		0%	564700 - CP20000	tivite interestración accessos y	rs
Peak Hour Factor	0.64	0.64	30 0.64	20 0.58	0 0.58	-20 0.58	45 0.98	590 0.98	20 0.98	0.85	625 0.85	15 0.85		Africa.
Hourly flow rate (vph)	16	2.04	47	34	0.30	34	46	602	20	12	735	0.65 18		200
Pedestrians	CE CONCIDENCE	ara e an Al-Freday				and Section 2	2011 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		niozzaki					e e
Lane Width (ft)											100			- Televa
Walking Speed (ft/s)	No estado simpropios meso	MATERIAL SPACE THAT THE PARE	STOREST PORTUGEN STATE OF THE S	ampanggape mgm		NAME OF THE OWNER OF THE OWNER OF	SERVER TO BOOK OF TOTAL		Section 10 Commission 10				The second distriction of the second	
Percent Blockage														1
Right turn flare (veh) Median type		None	4254 272		None				9 7 7578 (1959)			OF FORESE		é
Median storage veh)		INDIRE			INUHE			rational a						
Upstream signal (ft)	1947									144				į
pX, platoon unblocked		Mark School		or of the second										i
vC, conflicting volume	1506	1482	744	1519	1481	612	753	114		622				į
vC1, stage 1 conf vol		Duren Gertre		revenies coerte	TO STATE OF LANGUAGE	CONTRACTOR OF THE	er reneration recommend		and times them, the time, the				The second secon	
vC2, stage 2 conf vol	4500	4400		4-40							State .			1
vCu, unblocked vol tC; single (s)	1506	1482 6.5	744 6.2	1519 7.1	1481 6.5	612 6.2	753 4:1			622 4.1				i
tC, 2 stage (s)		0.0	U.Z		0.3	9.2	4.1			4.0	1.302.			
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			22	27778			į
p0 queue free %	82	99	89	58	100	93	95	CONTRACTOR OF SEC.		99	A CANADA AND A SHE			
cM capacity (veh/h)	89	118	418	× 81.	. 117	493	857:			958			144	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1										į
Volume Total	64	69:	668	765		371	, S							
Volume Left	16	34	46	12	77.75.45.46.46.47.47.47.4	interior de la Maria de la Calenda de la La Calenda de la Calenda d	S. CO. Silver S. W. S.	1980 LVV W-800 11-40	0444972HDHRJ302		Ale Decide a serie			
Volume Right	47	34	20	18										
cSH	213	140	857	958		TITLE SERVICE SERVICE	a canting a sanggaran	Description of the	anta mantanan na sasa		en e	THE COURT HAVE		
Volume to Capacity Queue Length 95th (ft)	0.30 30	0.49 58	0.05 4	0.01			lanton.							
Control Delay (s)	29.1	53.7	1.4	-		11 T S 187								
Lane LOS	D	F	A	A		M. SENGERS								
Approach Delay (s)	29.1	53.7	1.4	0.3										
Approach LOS	D	F	ALCOHOLOGICAL PRODUCTION	TAPACO TO SOCIAL CONTRACTOR	HILP A THE BOLD WE SHOW HE SE	er fransk fan de fransk fan skille	Mar Manager Sandag	n-in in the second of the se	2010/01/2012	Tipe Southwest	er en	DMAIN 7 A T CS 1990		
Intersection Summary					A 18				(F. 1717)					
Average Delay		a control Reports	4.3	- Company of the Company		SHEVER SEEDING			THE PERSON NAMED IN THE PE		and the second			
Intersection Capacity Utiliza	ation :	- /si 2 6	9.4%	. ICI	U Level o	of Service	e .		· c					
Analysis Period (min)	TOOKS SEEK SECTIONS NOW		15		TOTAL CONTRACTOR OF STREET		and oracle and all the	and the same of th	and the second second second second second second	a name (17) factores de 1900 (gr.		en servende a restructiva de la constanta de l	ner enter Statestatistische State	
								30,1						



Queue shown is maximum after two cycles.

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

	ᄼ	-	•		1	1	-		1	
Lane Group	EBL	∌EBT:	-WBL	WBT	NBE	. NBT:	SBL	SBT	SBR	
Lane Group Flow (vph)	400	563	172	430	256	640	67	528	417	
v/c Ratio	0.77	0.89	0.77	0.73	0.83	0.60	0.41	0.79	0.54	
Control Delay	43.6	40.7	57.9	31.4	55.5	25.4	41.8	40.0	11.3	
Queue Delay	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	
Total Delay	43.6	40.7	57.9	31.4	55.5	25.4	41.8	40.0	11.3	
Queue Length 50th (ft)	100	243	85	181	125	137	32	133	64	
Queue Length 95th (ft)	#165	#429	#186	284	#214	171	71	#205	149	
Internal Link Dist (ft)		854		619		1014		262		
Turn Bay Length (ft)	200		100		100		100		100	
Base Capacity (vph)	522	659	224	616	313	1066	166	681	767	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	. 0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.77	0.85	0.77	0.70	0.82	0.60	0.40	0.78	0.54	
Intercection Summann									e yak	
The state of the s	· overed	e conco	hi guari	o may b	longor	HP Secretary 4.5	3 () () () () () () () () () (Control of the	er service de	
Reduced v/c Ratio Intersection Summary # 95th percentile volume							0.40	0.78	0.54	

	→	4-	1	-	
lane Group, c	EBT	WBT	NBT	SBT	
Lane Group Flow (vph)	44	44	1162	1027	
v/c Ratio	0.24	0.24	0.74	0.65	
Control Delay	14.4	14.5	8.4	5.6	
Queue Delay	0.0	0.0	\$ 0.0	0.0	
Total Delay	14.4	14.5	8.4	5.6	
Queue Length 50th (ft)	6		157	114	
Queue Length 95th (ft)	19	18	#531	294	
Internal Link Dist (ft)	938	531.	468	395	
Turn Bay Length (ft)	Charles at a second parent and the	TOTAL PROPERTY MANAGEMENT	Marking water of the same of the		
Base Capacity (vph)	273	271	1572	1581	
Starvation Cap Reductn	0	0	0	0	
Spillback Cap Reductn	0	, 0		0	
Storage Cap Reductn	0	0	0	0	
Reduced v/c Ratio	0.16	0.16	0.74	0.65	
Intersection Summary					
# 95th përcentile volume	exceeds	capaci	ty, queu	e may be	ellonger
Queue shown is maxim	num after	two cyc	des.		

	A	Ť	1	*	
ane Group	EBL	∉NBT#	, SBT	NEL	
Lane Group Flow (vph)	72	1037	1495	511	
v/c Ratio	0.44	0.51	0.72	0.75	
Control Delay	47.0	11.2	3.9	41.4	
Queue Delay	0.0	0.0	0.2	0.5	
Total Delay	47.0	11.2	4.1	41.9	
Queue Length 50th (ft) 📝	39	168	23	141	
Queue Length 95th (ft)	82	236	64	185	
Internal Link Dist (ff) 🦠	1038	436	304	1207	
Tum Bay Length (ft)		****		www.compagnerseacows.com	
Base Capacity (vph)	179	2015	2090	∄-778	
Starvation Cap Reductn	0	0	120	0	
Spillback Cap Reductn	. 0	0	. 0	58	
Storage Cap Reductn	0	0	0	0	
Reduced v/c Ratio	0.40	0.51	0.76	0.71	
Intersection Summary					
	Mary Comment of the C	m terral bigg paligner	STATE OF THE STATE	NO PROPERTY OF STATE	

	ⅉ	>	*	•	4-		4	1	-	-	-	
Lane Group	EBL	EBT	EBR	WBE	WBT	WBR.	NBL	ANBT	NBR:	∛ SBL ∤	∷.SBT	
Lane Group Flow (vph)	27	33	. 33	320	336	604	32	789	700	579	885	
v/c Ratio	0.35	0.40	0_07	0.82	0.85	0.61	0.09	0.91	0.83	0.95	∴ 0.62	
Control Delay	54.0	56.5	9.7	44.4	47.1	9.7	26.8	43.0	21.5	43.4	19.1	
Queue Delay	0.0	0.0	0.0	- 0.2	0.3	1.1	.0.0	0.0	1.6	12.8	0.0	
Total Delay	54.0	56.5	9.7	44.6	47.3	10.8	26.8	43.0	23.1	56.3	19.1	
Queue Length 50th (ft)	15°	19	0	171	183	133	12	181	151	241	143	
Queue Length 95th (ft)	42	#52	23	m#264		m193	m27	#336	#474 r	n#480	m126	
Internal Link Dist (ft)		152			327			304			584	
Turn Bay Length (ft)	75		75			150	75			350		
Base Capacity (vph):	78	82	457	390	393	1001**	360	868	847	614	1991	
Starvation Cap Reductn	0	0	0	0	0	188	0	0	4	0	0	
Spillback Cap Reductn	. 0	0	0.	2.	. 2	. 0	0	0	51	41	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.35	0.40	0.07	. 0.82	0.86	0.74	0.09	0.91	0.88	1.01	0.44	
Intersection/Summary											d Section	
# 95th percentile volume				e may b	e longer				44.			
Queue shown is maxim	um after	two cycl	es.	over i sidome tra i si ma	articles in the constitution of	monitorio este un agranto	s complete war well national regions	Part department	nik Stellen, Stellengen in visus en	MENOR MERCANIS	navorene konnavero n	THE PLANTS TO CARL OF CAUSE NAMED OF THE PROPERTY OF THE PARTY.

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

	>	1	4-	4	†	1	
ane Group	EBT	EBR	WBT:	NBL 3	NBT	SBT	
Lane Group Flow (vph)	70	651	49	579	848	956	
v/c Ratio	0.40	0.61	0.25	0.72	0.29	0.85	
Control Delay	43.7	13.6	30.8	20.6	1.5	40.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	43.7	13.6	30.8	20.6	1.5	40.8	
Queue Length 50th (ft)	- 38	146	- 18	136	29	~360	
Queue Length 95th (ft)	77	217	39	m153	m44	#485	•
Internal Link Dist (ft)-	435		188		/584	705	
Turn Bay Length (ft)		200		150			
Base Capacity (vph)	210 -	1198	236	929	2934	_1125	
Starvation Cap Reductn	0	0	0	. 0	0	0	
Spillback Cap Reductn	'O	0	0	0	. 0	0	
Storage Cap Reductn	0	0	0	0	. 0	0	
Reduced v/c Ratio	0.33	0.54	0.21	0.62	0.29	0.85	
Intersection Summary			2.5				
Volume exceeds capa	citi gua	io ie the	orotical	u infinito			
Queue shown is maxim				ymmue			
# 95th percentile volume	AND INCOME THE RESIDENCE OF THE PARTY OF THE	CONTRACTOR CONTRACTOR	Name and Address of the Owner o	a may b	tondor		
# JOHE DEIGERALE VOIUITIE	exceed:	capaci	ıy, queu	e may be	e ioriger	restaur is 71	

Queue shown is maximum after two cycles.

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

	﴾	→	•	4	1	Ť	-	1	4
Lane Group	EBL	EBT	:WBL:	WBT\$	- NBL	NBT	SBL.	SBT	-SBR 4 +
Lane Group Flow (vph)	400	563	172	430	256	640	67	528	417
v/c Ratios	0.70	0.90	0.65	0.72	0.83	0.57	0.44	0.73	0.52
Control Delay	51.0	52.4	58.0	40.3	67.8	32.8	59.9	46.7	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	$\overline{0}.0$
Total Delay	51.0	52.4	58.0	40.3	67.8	32.8	59.9	46.7	13.1
Queue Length 50th (ft)	The second second	382	123	医内部性神经炎症	190	208	49	196	98
Queue Length 95th (ft)	207	#607	203	401	#294	241	98	259	193
Internal Link Dist (ft)		854		√ 619∈		1014		262	
Turn Bay Length (ft)	200	Transparent and the Control	100	week come is the last scatter of	100		100		100
Base Capacity (vph)	636	685	309	673	331	1190	169	851	8172
Starvation Cap Reductn	0	0	0	0	0	0	0 ·	0	0
Spillback Cap Reductn	0	- 0	0.	- 0	. 0	- 0	- 0.	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.82	0.56	0.64	0.77	0.54	0.40	0.62	0.51
Intersection Summary									
# 95th percentile volume	exceeds	s capacil	ly, queu	may b	e longer.				

Queue shown is maximum after two cycles.

	-	4	Ť	+	
rane Group	EBT	WBT	- NBT	SBT	
Lane Group Flow (vph)	44	44	1162	1027	
v/c Ratio	0.24	0.24	0.74	0.65	
Control Delay	14.4	14.5	8.4	5.6	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	14.4	14.5	8.4	5.6	
Queue Length 50th (ft)	6	6	157	114	
Queue Length 95th (ft)	19	18	#531	294	
Internat Link Dist (ft)	938	531	983	384	
Tum Bay Length (ft)					
Base Capacity (vph)	273	271	. 1572	1581	
Starvation Cap Reductn	0	0	0	0	
Spillback Cap Reductn	0	0	- ≥ 0 °	0	
Storage Cap Reductn	0	0	0	0	
Reduced v/c Ratio	0.16	0.16	0.74	0.65	
Intersection Summary					
# 95th percentile volume	exceeds	s capaci	ty, queu	e may b	e longer

	ⅉ	†	1	لر	*	
Lane Group	EBL	NBT	∦SBT.	SBR	ENEES	
Lane Group Flow (vph)	72	1037	1032	478	511	
v/c Ratio	0.41	0.54	0.90	0.49	0.75	
Control Delay	58.0	11.2	27.3	11.6	49.8	The state of the s
Queue Delay	0.1	0.1	39.6	1.6	0.0	
Total Delay	58.1	11.2	66.9	13.2	49.9	· · · · · · · · · · · · · · · · · · ·
Queue Length 50th (ft)	∴ 51°	195	564	162	186	
Queue Length 95th (ft)	104	245	813	235	#276	
San control to the state of the	1038	436	304		1207	
Tum Bay Length (ft)					~~~~	
Base Capacity (vph)	197	2130	1275	1085	796	
Starvation Cap Reductn	0	0	317	418	0	
Spillback Cap Reductn	3-	143	// 0	0	7	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.37	0.52	1.08	0.72	0.65	
Intersection Summary						
# 95th percentile volume	exceed	s capaci	ty, queu	e may b	e longer.	

Queue shown is maximum after two cycles.

	١	>	*	•	4-	1	1	1	1		1	•
Lane Group	EBL.	EBT	EBH	WBL	WBT	WBR	NBL	NBT	NBR.	SBL	SBT.	
Lane Group Flow (vph)	27	33	33	313	330	592	31	765	679	561	857	
v/c Ratio	0.24	0.28	0.25	0.86	0.90	0.59	0.27	0.76	0.84	0.92	0.41	
Control Delay	57.8	58.6	22.2	67.4	72.9	15.4	58.8	41.4	28.3	57.4	12.8	
Queue Delay	0.0	0.0	0.2	8.0	12.5	0.0	0.0	1.3	2.3	0.0	0.1	
Total Delay	57.8	58.6	22.4	75.4	85.4	15.4	58.8	42.7	30.6	57.4	12.9	
Queue Length 50th (ft)	19	23	0	233	249	209	22	266.	318	389	180	
Queue Length 95th (ft)	52	60	34	#445	#476	374	56	335	455	#671	225	
Internal Link Dist (ft)		152			327			304			584	
Tum Bay Length (ft)	75		75		CHART STREET	150	75		185	250	THE TAX PROPERTY OF THE PARTY O	e SVIDA DI-LI ZIMBA CHIAN MARINANA MININA
Base Capacity (vph)	114	120	133	362	. 365	992	122	1203	808	SERVICE ASSESSMENT	2134	
Starvation Cap Reductn	0	0	0	0	0	0	0	237	52	0	0	THE PROTOCOL TO A SECURE OF THE PROTOCOL PROTOCOL PROPERTY OF THE PROTOCOL PROPERTY OF THE PROTOCOL PROPERTY OF THE PROTOCOL PROTOCOL PROPERTY OF THE PROTOCOL PROPERTY OF THE PROTOCOL PROTOCOL PROPERTY OF THE PROTOCOL P
Spillback Cap Reductn	., 0	0.7	6	30	30	- 5	- 0	5	. 0	0 00	247	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	. 0:24	0.28	0.26	0.94	0.99	0.60	0.25	0.79	0.90	0.91	0.45	
Intersection Summary	STATE OF THE STATE OF					Printer.						
# 95th percentile volume	exceed	s capacit	y, queu	e may b	e longer.						Re contra	
Queue shown is maxin	num aftei	two cyc	les.	nas operasias Palais Pa	CONTRACTOR OF THE CONTRACTOR OF THE	SALES CONTRACTOR	The second of th	AU DUNA MINDINAS	in a the second	en en englisse, jungsfolke filige filige	en en sus sus sus sus sus sus sus sus sus su	୫୯୦୦୧୧୯୯୯ଟ ୧୪୦୦-୧୯.୦୦୬୯୬ ଅକଳା ଅଧିକ ପ୍ରତିକ୍ରିକ ଅନୁମଧିକ ଅଧିକ ଅଧିକ ଅଧିକ ଅଧିକ ଅଧିକ ଅଧିକ ଅଧିକ ଅ

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Movement	EBL	WEBT.	EBR	WBL.	WBT	WBR-	MBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	ĥ		ሻ	∱>		ሻ	∱ β		٦	ተተ	7	
Ideal Flow (vphpl)	1900	FIRE CONCERNATION	1900	1900	STATE OF THE PARTY OF THE	1900	1900	1900	1900	1900 -	1900	1900	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	PACE CONTRACTOR PRODUCTS TO
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00 0.95		1.00	1.00 0.98	70.004 Pt.01052	1.00 1.00	0.95 0.97		1.00	0.95	1.00	
Frt Flt Protected	0.95	1.00		0.95	1.00		0.95	-0.97 1.00	112	1.00	1.00	0.85	
Satd Flow (prot)	0.95 3385	1814		0.95 1745	1.00		0.95 1745	3372		0.95 1668	1.00 3336	1.00 1599	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (perm)	3385	1814			1857		1745	3372		1668		1599	
Volume (vph)	340	325	140	160	310	55	160	415	120	60	480	340	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.82	0.82	0.82	0.90	0.90	0.90%	
Adj. Flow (vph)	358	342	147	172	333	59	195	506	146	67	533	378	
RTOR Reduction (vph)	0	13	0	0	6	0	0	22	0	0.	000	168	
Lane Group Flow (vph)	358	476	0	172	386	0	195	630	0	67	533	210	PERSONAL PROPERTY.
Heavy Vehicles (%)	0%	₹ 0%≈	0%	0%	0%	0%	0%	0%	0%		1%		
Turn Type	Prot			Prot			Prot		7)11.140.42(00-404.240)	Prot		om+ov	
Protected Phases	7	4		3	. 8		-6, 5	2		1	. 6	7	1.4
Permitted Phases	The state of the s	A THE STREET, SALVANDER,	a . Anno no occupanto	CONTRACTOR OF A SECULAR	CONTROL DE LA COMO DE TRANSPORTO	WHEN BOTH STATE STATE OF THE PARTY OF THE PA	CATEGORIUS COMPONINCIAINE	ABACIONES ESCRETORS	CONTROL OF THE PROPERTY OF THE PARTY OF THE	CONTRACTOR STATES	THE PARTY OF THE PARTY OF THE	6	and the contract of the party of the contract
Actuated Green, G (s)	14.8	32.6		11.1	28.9		14.4	29.8		6.3	21.7	36.5	
Effective Green, g (s)	16.8	34.6		13.1	30.9		16.4	31.8		8.3	23.7	40.5	AND THE PROPERTY OF THE PROPER
Actuated g/C Ratio	0.17	0.35		0.13	0.31 ∷		0.16	0.32		80.0	0.24	0.41	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0	The second secon
Vehicle Extension (s)	3.0	3.0	1-20	3.0	3.0		3.0	3:0	4311	3.0	3.0	3.0	
Lane Grp Cap (vph)	570	629		229	575		287	1074		139	792	697	
v/s Ratio Prot	c0.11.	c0.26		c0:10	0.21		c0.11	0.19		0.04	c0.16	0.05	
v/s Ratio Perm	ring distributed according	0.48haan9aa - Amerikan Amerika	COVERNMENT OF THE PROPERTY.			refresham say because more	Comment and Comment Season					0.08	
v/c Ratio	- 0.63	AND SHARE OF THE PARTY AND ADDRESS.		0.75	0.67	376		0.59		0.48	0.67	0.30	
Uniform Delay, d1	38.6	28.9	CONTRACTOR OF THE SECOND	41.8	30.0	BERNALDI ARENGEL	39.2	28.5		43.7	34.5	20.1	TO PERSON WENTER STANDARDS
Progression Factor	1.00	1.00		1.00	1.00		Parameter Control	1.00		1.00	1.00		
Incremental Delay, d2	2.2	5.2		13.0	3.1	STATEMENT OF THE	6.3	0.8		2.6	2.3	0.2	NEWS THEORY CHARGES
Delay (s) Level of Service	40.8	34.1		54.7	33.1		45.5	29.3		46.3	36.8	20.3	
Approach Delay (s)	D	C 36.9		D	C - 39.7		D	C		D	D	C	
Approach LOS		ან.9 D		ortalis.	. 39./ D	las inis.		33.0 C	e Cara		A THE PORT OF REALIS		
Approach EOS		U			υ			C			С		
Intersection Summary	PARTY AND PROPERTY AND PROPERTY.						2.25			1. F. 2. W			
HCM Average Control De		nizenenome dierring ver	34.6	H	CM Leve	l of Serv	rice	THE THE THE PROTECTION AND THE	С	Pro Kristinia agricordos da seri			
HCM Volume to Capacity			0.71										
Actuated Cycle Length (s			99.8		um of los			TO THE PART OF THE PART	9.0		TO SHOW HOLD SANGERS TO SE	TA STEETS AND THE PERSON	PERSONE NUMBER OF THE PERSON O
Intersection Capacity Utili	zation	dia di A	70.0%	, IC	U Level	ot Servi	ce		· C				
Analysis Period (min)	\$554256452474	TO CONTRACT OF THE CONTRACT OF	15	a eventuare	Maria Constitution of the				Name and American States		with the second	GNT TERRETAR STORMERS	
c Critical Lane Group							VACUAL						300

Configurations		♪		*	•	4	1	1	†	1	-	+	1		
Lane Configurations	Movement 25 11	EBL	EBT2	EBR	WBL	WBT	WBR	NBL	ABT	NBR -	-SBL	SBI	SBR		
Idea Flow (rights) 1900			€\$			4			43			€Î>	Ode oto - A - Dark Sales	name and an experience of the	10.11.01.0
Lance Life Factor 1.00		1900	1900.	1900	1900	1900	1900	1900 🕏	1900	1900 -	1900		1900		
Fit Protected 0.93											A THE STREET			A STATE OF THE PARTY OF T	OSCIPLIA
File Protected				100					will be and and the party of the party.			the second management			
Satd. Flow (prot) 1704 1702 1893 1876 Fit Permitted 0.93 0.93 0.93 0.95 0.97 Satd. Flow (perm) 1614 1607 1813 1822 Volume (vph) 19 1. 20 10 0. 20 30 845 15 20 315 10 Peak-hour factor, PHF 0.69 0.69 0.69 0.68 0.68 0.68 0.86 11 12 12 12 12 12 <td></td> <td>and or the same of the same of</td> <td></td> <td>orene en en en en en en</td> <td>TRIBLE SERVICE PARKET</td> <td></td> <td>TATE COMMENTS</td> <td>TO THE MEDICAL PROPERTY AND</td> <td></td> <td></td> <td>Tana Siri Yi Yakina malaya ka ki</td> <td></td> <td>r witnessen maar van maar va</td> <td></td> <td></td>		and or the same of		orene en en en en en en	TRIBLE SERVICE PARKET		TATE COMMENTS	TO THE MEDICAL PROPERTY AND			Tana Siri Yi Yakina malaya ka ki		r witnessen maar van maar va		
Fife Permitted			Company of the second			The state of the s		12570	The second second		5672	A CONTRACTOR OF THE PARTY OF TH			
Satisfies Form Satisfies										8042 (S. 75 S. 84)				CONTRACT OF THE PARTY OF THE PA	FETTER
Volume (ypi)						The second second	e e la C								
Peak-hour factor, PHF 14		10		ാര	30		- no	- 20-		734F 6	on'		46	The second second	22422
Adj. Flow (vph)		The state of the s	The second second	Comment of the Comment of	and the same of the same	and the second second second		Later Commission and the		San Legion Alberta	Children and the second	The state of the s			
RTOR Reduction (vph)			0.03 20.03												
Lane Group Flow (vph)			27	SELECTION OF THE PARTY OF		Service of the service of	are a designation of the	Company of the State of the Sta	The state of the state of	The state of the s	AND THE PROPERTY.	A CONTRACTOR OF THE PARTY OF TH	The second second second second		
Heavy Vehicles (%)											-	-	_		200
Perm		0%				0%					UNITED STATES	- Commence of the con-	The state of the s		新四条 类
Protected Phases 2 2 1 1 1 1 Permitted Phases 2 2 1 2 1 1 1 Actuated Green, G (s) 5.7 5.7 71.2 71.2 Effective Green, g (s) 6.7 6.7 72.2 72.2 Actuated green, g (s) 6.7 6.7 72.2 Actuated green, g (s) 6.7 6.7 72.2 Actuated green, g (s) 6.7 72.2 Intersection Summary		Perm			Pem			Perm			Perm				
Actuated Green, G (s) 5.7 5.7 71.2 71.2 Effective Green, g (s) 6.7 6.7 72.2 72.2 Actuated g/C Ratio 0.08 0.08 0.85 0.85 Clearance Time (s) 4.0 4.0 4.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 Eane Grp Cap (vph) 127 127 1542 1549 V/s Ratio Prot V/s Ratio Perm 0.01 0.01 0.07 0.58 Uniform Delay d1 36.4 36.4 2.2 1.9 Progression Factor 1.00 1.00 1.00 Incremental Delay d2 0.5 0.5 2.3 1.6 Delay (s) 36.9 36.9 4.6 3.5 Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS D D D A A A		AND OFFICE STATES OF STATE	2	STATE OF THE STATE	CONTRACTOR	2	Arthropia mala Gordon de Callon de	STREET STREET STREET	1	al alter mental		1			S82222
Effective Green, g (s) 6.7 6.7 72.2 72.2 Actuated g/C Ratio 0.08 0.08 0.85 0.85 Clearance Time (s) 4.0 4.0 4.0 4.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 Eane Grip Cap (vph) 127 127 1542 1549 V/s Ratio Prot V/s Ratio Perm 0.01 0.01 0.07 0.58 Umiform Delay d1 36.4 36.4 2.2 1.9 Progression Factor 1.00 1.00 1.00 Incremental Delay d2 0.5 0.5 2.3 1.6 Delay (s) 36.9 36.9 4.6 3.5 Level of Service D D D A A A Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS D D D A A A	Permitted Phases	- 2			. 2			- 1			1				
Actuated g/C Ratio 0.08 0.08 0.85 0.85 Clearance Time (s) 4.0 4.0 4.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 Lane Grp Cap (vph) 127 127 1542 1549 V/s Ratio Prot WS Ratio Perm 0.01 C0.01 60.57 0.49 V/c Ratio 0.14 0.14 0.67 0.58 Umilorm Delay d1 36.4 36.4 2.2 199 Progression Factor 1.00 1.00 1.00 1.00 Incremental Delay, d2 0.5 0.5 2.3 16 Delay (s) 36.9 36.9 4.6 3.5 Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LoS D D A A A									71.2			71.2	ar or a same of the particular and	CONTRACTOR OF THE PROPERTY AND	A. S.
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V/s Ratio Prot W/s Ratio Perm 0.01 60.01 60.57 0.49 v/c Ratio 0.14 0.14 0.67 0.58 Uniform Delay d1 36.4 36.4 2/2 1.9 Progression Factor 1.00 1.00 1.00 1.00 Incremental Delay d2 0.5 0.5 2.3 1.6 Delay (s) 36.9 36.9 4.6 3.5 Level of Service D D A A Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS D D A A Intersection Summary A A A		ASSESSED 1989		EN SANGARE SE	**************************************			State Parent State		and the state of the	AND DESCRIPTION OF THE PARTY OF			CONTRACTOR OF THE PARTY OF THE	War standing
WS: Ratio Perm 0.01 ce.01 c0 57 0.49 v/c Ratio 0.14 0.14 0.67 0.58 Umform Delay d1 36.4 36.4 2/2 1/9 Progression Factor 1.00 1.00 1.00 1.00 Incremental Delay, d2 0.5 0.5 2.3 1.6 Delay (s) 36.9 36.9 4.6 3.5 Level of Service D D A A Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS D D A A Intersection Summary A A A			127			127	60.0	Bar Si	1542			1549			
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Progression Factor 1.00 1.00 1.00 Incremental Delay, d2 0.5 0.5 2.3 1.6 Delay (s) 36.9 36.9 4.6 3.5 Level of Service D D A A Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS: D D A A Intersection Summary A A A											N. C. S.				
Incremental Delay, d2 0.5 0.5 2.3 1.6 Delay (s) 36.9 36.9 4.6 3.5 Level of Service D D A A Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS: D D A A Intersection Summary A A A			Carrier and the second	ia Coleman	12. 2.2				want of the Balletine			A PROPERTY OF THE PARTY OF			
Delay (s) 36.9 36.9 4.6 3.5 Level of Service D D A A Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS: D D A A Intersection Summary D A A A															
Approach Delay (s) 36.9 36.9 4.6 3.5 Approach LOS D D A A Intersection Summary 36.9 4.6 3.5			36.9	n en		And the second second	one come open and		and the second second			Control of the second			ESTATE
Approach LOS D D A A Intersection Summary	Level of Service		D			, D			Α			Α			
Intersection Summary			36.9			36.9	***************************************	28.000-000-7250	4.6	Service Control of the Control of th	One of the state o	3.5	transcription of a Complex Sciences	THE PERSON NAMED IN COLUMN	MALL.W
	Approach LOS		D.			D			. A	1		A			
	Intersection Summary														
	HCM Average Control Del	av		5.5	Н	CM Leve	Lof Sen	ice	1,00	Δ	and an area	i i i		17.	10756
HCM Volume to Capacity ratio 0.63			Man Part Procession				and the second			Sing Carle	ART SERVICE		TANGEN PROPERTY.		MIN'S
Actuated Cycle Length (s) 84.9 Sum of lost time (s) 6.0	Actuated Cycle Length (s)				- Si	im of los	t time (s)		6.0					
Intersection Capacity Utilization 71.5% ICU Level of Service C	Intersection Capacity Utiliz	ation	· · · · · · · · · · · · · · · · · · ·	71.5%					e, weed to supplie to delice	C	namer Sent March State 1945	eranditikkiji intelesii	arantsirida 2002 (1994)		TO PERSONAL PROPERTY.
Analysis Period (min) 15	Analysis Period (min)			15				140							
c Critical Lane Group	c Critical Lane Group														

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Viovement	SEBLE?	EBR	-NBL	NBT	SSBT	SBR	SBR2	NELS	NER		
Lane Configurations	W			414	A	7		774			
Ideal Flow (vphpl)	1900	1900	1900%	1900	1900	1900	1900 ::		1900		
Lane Width	12	12	12	12	11	11	11	11	11	et Demonte State (e.g. A. and and providing defeation), design State (Part Part Philae) and defeation in record de 2	
Total Lost time (s)	3.0	123.4		3.0	3.0	3.0		3.0			
Lane Util. Factor	1.00	etetkuri maturakan	······································	0.95	1.00	1.00		0.97			
Fit & Special Control of the Control	0.98			1.00	1.00	0.85		1.00			
Flt Protected	0.96			1.00	1.00	1.00		0.95			
Satd. Flow (prot)	1787			3571	1818	1546		3385			
Flt Permitted Satd_Flow (perm)	0.96 1787			0.88 3139	1.00	1.00 -1546		0.95 3385			
Volume (vph)	60	10	15	920	915	385	20	400	0		
Peak-hour factor: PHF	0.96	0.96	0.96	0.96	0.94	0.94	0.94	0.88	0.88		
Adj. Flow (vph)	0.90 62	0.90 10	16	958	973	410	.u.94 21	455	υ.οο 0		
RTOR Reduction (vph)	62 60 60 60	0	0	0.	0	2	0	433	0		
Lane Group Flow (vph)	72	0	0	974	973	429	0	455	0		
Heavy Vehicles (%)	0%	0%	1%		1%	1%	1%	0%	0%		
Turn Type	Car Managaria		Perm	CONTRACTOR AND AND	CONTRACTOR OF THE PERSON NAMED IN COLUMN 1	Perm	- New York - 15-	er, e X. 2 / Landidad Control Control			A CA LI CA CATTON DATE OF THE SECOND
Protected Phases	3			. 2	6			4			
Permitted Phases			2	throughous transco	6	6	mani perkenanga di k	ALL DESCRIPTIONS OF THE STREET, NO.	and Descriptions		Para kanakat matangga 1964, pelanggangga Pa
Actuated Green, G (s)	5.4			53.1	53.1	53,1		16.0			
Effective Green, g (s)	7.4			55.1	55.1	55.1		18.0			and the second s
Actuated g/C Ratio	. 0.08			0.62	0.62	0.62		0.20			
Clearance Time (s)	5.0	emionale compressional	ela erembetelt (rei	5.0	5.0	5.0		5.0			Process with the construction of the second section of
Vehicle Extension (s) :	2.5			3.0	* 3.0	3.0		2.5			
Lane Grp Cap (vph)	148	na makazini sakatina protessa	and is the contraction of the co	1933	1119	952		681			
v/s Ratio Prot	c0.04				c0.54			c0.13			
v/s Ratio Perm	0.49			0.31 0.50	. 0.87	0.28 0.45		0.00	751215-652-553		
v/c Flatio Uniform Delay, d1	39.2			9.6	14.2	9.1		0.67 33.0			
Progression Factor	-1'00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	1.8			0.2	7.4	0.3		2.2			
Delay (s)	41.1			9.8	21.6	9.5	160	35.2			
Level of Service	D			A	C	A	A.A. Colonial A. Colo	D	andre waterways of the		18482842133 (1848-1712-1849)
Approach Delay (s)	41.1			. 9.8	17.9			35.2			
Approach LOS	D	entransferring region (means	N. Editation (Garage Sept.)	A	В	reduced the contract of the co	Mariana de Caldinas	D	PARTICIPATION STATES AND STATES A	CHECKTON CONTROL OF CHECK CONTROL CONT	and the second s
Intersection Summary					e+44.00						
HCM Average Control De	lav	ANGUSCOVI.	18.5	Н	CM Lev	el of Serv	ice	SILEMAN SEA	В		CARDAN PORTE CONTRACTOR OF THE PERSON OF THE
HCM Volume to Capacity			0.79	15/17/19					ر		
Actuated Cycle Length (s		ROANVEILS!	89.5	S	um of lo	st time (s))		9.0	onzewianii oniisii in i	
Intersection Capacity Util			73.7%			of Service	,		D'		
Analysis Period (min)	onen o un trebando por tras de 18000 e 18	Comments of Clarific States	15	ar von vil 10,000 Sõõta	r ugas s i Laid 20 rai 27 Alid 1974.	- CALLO CONTENTINA PARA PARA PARA PARA PARA PARA PARA PA	>>endertransen belit		reneal tracker (street)		
c - Critical Lane Group											

Movement Fig. Fig. Fig. Wile Wil		ⅉ	→.	*	•	—	4	4	1	/	1	+	1	
Ideal Flow (Popto) 1900	Viovemente	ÆEBLT.	EBI	EBR	.WBL=	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Width 12 12 12 12 12 12 12 1					ሻ			ሻ	朴					
Lane Util, Factor 1,00 1		CANCELLER PROPERTY.	THE TWO COMMENTS		The second second	A STATE OF THE STA		The second second second	A CONTRACTOR OF THE PARTY OF TH	O STATE OF STREET	The second section is	Street Corners and services de	with the second second	
Lane Util. Factor													11	
Fit Protected 0.95 1.00 1.00 9.85 1.00 1.00 0.85 1.00 1.00 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	THE REPORT OF THE PROPERTY OF	A STATE OF THE PARTY OF THE PAR												
Filt Protected 0.95														AND THE WAY HAVE THE WAY AND
Sato Flow (pro)		And the Charles of the Land	The second second	CAN DE CONTRACTOR	The Administration Sections	and the second second	THE RESERVE TO SERVE	Section of the section of	STATE OF THE STATE	The resident states	School and August and August	ever being being being		
File Permitted														
Safe Flow (perm) 1805 1900 1615 1698 1712 1598 1805 3010 1615 1728 3426					ACRES TO MENT SERVICE OF THE	The state of the s	The state of the s				The state of the state of	The second second second second		
Volume (vph)													CONTRACTOR DE LA COMPANSION DE LA COMPAN	Sent IS super or a republicant and a single
Peak hour factor, PHF 0.63 0.63 0.63 0.96 0.96 0.96 0.96 0.91 0.91 0.91 0.84 0.84 0.84 0.84 0.84 Adj. Flow (vph) 40 48 48 483 31 438 33 918 516 470 1018 60 RTOR Hediction (vph) 0 0 0 0 0 0 0 0 0		Commenter State and Comments of the Comments o	CATCHER STREET	MATERIAL PROPERTY OF THE PARTY	ALTERNOSTO CONTRACTOR	All Volvery William In any and It where	Address of the National Section	A CONTRACTOR OF THE PARTY OF TH	CONTRACTOR AND ADDRESS.	25 8-18-110-110-110-1		The state of the s		
Adj. Flow (vph)														CONTRACT TRANSPORT OF THE PARTY TRANSPORT
RTOFI Reduction (vph)		The second section of the second	AST TO THE WAY COME TO THE PARTY.	a service with the property		SATISFIED THE WAY AND THE	w Alexandra Comment				Charles Santa Santa Con	and the second	ALMERICAN CONTRACTOR OF THE REAL PROPERTY.	
Lane Group Flow (vph)														Some Company of the Company
Heavy Vehicles (%)			CONTRACTOR OF THE STATE OF			Contract of the second	Carried Contract of the Contra	CT AND AND STATISTICS OF	spiritual description of the property of the p	ALCOHOLD WAR TO SEE THE			Place L'ALTE DE MARCHA	a da como de c
Turn Type Split Prot Protected Phases 3 3 3 4 4 1 5 2 4 1 6 Permitted Phases 3 3 3 4 4 1 5 2 4 1 6 Acturated Green, g (s) 3.9 3.9 18.2 18.2 48.0 31.3 32.9 51.1 29.8 59.6 Effective Green, g (s) 5.4 5.4 5.4 19.7 19.7 51.0 4.6 34.9 54.6 31.3 61.6 Actuated g/G Patic 0.05 0.05 0.05 0.19 0.19 0.49 0.04 0.34 0.33 0.30 0.60 Clearance Time (s) 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 5.0 4.5 4.5 5.0 4.5 4.5 5.0 4.5 4.5 5.0 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5														
Profected Phases 3 3 3 4 4 1 5 2 4 1 6 6	Control of the Contro	Walter Bridge Committee	0%	Mary Cont. Mary Cont.	Same of the second section	CAN'T ALL MORE THE CAN'T CHARLES	F-9	-200-0010-0010-0010-00	Children Agent Street Street	or Light Nation Association of	CONTRACTOR ACTION	1%	1%	
Permitted Phases 3			**************************************		a. seemanaka uure muure		TOTAL CONTRACTOR CONTR				Prot	oranie a la company	Ontonia en menta nomina	
Actuated Green; G (s) 3.9 3.9 3.9 18.2 18.2 48.0 3.1 32.9 51.1 29.8 59.6 Effective Green, g (s) 5.4 5.4 5.4 19.7 19.7 51.0 4.6 34.9 54.6 31.3 61.6 Actuated G/C Ratio 0.05 0.05 0.05 0.19 0.19 0.49 0.49 0.04 0.34 0.53 0.30 0.60 Clearance Time (s) 4.5 4.5 4.5 4.5 4.5 4.5 5.0 4.5 5.0 4.5 5.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 2.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 Lane Grp Cap (vph) 94 99 84 324 326 836 80 1220 854 524 2043 v/s Ratio Perm 0.10 0.2 0.03 0.00 0.14 0.15 0.14 0.02 0.25 0.12 0.27 0.31 v/s Ratio Perm 0.10 0.20 0.20 0.30 0.73 0.76 0.48 0.41 0.75 0.60 0.30 0.53 Uniform Delay, d1 47.4 47.6 46.5 39.3 39.6 17.3 48.0 30.4 16.9 34.5 12.3 Progression Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		3		3	4.	4		5			1	A STATE OF THE PARTY.		
Effective Green, g (s) 5.4 5.4 5.4 19.7 19.7 51.0 4.6 34.9 54.6 31.3 61.6 Actuated g/C Ratio 0.05 0.05 0.05 0.19 0.19 0.49 0.04 0.34 0.53 0.30 0.60 Clearance Time (s) 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 5.0 4.5 5.0 4.5 5.0 Wehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0		NAMES OF THE PARTY OF THE PARTY.			anescriptures	visto estrategazione				_	- The transport of the same	_	ACTION OF THE PROPERTY AND	A 200/00/00/00/00 PROPER PROGRAMMENT OF THE PARTY OF THE
Actuated g/C Hallo 0.05 0.05 0.05 0.19 0.19 0.49 0.04 0.34 0.53 0.30 0.60 Clearance Time (s) 4.5 4.5 4.5 4.5 4.5 4.5 4.5 5.0 4.5 5.0 4.5 5.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0		and the second second	and the state of t		And the same of the same of the	Service Company of the	AND CONTRACTOR	THE RESERVE OF THE PARTY OF THE	title Contraction of the	and the second second second	The State of the S	effected and a security		
Clearance Time (s)														THE THE PROPERTY OF THE PROPERTY AND THE PROPERTY OF THE PROPE
Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 2.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 3.0 3.0 2.0 3.0 3.0 2.0 3.0 3.0 2.0 2.0 3.0 3.0 3.0 3.0 2.0 2.0 2.0 2.0 3.0					A CONTRACTOR OF THE PARTY OF TH			Maria Staron Sarden			The state of the s	The state of the s		and the second
Lane Grp Cap (vph) 94 99 84 324 326 836 80 1220 854 524 2043 V/s Ratio Prot 0 0 0														
V/s Ratio Prof. 0.02 c0.03 0.00 0.14 c0.15 0.14 c0.02 c0.25 0.12 c0.27 0.31 v/s Ratio Perm 0.10 0.10 0.20 We Ratio 0.43 0.48 0.03 0.73 0.76 0.48 0.41 0.75 0.60 0.90 0.53 Uniform Delay, d1 47.4 47.6 46.5 39.3 39.6 17.3 48.0 30.4 16.9 34.5 12.3 Progression Factor 1.00 <t< td=""><td></td><td>AND RESPONSE OF THE PROPERTY OF</td><td>CONSTRUCTOR - 14 - 50 - 50 - 50</td><td></td><td></td><td></td><td>an pear to the for the part of the</td><td>Wild REAL PROPERTY.</td><td>And the property of</td><td>Capacity Control of the Control of t</td><td></td><td>Carlo Carlo Carlo</td><td></td><td></td></t<>		AND RESPONSE OF THE PROPERTY OF	CONSTRUCTOR - 14 - 50 - 50 - 50				an pear to the for the part of the	Wild REAL PROPERTY.	And the property of	Capacity Control of the Control of t		Carlo		
v/s Ratio Perm 0.10 0.20 V/c Ratio 0.43 0.48 0.03 0.73 0.76 0.48 0.41 0.75 0.60 0.90 0.53 Uniform Delay, d1 47.4 47.6 46.5 39.3 39.6 17.3 48.0 30.4 16.9 34.5 12.3 Progression-Factor 1.00														
V/c Râtio 0.43 0.48 0.03 0.73 0.76 0.48 0.41 0.75 0.66 0.90 0.53 Uniform Delay, d1 47.4 47.6 46.5 39.3 39.6 17.3 48.0 30.4 16.9 34.5 12.3 Progression Factor 1.00		0.02	c0.03	_0.00	0.14	cu.15	Committee and the second	0.02	c0.25	NAME OF THE PARTY	c0.27	0.31		
Uniform Delay, d1				5222223				rungsverter (1886)			verzezen.			
Progression Factor 1.00		A CANADA CONTRACTOR	Service of the servic	Control of the Land of the Control	The state of the s					the state of a self-to-state of the second		Charles and the same of the sa		
Incremental Delay, d2													TERRORITARIA PARA	
Delay (s) 50.5 51.3 46.6 47.1 49.8 17.5 49.3 33.0 18.1 51.9 12.5 Level of Service D D D D B D C B D B Approach LOS D C C C C C Intersection Summary B B C C C C HCM Average Control Delay 28.7 HCM Level of Service C C C HCM Volume to Capacity ratio. 0.79 Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization Analysis Period (min) 74.5% IGU Level of Service D		CONTRACTOR OF THE SECOND	元本の企画は公司の日本の大学の	DE CONTRACTOR OF THE PARTY OF T	A CONTRACT OF THE PARTY	The second second	The state of the state of the	Management 10 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A CONTRACTOR OF THE PARTY OF TH	a Dad Allenda Section	Manager Commen	WILL DO NO. W. A.		
Level of Service D D D D D B D C B D B Approach Delay (s) 49.4 33.7 28.1 24.5 Approach LOS D C C C Intersection Summary B HCM Level of Service C HCM Volume to Capacity ratio 0.79 Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% IGU Level of Service D Analysis Period (min) 15														
Approach Delay (s) 49.4 33.7 28.1 24/5 Approach LOS D C C C Intersection Summary C HCM Level of Service C HCM Volume to Capacity ratio 0.79 C C Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% ICU Level of Service D Analysis Period (min) 15		the section of the section of the section of	The same of the same of the	Mary Talking Spirit Printers	distribution of the second	- Charles Barbar	Committee of the Commit	Transmission P	LA COMMONDAY AT		The state of the	and delication of the second		
Approach LOS D C C C Intersection Summary HCM Average Control Delay 28.7 HCM Level of Service C HCM Volume to Capacity ratio 0.79 Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% IGU Level of Service D Analysis Period (min) 15		D		u d D	U Esta de Albarda		В	AVOI ORGANISTACIST MEDICAL	_	-	_			
Intersection Summary: HCM Average Control Delay 28.7 HCM Level of Service C HCM Volume to Capacity ratio 0.79 Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% IGU Level of Service D Analysis Period (min) 15		DELECT:				Drawn (Charles Contactors			STANDARD COM			STATE OF STA		
HCM Average Control Delay 28.7 HCM Level of Service C HCM Volume to Capacity ratio 0.79 Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% ICU Level of Service D Analysis Period (min) 15	Approach LOS		D			C			U			C		
HCM Volume to Capacity ratio. Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% IGU Level of Service D Analysis Period (min) 15									- E					12
Actuated Cycle Length (s) 103.3 Sum of lost time (s) 12.0 Intersection Capacity Utilization 74.5% ICU Level of Service D Analysis Period (min) 15					H	CM Leve	el of Serv	/ice		С				
Intersection Capacity Utilization 74.5% ICU Level of Service D Analysis Period (min) 15				Mary Transport										
Analysis Period (min) 15	, , , , , , ,									management to be the concentration of				
		zation		74.5%	, IÇ	U Level	of Servi	ce		_ D				
c Critical Lane Group				15										
	c Critical Lane Group	W.												

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Viovement	EBL	EBI	EBR	ZWBL	WBT	WBR (NBL	NBTS	NBR	SBL	SBT	SBR	
Lane Configurations		લ	7	ALL PROPERTY OF THE PARTY OF TH	4		ħ	作		A CONTRACTOR OF THE PARTY OF TH	4B		Harmon March Control
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900	1900		1900	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0		
Lane Util. Factor	nonenanan kanatan arawa (1214 at	1.00	1.00	our personal for the personal distriction was	1.00	ever a remine sometime	1.00	0.95		the second to the second section	0.95	Water to the state of the state	
Frt see see see	1.00	1.00	0.85		0.96		1.00	1.00			0.98		
Fit Protected	Form Military Commission (1985)	0.96	1.00	en in server and supple	0.99	OCTATE SERVE STANK	0.95	1.00			1.00		
Satd. Flow (prot)		1918	1812	i a	1801		1787	3563			3507		
Flt Permitted		0.80	1.00		0.87		0.95	1.00	SINELES STORY		0.95	enderen en en en	
Satd, Flow (perm)		1613	A.Z. C. Compression of the Compr		1597		1787	3563			3333		
Volume (vph)	60	5	585	10	15	10	535	730	15	5	705	100	
Peak-hour factor, PHF	0.93	0.93	0.93	. 0.73	0.73	0.73	0.95	0.95	0.95	0.88	0.88	0.88	
Adj. Flow (vph)	65 0	5 0	629 - 30	14 0	21 12	14 0	563	768	16	6 - 0	801	114 0	
RTOR Reduction (vph)	The state of the s	Section Section 2	599	TO THE REAL PROPERTY OF THE PARTY OF THE PAR	12) 37	Consideration of the Colors	- 0	700	0		9	Programmers of the Contract of	
Lane Group Flow (vph) Heavy Vehicles (%)	0 1%	70 40/	299 	0 	37 - 0%	. 0 - 0%	563 1%	783 1%	0	0 1%	912	0 1%	
Turn Type	Perm	e-enver3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -	Control of the second	Perm	- U/o	U /o	Prot	t /0.	Saves university of the	Perm	1 /0	- 17.1 /0 / - E	
Protected Phases	renn	- 8	pm+ov 5	renn	4	A SPORT STEERS	F10t	2.1		remi	6		
Permitted Phases	8	8		4	4		J.	2 2		6	6		
Actuated Green, G.(s)		4.5	36.4		4.5		31.9	67.0			30.1		
Effective Green, g (s)	Biddina (1916)	6.5	40.4	YNAMA	6.5		33.9	69.0			32.1		
Actuated g/C Ratio		0.08	0.50		0.08		0.42	0.85			039		
Clearance Time (s)		5.0	5.0	en ender bede	5.0		5.0	5.0		s kondis Diese Beiter	5.0		Cale Crassing S
Vehicle Extension (s)		2.5	2,5		2.5		2.5	3.0			3.0		
Lane Grp Cap (vph)	X - C. P. P. C. P. C. P. C. P. C. P. C. P. P. C. P. C. P. P. C. P. P. C. P. C. P. P. P. C. P. P. P. C. P.	129	965		127		743	3017			1313		
v/s Ratio Prot			c0.26				c0:32	0.22					
v/s Ratio Perm	Car Al Community of Nice and Control of the	0.04	0.07	demonstration of the Confession of the Section of t	0.02	and and a second	endeden international con-	nut al initiative describerations and sections.	Control of the Contro	No. of the second second second	c0.27	en manual contra	and the second second second
v/c Ratio		0.54	0.62		0.29		-0.76	0.26			0.69		
Uniform Delay, d1		36.1	15.0		35.3		20.3	1.2			20.6		
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00		
Incremental Delay, d2	781010111111111111111111111111111111111	3.6	1.1	omer description of the second	0.9	an and the second section of the section of the second section of the sect	4.2	0.0	encommunication crosses a services of	nonakottary carponale	1.6	anger regulationers are extremely a second	
Delay (s)		39.7	16.1		36.3		24.5	1.3			22.2		
Level of Service	ENERGY GENERAL STANS	D	В	was continue	D	Constitution and the constitution of the const	C	A		n name som gran	С		
Approach Delay (s)		18.4			36.3			11.0			22.2		
Approach LOS		В			Đ			. В			С		
Intersection Summary											April 1		
HCM Average Control De	elay		16.6	H	CM Leve	l of Serv	rice		В				
HCM Volume to Capacity			0.72										
Actuated Cycle Length (s			81.5		um of los				9.0				
Intersection Capacity Util	ization		73.2%	ri _k , jo IC	U Level	of Servi	çe		\mathbf{D}_{i}				
Analysis Period (min)	o Marine and Artificial Control of the Artif		15		manufacture (ar not be consideration to					
c Critical Lane Group													

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Movement 4.4	EBL	EBT	EBR	WBL	WBT	WBR.	NBLE	ENBT:	NBR.	SBL	SBT	SBR	
Lane Configurations	ሻሻ	ĥ		ሻ	Ĥ		79	^ }		ħ	朴	Ąf	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3,0	3.0	3.0	
Lane Util. Factor	0.97	1.00	1220700 (444-144)	1.00	1.00	December and Control	1.00	0.95		1.00	0.95	1.00	
Fit was a second	1.00 -	0.95		1.00	0.98	10	1.00	0.97		1,00	1.00	0.85	
Flt Protected	0.95	1.00	***************************************	0.95	1.00	***************************************	0.95	1.00	TANK ST.	0.95	1.00	1.00	AND THE PERSON NAMED AND POST OF THE PERSON N
Satd: Flow (prot)	3385	1814		1745	1855		1745	3374		1668	3336	1599	
Flt Permitted	0.95	1.00		0.95	1.00	William To Burning Bell 2	0.95	1.00	A CONTRACTOR CONTRACTOR	0.95	1.00	1.00	CONTRACTOR STORY
Satd: Flow (perm)	3385	1814		-1745	1855		1745	3374		1668	3336	1599	
Volume (vph)	330	310	135	155	290	55	155	405	115	60	465	325	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.82	0.82 +	0.82	0.90	-0.90	0.90	
Adj. Flow (vph)	347	326	142	167	312	59	189	494	140	67	517	361	
RTOR Reduction (voh)	0	13	0	0	6	- 0	0	22	0	0	0	180	
Lane Group Flow (vph)	347	455	0	167	365	0	189	612	0	67	517	181	
Heavy Vehicles (%)	0%	0%	- 0%	0%	0%	0%	0%	0%=	- 0%	1%	1%	1%	
Turn Type	Prot			Prot			Prot			Prot		pm+ov	
Profected Phases	7	4		3	8		5	2		35.1	6	7	
Permitted Phases	a piece base Octoberadiliše i	sete (Printers settle belan stor) vit	WARESTANDS SERVE		that the A. State and a state of the	e ora compositación	AT AT STATE OF THE	tan kili ist ili walenii ku	evaloratinativa.V	CONTRACTOR STATES OF T	\$5500000000000000000000000000000000000	6	
Actuated Green, G (s)	14.8	32.6	174	10.6	28.4		11.3	25.0		6.1	19.8	34.6	
Effective Green, g (s)	16.8	34.6	PERSONAL PROPERTY SPACENCE	12.6	30.4	realizable confident	13.3	27.0	CAR PERSON SANDAR	8.1	21.8	38.6	CONTROL CONTRO
Actuated g/C Ratio	0.18	0.37		0.13	= 0.32		0.14	0.29		0.09	0.23	0.41	
Clearance Time (s)	5.0	5.0	AND THE PROPERTY OF THE PROPERTY OF	5.0	5.0	- CANADA STA	5.0	5.0	THE PROPERTY OF LAND	5.0	5.0	5.0	And the second s
Vehicle Extension (s)	3.0	3.0	G. C.	3.0	3.0		3.0	3.0		3.0%	3.0	3.0	
Lane Grp Cap (vph)	603	666		233	598		246	966		143	771	705	
v/s Ratio Prot	c0.10	c0.25		c0.10	∞ 0.20		c0.11	c0:18		0.04	0.15	0.05	
v/s Ratio Perm	A CONTRACTOR OF THE SECURIOR	The Mark Committee of the Committee of t	NAME AND TO SERVE	ALADESE PER ESTA PARA PARA PARA PARA PARA PARA PARA PA	en e		Cisaziakata dianos	**************************************	ACCESS AND	orogeneenderde stad	Publishedelik dipila se amuk, se i	0.07	
v/c Ratio	0.58	0.68		0.72	0.61		0.77	0.63		0.47	0.67	0.26	
Uniform Delay, d1	35.5	25.2	Mariner (1997) e Parameterante	39.1	27.0		39.0	29.3	530xx7500000xx	41.0	33.0	18.4	to control of the con
Progression Factor	1.00	1.00		1.00	1.00		:1,00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.3	2.9	and the property of	10.0	1.8	CONTRACTOR CONTRACTOR	13.4	1.4	CONTRACTOR CONTRACTOR	2.4	2.3	0.2	SOUND AND CONTRACTOR AND ASSESSMENT
Delay (s)	36.8	28.1		49.2	28.8		52.4	30.7		43.5	35.3	18.6	
Level of Service	D	С		D	С	AND DESIGNATION OF SHIP	D	С		D	D	В	
Approach Delay (s)		31.8			35.1			35.7			29.5		
Approach LOS		С			D			D		and their sens property	С	or the Commence of the Extra Commence in	A AND A STATE OF THE PROPERTY
intersection Summary				T.C									
HCM Average Control De	lay		32.7	Н	CM Leve	l of Serv	/ice		С				
HCM Volume to Capacity			0.67				***					77	
Actuated Cycle Length (s)		westernalise in 1946	94.3	S	um of los	t time (s	**************************************		6.0	manual control of the	nosannekskihili	ucześnie zelnielski gra	
Intersection Capacity Utili			57.9%		U Level				≟. C∷				
Analysis Period (min)	er i von errori i er i diologi	rops (SRVAL) (Callina)	15	mer ambet to establish the	andriine shidhidhida nibid	nero eta ertemblikio	eneurit Carola (in)	THE REPORT OF THE PROPERTY OF	THAT BUILDING THE WAY	ann an Shartain (Shartain	and Anna Control of the Control of t	10001200011111111111111111111111111111	
c - Critical Lane Group						72.5							
tressections and an experience of the section of the Pro-	AND	wastermanii	arcerdorander	2000 (2000) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900) (1900)	emanantisti di di salah di sa	oranie programa (1995)	MINERAL CONTRACTOR	The State of the S	DESCRIPTION OF STREET	orango ististi orango	ano do antimodelos	AND AND PROPERTY.	

	ⅉ	>	•	•	4	*		†	~	1	1	1	
Movementes	EBL	EBT	EBR	WBL#	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		♣			€\$			4			43		Annual Company of the
ideal Flow (vphpl)	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		3.0	Change of the community of	EL TANGET E PLAN TO THE	3.0	make a series at the server	may of States, 17th of Table States and	3.0	and the Bankstoner was son		3.0		
Lane Util. Factor		1.00			1.00			. 1.00	754		1.00		
Frt		0.94			0.91			1.00	C DOMESTICA	oeksenneen	1.00		
Fit Protected		0.98 1740			0.98 1702		a, ia	1.00 1894			1.00		
Satd. Flow (prot) Fit Permitted		0.92		5 4 B 1 1 1 1 1	0.89			0.99	215.00		1879 0.97		
Satd. Flow (perm)		1644			1538	Service 20		1876			1825		
Volume (vph)	- 5	1044	5	- 10	1330	20.	10	820	15	20	790	1	
Peak-hour factor, PHF	0.69	0.69	0.69	0.68	0.68	0.68	0.86	0.86	0.86	0.94	0.94	0.94	
Adj. Flow (vph)	7		7	15	0.0	29	12	953	17	21	840	1	
RTOR Reduction (vph)	0	7	0	0	27	0	0	0	0	0	0	0	
Lane Group Flow (vph)	0	8	0	. 0	17	0	. 0	982	0.0	- 0 -	862	0	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	property - representation and the control of the co
	Perm	1000		Perm:			Perm			Perm			
Protected Phases		2	na mana mana anta anta anta	U. ANTONIO PROGRAMMO O	2	company to the second of the last of the l	to a second to a second training to the	1	A TOTAL COLUMN TO THE PROPERTY OF THE	er Dir a er Stransversione en sie naar en	1		
Permitted Phases	. 2			2			1			1			
Actuated Green, G (s)	SOURCE STATE OF THE SOURCE	5.5	NOTAR CONTRACTOR		5.5	TO PROPERTY OF THE PARTY OF THE		78.3	areneny mercun	es contrate to the contrate of	78.3		
Effective Green, g (s)		6.5		Lake.	6.5			79.3			79.3		
Actuated g/C Ratio		0.07 4.0			0.07 - 4.0	MESSES TOUR		0.86 4.0		1150 F. 160 F. 16	0.86	and the second	
Clearance Time (s) Vehicle Extension (s)		3.0		of Consultation	3.0			4.0 3.0			4.0 3.0		
Lane Grp Cap (vph)	65 262 (165)	116			109	36-32-33		1621	SS 250 P.	Carlos VIII Core	1576		
v/s Ratio Prot		110		A SERVICE	103			31 92 633			1370		allocation and a
v/s Ratio Perm		0.01		1.5	c0.01		525	c0.52			0.47		
v/c Ratio		0.07		i zina zozanek	0.16	odinelija esteb	AND DESCRIPTIONS	0.61	Maria Cara		0.55		
Uniform Delay, d1		39.8			40.1			1.8			1.6		
Progression Factor	NAME AND POST OFFICE ASSESSMENT	1.00	TALLEY SON BUT SECOND		1.00	ENGLIGHTER AT AT AT A	S. S	1.00	a we the west water	moracasisto es su abstrac	1.00	14-12-1100/07/2014/2015/2015	CONTRACTOR AND CARDON CONTRACTOR
Incremental Delay, d2		0.3			0.7			1.7			1.4		
Delay (s)		40.1	and the second s	N TON LANGUE IN MICTINE	40.7	To the same about the second of the Lates, 1110, 1		3.5			3.0		
Level of Service		$\cdots \cdot D$			\mathbf{D}_{i}			Α,			A		
Approach Delay (s)		40.1	+ PERSON ACROSS		40.7		ADMINISTRAÇÃO CONTRAÇÃO DE TAR	3.5			3.0	eranica (meneraliza	EGRENISE CHARACTER
Approach LOS		. D			D		. 10.	A.			A.		
Intersection/Summary													
HCM Average Control Dela	ÿ		4.4	H	CM Leve	l of Serv	ice		Ä				
HCM Volume to Capacity ra			0.57					A-775-B-975-					The second secon
Actuated Cycle Length (s)			91.8		um of los				6.0				
Intersection Capacity Utiliza	ation		55.3%	IC	U Level	of Servi	enserskeer	anterna e e e e e e e e e e e e e e e e e e e	С	errencement	THE RESERVE OF STREET	TAL SOUTH STREET, STRE	
Analysis Period (min)			15).						and the			1500	
c Critical Lane Group													

	Þ	*	4	†	1	لر	4	*	4	
Viovement	EBL	EBR#	SNBL	NBT#	SBT.	SBR S	BR2	NELS	NERS	
Lane Configurations	k#	Per a series and	or out of the same	414	Å	7	ALL LONG TO WAS	ሻሻ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	11	11	11	11	11	11	11	
Total Lost time (s)	3.0			3.0	3.0	3.0	1	3.0		
Lane Util. Factor	1.00			0.95	1.00	1.00		0.97		
Fn	₹0.98			1.00	1.00	0.85		1.00		
Flt Protected	0.96			1.00	1.00	1.00		0.95		
Satd∄Flow (prot)	1787			3452	1818	1546		3385		
Flt Permitted	0.96	NATURAL PROPERTY AND	CYCYNG DOLCGGOGG	0.90	1.00	1.00	e constituent con	0.95		
Satd_Flow (perm)	1787			a godde father than the last of	1818	1546		3385		
Volume (vph)	60	10	15	880	875	365	20	380	0	
Peak-hour factor, PHF.	0.96	0.96	0.96	0.96	0.94		0.94	. 88.0	0.88	
Adj. Flow (vph)	62	10	16	917	931	388	21	432	0	
RTOR Reduction (vph)	0 :	0	0	0.	0.	2	0	0.	0	
Lane Group Flow (vph)	72	0	0 1%	933	931	407	0	432	0	
Heavy Vehicles (%)	- 0%	0%	Chicarotte Carolin	1%	1%	_1%	1%	0%	0%//	
Turn Type			Perm		and the same	Perm	CHANCEARE			
Protected Phases	, J			2	6		Jung	4	a wan	
Permitted Phases	5.4		2	49.1	6 ∴49.1‰	6	a kananan da		oracasala.	
Actuated Green, G (s) Effective Green, g (s)	7.4		2. (5. K) 10 K 12	51.1	51.1	51.1		15:2 17.2		
Actuated g/C Ratio	7.4 0.09			0.60	0.60	0.60		0.20		
Clearance Time (s)	5.0			5.0	5.0	5.0	142.43.93	5.0		
Vehicle Extension (s)	2.5			3.0		3.0		2.5	77.E.P. 76	
Lane Grp Cap (vph)	156	Service Market No.	Marin Salah	1869	1097	933	ALEC: VIEWS	687		
v/s Ratio Prot	C0.04			1000	c0.51			c0.13		
v/s Ratio Perm				0.30		0.26				
v/c Ratio	0.46		10.7	0.50 ⁵	0.85	0.44		0.63		Walter
Uniform Delay, d1	36.8		Same and a subject to	9.5	13.7	9.0	A TO M. CALLED AND AND A	30.8		
Progression Factor	1.00	200		1.00	1.00	1.00		1.00		
Incremental Delay, d2	1.6		ed inc. mbc.Elegal pc.Co.	0.2	6.3	0.3	- CENTRAL PARTY IN	1.6	AL PILOS III (PIRA)	
Delay (s)	38.3			9.7	19.9	9.4		32.4		
Level of Service	D			Α	В	Α		С		The Control of the Co
Approach Delay (s)	38.3			9.7	16.7			32.4		
Approach LOS	D			Α	В			С		
intersection Summary										
HCM Average Control De	lav	erndre Olivi	17.4	Meneral areas H	CMI eve	el of Servic	:e	CALLED AND STATE	В	THE CONTROL OF THE PROPERTY OF
HCM Volume to Capacity			0.76							
Actuated Cycle Length (s			84.7	s S	um of lo	st time (s)	CAREE SA		9.0	
Intersection Capacity Util			71.1%			of Service			C.C	
Analysis Period (min)	er er fill til fill skille		15	00.250 W 150 IS	ne stand the second		markin'il'Adi	matiko elsesa	varannovalion	
c Critical Lane Group										

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Movement	EBL.	EBI	EBR	WBL	WBT	WBR.	NBL	4NBT	ENBR	SBL	SBI	SBR	
Lane Configurations	ሻ	A	7	ħ	र्स	7	*	ተተ	7	ሻ	ት ን		SOCIAL SERVICE COMMON C
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	
Lane Width	12	12	12	12	12	12	12	12	12	11	11	11	n de semble de la comitation de la companya del companya de la com
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Util. Factor	1.00	1.00	1.00	0.95	*0.77	1.00	1.00	0.95	1.00	1.00	*0.83		
Frt - Towns	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		
Fit Protected	0.95 	1.00 1900	1.00 1615	0.95 1698	0.96 1389	1.00 1599	0.95 1805	1.00 3610	1.00 1615	0.95 1728	1.00	S10427-9393	
Satd. Flow (prot) Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	2992 1.00		
Satd. Flow (perm)	1805		1615		1389		1805	3610		1728	2992		
Volume (vph)	25	30	30	415	30	395	30	800	445	370	815	50	30 Sept. 10
Peak-hour factor, PHF	0.63	0.63	0.63	0.96		70.96°	0.91	0.91		0.84	0.84	0.84	
Adj. Flow (vph)	40	48	48	432	31	411	33	879	489	440	970	60	
RTOR Reduction (vph)	0	0	45	0	0	42	0	0	0	0	3	0	
Lane Group Flow (vph)	40	48	3	250	213	369	33	879	489	440	1027	0	
Heavy Vehicles (%)	0%	0%	0%>	1%	1%	1%	0%	0%	0%	1%	1%	1%	
Turn Type	Split		Prot	Split		pm+ov	Prot		pm+ov	Prot			
Protected Phases	- 3	3	3	4	4	1	5	- 2	4	1	6		
Permitted Phases		3	halfandung f belge kersanna f Mil		i della sasionerada Sasidenas .	4		2	2		6		
Actuated Green, G (s)		3.9	3.9	18.1	18.1	45.8	3.0	31.6	49.7		<i>∞.</i> 56.3⊹		
Effective Green, g (s)	5.4	5.4	5.4	19.6	19.6	48.8	4.5	33.6	53.2	29.2	58.3		San Tanantakia sin mengenya mpalaban p
Actuated g/C Ratio	0.05	0.05	0.05	0.20	0.20	0.49	0.05	0.34	0.53	0.29	0.58		
Clearance Time (s)	4.5	4.5 3.0	4.5 3.0	4.5 3.0	4.5	4.5 2.0	4.5	5.0	4.5	4.5	5.0		
Vehicle Extension (s)	The state of the s	103	87	333	273	Contribution and Contribution of	CONTRACTOR OF THE PARTY OF	3.0	Second Street, Second Second	2.0	SAME OF THE PARTY.		
Lane Grp Cap (vph)	98	103 c0.03			2/3 c0:15	830	81 -0.02	1215 c0.24	861	506	1748 0.34		
v/s Ratio Prot v/s Ratio Perm	0.02	cu.us	0.00	9.19	ေပပ ၂၁	0.13 0.10		60.24	0.11	CU:23	0.54		
v/c Ratio	0.41	0.47	0.03	0.75	0.78	0.10	0.41	0.72	0.19	0.87	0.59		
Uniform Delay, d1	45.7	45.8	44.7	37.8	38.1	16.6	46.4	29.0	15.6	33.5	13.1		
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	2.8	3.3	0.1	9.2	13.4	0.1	1.2	2.2	0.9	14.3	0.5		
Delay (s)	48.4	49.1	44.9	47.0	51.5	16.8	47.6	31.2	16.5	47.8	13.6		
Level of Service	D	D	D	D	D	В	D	С	В	D	В	CALCONING CONTRACTOR	NO. 18 Commission of Commission States
Approach Delay (s)		47.4			33.9			26.4			23.9		
Approach LOS		D		·	С			С			С		
Intersection Summary .													
HCM Average Control De			27.9	Н	CM Leve	el of Sen	/ice		С				
HCM Volume to Capacity			0.77										
Actuated Cycle Length (s		11 (27) A 15 FEBRUAR STONE *****	99.8			st time (s		SECTION AND ADDRESS OF THE PARTY.	12.0	alli vitorita de proposito i conse		WILES OF STREET	
Intersection Capacity Utili	zation		71.6%) IC	CU Level	of Servi	ce .		· C				
Analysis Period (min)			15	Sementar an		ungu a salahanan		DELTA STEER SERVICE	ice opposition	terment de transcone			
c Criffical Lane Group													

	<i>></i>	→	•	1	4	4	4	†	1	1	1	4	
Movement	(S)EBL	≥ EBT	≅EBR €	WBL	WBT	WBR .	NBE	NBT :	NBR	SBL	SBT	SBR	
Lane Configurations		र्स	7		4		. 1	†			र्बीने		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	THE REAL PROPERTY OF THE PROPE
Total Lost time (s)		3.0	3.0		3.0		3.0	3.0			3.0		
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95		
Fit (2)		1.00	0.85		0.96		1.00	ALCOHOLD CONTRACTOR			0.98		
Flt Protected		0.96	1.00		0.99		0.95	1.00			1.00		
Satd: Flow (prot)		1918	1812		1,801		1787	3563			3506		
FIt Permitted		0.83	1.00		0.88		0.95	1.00			0.95	was a surface of the	
Satd. Flow (perm)	a de la companya de	1659	1812		1606		1787				3333	Participation of the Control of the	
Volume (vph)	60	5	560	10	15	10	515	690	15	5	665	95	
Peak-hour factor, PHF	0.93	0.93	0.93		0.73	0.73	0.95	0.95	The second second	0.88	0.88	0.88	
Adj. Flow (vph)	65	5_	602	14	21	14	542	726	16	6	756	108	
RTOR Reduction (vph)	0	0.	36	0	- 5 12 -	0^{1}	0	Charles of the contract of	0	0	9	0	
Lane Group Flow (vph)	0	70	566	0	37	0	542	741	0	0	861	0	
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	1%	1%	1%	1%	. 1%	1%	
Turn Type	Perm		pm+ov	Perm			Prot			Perm			
Protected Phases		8	5		- 4		5	2			- 6		
Permitted Phases	. 8	8	8	4	4	O Agency of Proceedings of Street and Street	an analysis trans transport	2	DY-MATERIAL OF GROWING	6	6	aper as performance and service	
Actuated Green, G (s)		4.4	33.1		4.4		28.7	461.4			27.7		
Effective Green, g (s)	BATTER THE STATE OF THE STATE O	6.4	37.1		6.4		30.7	63.4	nancovantantanan-o-		29.7	5071545545 6 * FEBRUS	NAMES OF STREET STREET, S
Actuated g/C Ratio		0.08	0.49		0.08		0.41	0.84	4.200		0.39		
Clearance Time (s)		5.0	5.0	ran menagan dengan ma	5.0	DESCRIPTION FOR PARTY	5.0	5.0	2010/2010/2010/2010		5.0		REGINATES FRANCISCO E CHANED!
Vehicle Extension (s)		2.5	2.5		2.5	37 (9) S	2.5	3.0			3.0		
Lane Grp Cap (vph)	CENTRALIZATION COSTO, VAL	140	959	en move process	136		724	2980	Description of the Control of the Co	M DISCONSTRUCTOR AND A SECURIO	1306	F-00178-0180-703-8-3-763-	
vis Ratio Prot			c0.24				c0.30	0.21					
v/s Ratio Perm		0.04	0.07		0.02			ukyara pen	v danskatelate	TALLER BERNER	c0.26	NACON DICTION DE 1900	
v/c Ratio		0.50	0.59		0.27		0.75	0.25			0.66		
Uniform Delay, d1		33.2 1.00	13.9 1.00	avas e	32.5 1.00		19.3 1.00	1.3 1.00	SON THE CONTRACT	CONTRACTOR AS	18.9 1.00		
Progression Factor		or attended to transaction of the	Carried States of the Carried States		of Format and State of the Stat		4.0	0.0			1.2		
Incremental Delay, d2		2.0 35.2	0.8		0.8 33.3		23.3	1.3			1.2 20.1		54 75 75
Delay (s) Level of Service		35.2 D	14.7 B		აა.ა C		- 23.3 : C	ι.ο A			20.1 C		
	98597747EU	16.8	D	1508/508/812-13	33.3			10.6			20.1		
Approach Delay (s)		, ко.о В			. ၁၁.၁ . C	Marine 1		10.0 B		2000	20.1 C		
Approach LOS		Б			· ·			Б			C		
Intersection Summary	THE PARTY OF THE P		10.00								3.65		
HCM Average Control De			15.3	Н	ICM Leve	of Ser	vice	NEEDS IN THE THE WAS IN THE TO SEED THE TO	В	ieru zadowiał inematin	acintrolo scetale el	entre malaner entre certaine	
HCM Volume to Capacity			0.70					132,000				žti.	
Actuated Cycle Length (s		OUT ON THE STATE OF	75.8		um of los		,	a ton hall a should be seen and	9.0	en open de personen	PERSONAL MEGRATIC	DENGERO SECUENDA	TO BE CONTROL OF THE
Intersection Capacity Util	ization		70.4%	, j	CU Level	of Servi	ce ;		C				
Analysis Period (min)	TERRETORIS STORT ALSON		15	enterna suprem men	SETTER STATE OF THE STATE OF TH	erendiken en en	na an a	TYNS FILIAN FILIAN THURST	CONTRACTOR CONTRACTOR	STATE VERNE NAME	residente de la composition della composition de	reconstruction	
c Crifical Lane Group						1016 100							

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Movement services -	SEB (F	SEBT#	EBR	WBL 5	WBT	WBR -	NBL	NBT	NBR :	SBL	SBT	SBR 4	
Lane Configurations		€}>			4			€\$			€\$		
Sign Control		Free			Free -			Stop			Stop		
Grade		0%			0%		77478 W 77 L 200	0% 0			0%		
Volume (veh/h)	55 0.93	800 0.93	0.93	0.91	600 0.91	5 0.91	0.88	0.88	0.88	0.75	0.75	40 0.75	
Hourly flow rate (vph)	59	860		0.51	659	5.5	CONTRACTOR ACCOUNTS AND ADDRESS AND	0.00	0.00	0.73	0.73	0.73	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)	contract to sensite		Silvania and a second	THE RESERVE OF THE PARTY OF THE			to the contract of the contrac	OF TOURS HOUSE		NATION WHEN SHE			CANDESCRIPTION OF STREET
Percent Blockage													
Right turn flare (veh) Median type					en ar ar en en			None	e e e e e e e e e e e e e e e e e e e		N/C	CONTRACTOR OF THE	
Median storage veh)								Notie 1			None		
Upstream signal (ft)					869								
pX, platoon unblocked	Senior Live For Service				Constitute and Edic			Harris Albahan Latur	STEAT STATES	action attended	Designation of the control of the co		
	665			860			1697	1646	860	1644	1643	662	
vC1, stage 1 conf vol			ender volvog konstruktur	na see santa na se					VIA SAMENE NI TUNI PARI	TERESCO DE LA COMP	and the contract of the contra	DT NEXT YEAR MADE AND A STEEL AND	
vC2; stage 2 conf vol vCu, unblocked vol	665			7.00			4007	4040	000	4044	4040		
tC, single (s)	4.1			860 4.1			1697 7.1	1646 6.5	860 60	1644 • 7.1	1643 - 6.5	662 6.2	a de la companya de
tC, 2 stage (s)			LLA CONTRA	DE THE			1.1	v.v.	U.C.		U.U	0.2	Alexandra Alexand
tF(s)	2.2			- 2.2			3.5	× 4.0	3.3	3.5	4.0	3.3	
p0 queue free %	94		WELL ZON TO THE PROPERTY OF	100		ENCISES CONTRACTOR	91	100	100	91	99	89	
cM capacity (veh/h)	924			773			62	94	358	76	94	₹465	
Direction Lane #	EB 10	WB 1	NB1	SB1		10.00							
Volume Total		666	7	61	924			400			100		
Volume Left	59	1	6	7									one of the second secon
Volume Right	9	5	1	53	esta es					ada s			
cSH Volume to Capacity	924 0.06	773 0.00	71 -0.10	284 0.22		erzesznere	CONTRACTOR OF THE PARTY OF THE P			95,970,000		A TOTAL STREET	
Queue Length 95th (ft)	5	0.00	8 8	- 0.22 20	4000								
Control Delay (s)	17	0.0	60.7							To the second	TO STATE OF		
Lane LOS	A	A	F	C	dharatoru as diseb		eencenser			Madrice Control			
Approach Delay (s)	1.7	0.0	60.7	21.2									
Approach LOS			F	С									The second secon
Intersection Summary					5,640		10-10-10		-	1000			
Average Delay			2.0				- No.				A STATE OF THE PARTY OF THE PAR	A CONTRACTOR OF THE PARTY OF TH	Figure 1994 State of the Control of
Intersection Capacity Utiliz	ation 🐇	11	90.4%	IC	U Level	of Servi	ce :		i E				
Analysis Period (min)		ente magnetatat	15			WATER BUILDING		er programme de l'arche				and the contract of the contra	FOR BALLON TO ANNUAL TO THE
			eri (*)								250		

	•	*	1	1	-	1							
Movement account 25	AWBL	WBR	SNBT	NBR	SBL	SBT.							100
Lane Configurations	ሻ	7	ĵ ,		75	↑		-muse a latent control		2000 mm 1000 mm 1000	e en mar searchean a	Section 18 Control	į
Sign €ontrol	Stop		Free			Free							, and
Grade	0%		0%			0%				and the state of the same		C. S. S. A. C. S.	i
Volume (veh/h)	50	350	915	35	20	785							Page 1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		PIST SINGER CONTRA	on some of the second				
Hourly flow rate (vph) Pedestrians	- 52	365	953	36-	21	818							Kilberta
Lane Width (ft)										MESET ST			ę
Walking Speed (ft/s)										Walley Dis	2.5		į
Percent Blockage				X 12									e de la composition della comp
Right turn flare (veh)	OF HIBBREAUTERS	8	ione?	\$2.00 miles and 100 miles	en e						nical state		į
Median type	None											70.0	2002
Median storage veh)					Second Services Services		an and a series of the control of th	entere en entere en entere en entere en en	THE RESIDENCE OF THE PARTY OF T	8.04Tcm3450494044417129730	secondina alter		1
Upstream signal (ft)													, Land
pX, platoon unblocked	SERVICE PROPERTY AND THE STORY	nationalist materials	Na Sanga Pagangan										
	1831	971			990								-
vC1, stage 1 conf vol										Photographic Sec.			a
vCz, stage z com vol vCu, unblocked vol	1831	971			990							Sature 1	
tC, single (s) :	6.4	6.2			230						Art Vent	2.70	j
tC, 2 stage (s)	en e			299 K						<u>. 1.</u>			İ
tE (s)	3.5	3.3			2.2	10.17							-
p0 queue free %	36	0	Control of the State of the Sta	A DEFECT SHE HADDRESS SHE	97					a ere aldhers (1923) -			
cM capacity (veh/h) :	· 81	307			699						E Tarri		
Direction, Lane # 3	WB 1	NB 1	SB1	SEV									į
Volume Total	417	990	21	818		7.39					2		ĺ
Volume Left	52	0	21	0			an art of the bearing of the second		(Maria 1935, 200		and the second		:
Volume Right	365	36	. e 0	. 0									į
cSH	350	1700	699	1700	Marine Committee	AND THE PARTY OF STREET	CONTRACTOR OF THE PROPERTY OF		THE REAL PROPERTY.	Manager Communication (Co.)	ASSAULTE SALEST TO SECOND	NAMES OF TAXABLE PARTY.	
Volume to Capacity	1.19	0.58		0.48		100	100						
Queue Length 95th (ft)	433	0	2	0					CESSATES CONTROL CONTROL		AND REPORT OF THE PARTY OF THE PARTY OF		
Control Delay (s)	144.0	-0.0	10.3	0.0								44	į
Lane LOS Approach Delay (s)	F	0.0	B 0.3		NECTO STORY						Energy Serape (1500)		
Approach LOS	∘ા44.0 F												
			Barrier Control		**************************************								
Intersection Summary		Country.											
Average Delay			26.8								en e	That had the proper to the same to the sam	
Intersection Capacity Utili Analysis Period (min)	zauon		78.6%	, IC	u Level	of Servic	9	D		i de la companya de			
Analysis Fellou (IIIII)			15	4804 204							1904 PROPERTY - 1897		

	*	•	1			1	
Movement 2	WBE	WBR	NBT	NBR	SBL :	SBT	
Lane Configurations	R#		∱ }			414	
Sign Control	Stop		Free			Free	
Grade	0%		0%		and the property of the back	0%	
Volume (veh/h)	0.5	35	1415	10	. 15	1115	
Peak Hour Factor	0.68	0.68	0.92	0.92	0.93	0.93	The second secon
Hourly flow rate (vph):	0	-51	1538	. 11	16	1199	
Pedestrians		Programme per more	NATIONAL PROPERTY.	DW/SADWTHY IN COME	erry to the section of the section o		
Lane Width (ft)		i de la					
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)	3. Leg (1997)	APRILITER FOR					
Median type	None						
Median storage veh) Upstream signal (ft)				W.C.C.		516	
pX, platoon unblocked	0.67	AZA SE				- 010 ·	
vC, conflicting volume	2175	771			1549		
vC1, stage 1 conf vol			2150				
vC2, stage 2 conf vol					2 - 5 - 7	271	
vCu, unblocked vol	2261	774		e calmental	1549		
tC, single (s)	6.8	6.9			4.1	3548 E	
tC, 2 stage (s)		ikeli katawa a shirki		a rain mat in the sound			
tF(s)	3.5	3.3			2.2		
p0 queue free %	100	85	20 48 2 1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	*************	96	-entire recovered mother	· · · · · · · · · · · · · · · · · · ·
cM capacity (veh/h)	23	345			424		
Direction Lane#	WRA	NR 1	NB2	SE 15	CR 2	Seattle	
Volume Total	51	1025	524	416	799	Market State	
Volume Left	0	0	0	16	0		
Volume Right	51	. 0	11	0.0	0		
cSH	345	1700	1700	424	1700		
Volume to Capacity	0.15	0.60	0.31	0.04	0.47		
Queue Length 95th (ft)	13	0	0	3	0	SANCTED SOLVES	
Control Delay (s)	17.2	0.0	0.0	1.2	0.0		
Lane LOS	С			Α		Proposition Street or Problem Co. Co.	
Approach Delay (s)	17.2	-0.0		0.4			
Approach LOS	С						The state of the s
Intersection Summary							
Average Delay			0.5		and the second second	Company of the Party of the Par	
Intersection Capacity Utili	zation		51.4%	i iC	U Level	of Service	e.
Analysis Period (min)	reministrative de la company de la compa	COLUMN TO SERVICE SERV	15	0000 00 0000 0000 0000 0000	er arministi	neare for classes for a	
more communication or an annual and a second section of the second section of the second section of the second section of the second se			manual Establishment (1979)		The state of the s	more with the second	

	*	*	Ť	1	1	1						
Movément	WBL	WBR.	NBT	eNBR €	SBE	SBT					163	
Lane Configurations	W		ß			413			- Programme and the second	2000-000-000-000-000-000-000-000-000-00		
Sign Control	Stop		Free			Free						
Grade	0%		0%			0%	A CONTRACT OF THE CONTRACT OF	The second of the second of the second		entering of the Committee of the Committ	CONTRACTOR CONTRACTOR	NEW CHICAGO MORE SERVICES
Volume (veh/h)	393	190 -	955	410	215	745						
Peak Hour Factor	0.92	0.92	0.98	0.98	0.98	0.98		PARENTHE BUTHING TOWN	NAME OF THE PERSON NAMES AS	Chile Laborate Company Come	a a TT offens Winness Lab and a Million a street and	
Hourly flow rate (vph)	427	207	- 974	418	-219	760						
Pedestrians										BARARA SANSANDA		Anna Some Someone and
Lane Width (ft) Walking Speed (ft/s)												
Percent Blockage			LOFF.TER									
Right turn flare (veh)												
Median type	None											
Median storage veh)			K GOVERNMENT				and the second of the second		Table Table 1			
Upstream signal (ft)			407							, v		
pX, platoon unblocked	Secretary and an address of the second	1.104-1.10C.110.110C.1C	N. C. S. C. C. S.	COMMITTED AND ADDRESS OF	AND STREET, ST	CALL LINE WAS IN NO.	2000 - 100 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 2		renembe Author Architecture	CARBOOK CONSCION		
vC, conflicting volume	-2003	1184			1393							
vC1, stage 1 conf vol		Charter to the Market Statement	AND DOOR OF THE PROPERTY OF	Security can be early to construct at which								The Lat A - Market Washington Sales and The
vC2, stage 2 conf vol.												
vCu, unblocked vol	2003	1184			1393				STORY STRUCTS	Specification of the second		
tC, single (s) tC, 2 stage (s)	6.8	6.9			4.1							
tC, 2 stage (s)	3.5	3.3			2.2			esse a service de As				
p0 gueue free %	0	0			56						and the	v: 30.55
cM capacity (veh/h)	30	185			497				N. N. Santa			
Directional ane #	WB 1	NBIL		SB2								
Volume Total	634	Charles and the second	473	50.25 507	atteriores.		4 1					
Volume Left	427	1090 0	219		201. N. 14.		100	<u> </u>				
Volume Right	207	418	210	0					480			76 F (58-15) 22 72 72 75
cSH	41	1700	497	1700								2.000
Volume to Capacity	15.49	0.82	0.44	0.30								
Queue Length 95th (ft)	Err	0	56	0	AND DESCRIPTION OF THE PARTY OF	al consent and cons	MARIO LIC. DIN CONSUMERNAZIONE	ornamental Park	dimensional Artist State	ant and electric services	and the second second	
Control Delay (s)	Err	0.0	13.2	0.0								
Lane LOS	F	ACTIONS OF THE THAT IS	В	SECULO CONTRACTOR DE SECULO CO								
Approach Delay (s)		0.0	6.4									
Approach LOS	F											
Intersection Summary												4 - 4
Average Delay			2109.9									
Intersection Capacity Utili	zation	<u>.</u> 1	45.5%	, IC	U Level	of Service	e e					2
Analysis Period (min)			15							NULSUS OF PRESENCE	erren - construent-un et en en-	

	•	•	1	1	1	1					
Movement	. WBL:	WBR	*NBT#	NBR 2	SBL	SBT			N. Jakan San		91
Lane Configurations	NA.		ĵ»			र्स					
Sign Control	Stop		Free			Free					
Grade	0%	7-	0%	erusaren		0%		o consultation	NEWSCHIED AND DAILERY		
Volume (veh/h) Peak Hour Factor	15 0.84	0.84	1120 0.93	25 - 0.93	15 0.95	945 0.95					
Hourly flow rate (vph)		18	1204		16	995			7.653.10		
Pedestrians			60.000 TO 100.00	enactice.	e dan Sela					ANTE AND ADDRESS.	
Lane Width (ft)											
Walking Speed (ft/s)											30-210-210-220-1001
Percent Blockage											
Right turn flare (veh) Median type	None		ures es es		-117-15-15-14-T	oteografia					
Median storage veh)	none	uolia.		8.00.00							
Upstream signal (ft)			771			1063				1.20	
pX, platoon unblocked	0.63	n solidospa Charles				er Barre		i Pas Salahin Mar		a ana a a a a a a a a a a a a a a a a a	
vC, conflicting volume	2244	1218			1231						
vC1, stage 1 conf vol	77-90-96-77-28-28-28	unar sarbrur e tsasee			Defendance Systematical	KENNEY IN THEIR THE		Chick to a new party of the receiver	***************************************		
vC2, stage 2 conf vol			1000				Various contracts				
vCu, unblocked vol tC, single (s)	2969 6.4	1218 6.2			1231 4.1				7.25% 44	STATETAT	
tC, 2 stage (s)	0.4	0.2			4,15	5 12 4			ďΩ sest,		
iF (s)	3.5	3.3			2.2						
p0 queue free %	0	92		negamakaabka	97	o a formación de			and Charles Hall Market Co.		
cM capacity (veh/h)	10	- 222			569						
Direction Lane # 3	WB1+	NB 1	SB1					46			
Volume Total	36	1231	Comment of the Comment								
Volume Left	18	0	16	SUPERIOR TO THE OWNER.	(PAL DALA DAN PARTAMENTAN	e de de la faire de la composición del composición de la composición del composición de la composición					e and the second second second
Volume Right	18	27	0								
cSH	19	1700	569		range a korn					TURNET TO THE PARTY OF THE PARTY OF	
Volume to Capacity Queue Length 95th (ft)	1.89 122	0.72	0.03								
Control Delay (s)	847.7		2 0.9		2.5						
Lane LOS	F		0.5 A								
Approach Delay (s)	847:7	0.0	0.9								
Approach LOS	F	· ····	AND STREET PARTY.	mana and page and fill fill f			namen er ett sem sterne er ett sem er ett se	en e	omore intellesi de Aporto d'Alberta	No. and the Color of the Color	
Intersection Summary				1				4.0			1141 22 4 X
Average Delay			13.7	CONTRACTOR OF THE		TOTAL STREET,				constant of the second	er in de la Propieto de la companya
Intersection Capacity Utiliz	ation-		71.7%	: IC	U Level	of Service	e	C			
Analysis Period (min)	ng pang ang manang ang		15			naver (management) two 2.6%	and the second s		termen tali Shell (Miller & Nill Y-C)	TO THE RESERVE OF THE PARTY OF	THE RESERVE OF THE PERSON OF T

Movement FBL FBL FBR FBR WBL WBR WBR NBL NBR SBL SBR SBR Lane Configurations
Stop Stop Stop Stop Stop Stop Stop Stop Stop O'% O
Stop
Volume (veibft)
Peak Hour Factor
Flourity flow rate (vph)
Pedestrians Lane Width (ft) Walking Speed (ft/s)
Cane Width (ft) Walking Speed (ft/s) Percent Biockage Flight turn flare (veh) Median storage veh) Walking Speed (ft) Percent Biockage Percent Biockag
Walking Speed (ft/s) Percent Blockage Right turn flare (veh)
Percent Blockage
Right turn flare (veh) Median type None None None Median type None Non
Median storage yeh) None None 1018 Upstream signal (ft) pX, platoon unblocked vC1, stage 1 conf vol vC2, stage 2 conf vol vC2, stage 2 conf vol vC2, stage 2 conf vol vC3, stage 1 conf vol vC4, unblocked vol vC4, unblocked vol vC4, unblocked vol vC5, stage (s) 4591 3787 636 3835 3780 1181 641 1188 1188 If (s) ingle (s) vC2, stage (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 4.1 4.1 If (s) ingle (s) vC2, stage (s) 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 2.2 2.2 2.2 2.2 pO queue free % 0 0 0 88 0 100 0 97 70 70 70 70 Mcapacity (veh/h) 0 0 1 240 0 0 1 240 0 0 1 234 473 5592 70 70 Direction Land (t) 1 38 420 1200 179 821 Volume Left 1 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13 12 179 0 Volume Left 1 1 13 13
Median storage veh Upstream Signia (ft)
Distriction Fig.
pX, platoon unblocked VC. confilicting volume 0.50 0.
VC1, stage 1 conf vol VC2, stage 2 conf vol VC1, unblocked vol 4591 3787 636 3835 3780 1181 641 1188 IC, single (s) 7,1 6,5 6,2 7,1 6,5 6,2 4,1 4,1 IC, 2 stage (s) IF (s) 35 40 3,3 3,5 4,0 3,3 2,2 PO queue free % 0 0 88 0 100 0 97 70 CM capacity (veh/h) 0 1 240 0 1 234 473 592 Directions Eane # EB.1 WB.1 NB.1 SB.1 SB.2 Volume Total 38 420 1200 179 821 Volume Right 29 407 12 10 5 CSH 0 0 473 592 1700 Volume Io Capacity Err Err 0.03 0.30 0.48 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1.2 13.7 0.00 Lane LOS F F F A B
VC2, stage 2 conf vol VCu, unblocked vol 4591 3787 636 3835 3780 1181 641 1188 IC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 0 0 88 0 100 0 97 70 cM capacity (yeh/h) 0 1 240 0 1 234 473 592 Directions lane #r EB.1 WB.1 NB.1 SB.1 3SB.2 3SB.2 3SB.2 Volume Total 38 420 1200 179 821 3SB.2
vCu, unblocked vol 4591 3787 636 3835 3780 1181 641 1188 IC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 0 0 88 0 100 0 97 70 cMcapacity (veh/h) 0 1 240 0 1 234 473 592 Direction: Eane #+ EB1: VB 1: NB1: SB 1: SB 2: VB 2: VB 1: VB 2:
IC, single (s) 7.1 6.5 6.2 7.1 6.5 6.2 4.1 4.1 tC, 2 stage (s) IF (s) 3.5 4.0 3.3 1.5 4.0 3.3 2.2 2.2 p0 queue free % 0 0 88 0 100 0 97 70 cM'capacity (veh/h) 0 1 240 0 1 234 473 592 Direction: Lane # EB1: WB.1 NB.1 SB1: SB2 SB2 SB2 Volume Total 38 420 1200 179 821 Volume Left 1 13 12 179 0 Volume Right 29 407 12 0 5 cSH 0 0 473 592 1700 Volume to: Capacity Err Err Err 0.03 0.30 0.48 Queue Length 95th (ft) Err Err Err 12 13.7 0.0 Lane LOS F F A B
tC, 2 stage (s) tF (s)
IF (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 p0 queue free % 0 0 88 0 100 0 97 70 cM'capacity (veh/h) 0 1 240 0 1 234 473 592 Directions ane #+* EB1 *WB 1 NB 1 SB 1 \$B2 *** Volume Total 38 420 1200 179 821 Volume Left 1 13 12 179 0 Volume Right 29 407 12 0 5 cSH 0 0 473 592 1700 Volume to Capacity Err Err Err 0.03 0.30 0.48 Queue Length 95th (tt) Err Err 2 32 0 Control Delay (s) Eir Err 12 13.7 0.0 Lane LOS F F A B
p0 queue free % 0 0 88 0 100 0 97 70 cM'capacity(veh/h) 0 1 240 0 1 234 473 592 Direction Fane # EB1 WB 1 NB 1 SB 2 581 Volume Total 38 420 1200 179 821 Volume Left 1 13 12 179 0 Volume Right 29 407 12 0 5 cSH 0 0 473 592 1700 Volume to Capacity Err Err 0:03 0:30 0:48 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1:2 13.7 0:0 Lane LOS F F F A B
EM capacity (veh/h) 0 1 240 0 1 234 473 592 Direction: Lane #/ Volume Total 181 WB 1 NB 1 SB 1 SB 2 Volume Total 38 420 1200 179 821 Volume Left 1 13 12 179 0 Volume Right 29 407 12 0 5 cSH 0 0 473 592 1700 Volume to Capacity Err Err Err 0.03 0.30 0.488 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1:2 13.7 0.0 Lane LOS F F F A B
Direction Langer EBJ WB I NB I SB I SB 2 Volume Total 38 420 1290 179 821 Volume Left 1 13 12 179 0 Volume Right 29 407 12 0 5 cSH 0 0 473 592 1700 Volume to Capacity Err Err 003 0.30 0.48 Queue Length 95th (tt) Err Err 2 32 0 Control Delay(s) Err Err 1:2 13.7 0.0 Lane LOS F F A B
Volume Total 38 420 1200 179 821 Volume Left 1 13 12 179 0 Volume Rights 29 407 12 0 5 cSH 0 0 473 592 1700 Volume @ Capacity Err Err 003 0.30 0.48 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1:2 13.7 0.0 Lane LOS F F F A B
Volume Left 1 13 12 179 0 Volume Rights 29 407 12 0 5 cSH 0 0 473 592 1700 Volume @Capacity Err Err err 003 0.30 0.482 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1.2 13.7 0.0 Lane LOS F F A B
Volume Rights 29 407 12 0 5 cSH 0 0 473 592 1700 Volume @Capacity Err Err 0:03 0.30 0.482 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1:2 13.7 0.0 Lane LOS F F A B
cSH 0 0 473 592 1700 Volume @ Capacity Err Err err 003 0.30 0.48 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1.2 13.7 0.0 Lane LOS F F A B
Volume to Capacity Err Err 0:03 0.30 0.48 Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1:2 13.7 0.0 Lane LOS F F A B
Queue Length 95th (ft) Err Err 2 32 0 Control Delay (s) Err Err 1:2 13.7 0.0 Lane LOS F F A B
Control Delay (s) Err Err 1.2 13.7 0.0 Lane LOS F F A B
Lane LOS F F A B
Approach LOS F F
Intersection Summary
Average Delay Err
Intersection Capacity Utilization 125:0% ICU Level of Service H
Analysis Period (min) 15

	夠		*	•	←		4	1	1	-	1	4	
Movement 528	EBL	EBT	EBR	#WBL#	WBT	WBR.	sNBL	«NBT»	NBR#	⊈SBL:	SBT	SBR	
Lane Configurations		4			4			€\$			4		
Sign Control		Stop			Stop			Free			Free		100
Grade	Trace Colored Colored	0%			0%	normal material		0%	TOT MEDICAL SALES	***************************************	0%	CONTRACTOR OF THE SPECIAL OF	
Volume (veh/h)	10	1	45	15	0	15	50	1090	30	15	765	45	
Peak Hour Factor Hourly flow rate (vph)	0.67	0.67	0.67	0.63	0.63	0.63	0.95	0.95	0.95	0.81	0.81	0.81	
Pedestrians	15	31/26/52	67	24	0	. 24	53	1147	32	19	944	56 8	
Lane Width (ft)												***	
Walking Speed (ft/s)		3254570.27			91.000000000000000000000000000000000000	THE READS							
Percent Blockage	4.5												
Right turn flare (veh)	no and American	wat samenatatata	NEW WOOD LAND OR		nan matangan pada		alla del Cara del Car	A PLACE BOOKSTAND	n alle a la l			15.37	
Median type		None			None								
Median storage veh)		James & Street William Street Street											Service Control of the Service Control of the Contr
Upstream signal (ft)													
pX, platoon unblocked					waxxxx								(week success of the second
vC, conflicting volume vC1, stage 1 conf vol	2301	2293	972	2346	2305	1163	1000			1179			
vC1, stage 1 conf vol													
vCu, unblocked vol	2301	2293	972	2346	2305	1163	1000		100 Miles	1179			
IC, single (s)	7.1		6.2			6.2				4.1			
tC, 2 stage (s)												15071 (F221)	
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2			
p0 queue free %	35	96	78	0	100	90	92	ENTERNA PRODUCTION	- Continuental Resident	97	* 122.0-7-02-00-00-00-00-00-00-00-00-00-00-00-00-	40 20 CD 40 LIZ 50 JANE	CONTRACTOR CONTRACTOR
cM capacity (veh/h)	23	35	309	18	35	239	696			-596		\$657.14	
Direction: Lane #	EB 1	WB	enb 1	SB1									
Volume Total	. 84	A CONTRACTOR OF THE PARTY OF TH	1232	1019	er en e								
Volume Left	15	24	53	19	CHECK CONTRACTOR	CONTRACTOR OF THE							
Volume Right	67	24	32	56									
cSH	91	33	696	596			A STATE OF THE PARTY OF THE PAR	Comment of the Contract of the			1 PM 2 9 20 A 9 5 5 5 7 1 A 1 A 1	maken new terminani di pini	
Volume to Capacity	0.91	1.43	80.0	0.03									
Queue Length 95th (ft)	128	131	6	2		B KARAT YENGAL KAR	Telegraph Services			NAMES OF THE OWNER, WHEN THE O		TO COMPANY WITH	
Control Delay (s) Lane LOS	a security of the first	492.9	3.0	1.0				e e e e e e e e e e e e e e e e e e e					
Approach Delay (s)	F 153.7	F 492.9%	A 3.0	A 1.0 %		STEEDICAL							
Approach LOS	. , юю. <i>г</i> F	492.9 F	0.0 €	1.0									
	•	l .		PACE OF A CONTRACTOR OF A CONT	WT 10 T 10	ALL PROPERTY AND ADDRESS OF THE PARTY AND ADDR	V. V.						
Intersection Summary -	1200			20 A. S.					44 1				
Average Delay		нього хоргориян ького	17.2	POLIFICAL MINESTER								eller aller könne kristanske med me	
Intersection Capacity Utiliz	zation		96.7%	IC	U Level	of Servi	ce		F				
Analysis Period (min)			15						A CONTRACTOR		en en en en en en en en		
		的复数数数	2007				Mark British						

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Viovement	EBL	EBT	EBR	-WBL	WBT	WBR	NBL	NBT	NBRZ	SBL	SBT.	SBR	
Lane Configurations		4			€\$			4			₽		
Sign Control		Free			Free			-Stop			Stop		
Grade	CONTRACTOR OF THE	0%	ne erekerizak	ata este esta accessor.	0%	nama in company to media c	en men en en en en en en en en	0%	EASTER SUCCESSION	tion of the section of the section of	0%		
Volume (veh/h) Peak Hour Factor	55	785	0.00	0.91	585	5	5	0		5	1	40	
Hourly flow rate (vph)	0.93 - 59	0.93 844	0.93		0.91 643	0.91 5	0.88	0.88 0	0.88	0.75	0.75	0.75 - 53	
Pedestrians							a, v	U 10					
Lane Width (ft)													
Walking Speed (ft/s)	CANAL REPORTED AND THE	SILVER STATES OF CALL		en da raminadas deste des	BUR STEEL AT PERCENTEN			rederented	ent markety sy	Historia de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición dela composición de la composición de la composición de la composición dela composición			
Percent Blockage													
Right turn flare (veh)			vecepetative		GENEVIC SERVICE		NATIONAL ASSESSMEN	value and the same of the same of	PROTECT SERVICES AND ADDRESS.	THE DESIGNATION IS	CNV COURS SERVICE CONTRACT	WILLIAM TO THE COMM	
Median type Median storage veh)								None /			None		
Upstream signal (ft)			V.,		869				EASTER OF	795 25 250			
pX, platoon unblocked	are selective.				003								
	648			844		S. Santa	1664	1613	844	1611	1610	646	
vC1, stage 1 conf vol	NEGAPINADEEN		Contractor of the second	Mara - Armanagan		ing paragraphic and the second	Markatar Bara	Heli Mes ve kilota i sessabbil		4446BBC567FF			
vC2, stage 2 conf vol	9256												0.00
vCu, unblocked vol	648	ACCOUNT MAGNETIC WATER		844		C INSTITUTOR INVOICE ENGINEERS (III	1664	1613	844	1611	1610	646	and the second s
tC, single (s)	4.1			4.17			7.1	6.5	6.2	7.1	6.5	6.2	10.00
tC, 2 stage (s) tF (s)	22			22			3.5	4.0	3.3	n e		3.3	
p0 queue free %	94			100		Ros I v	ა.ე 91	100	3.3 100	3.5 92	4.0 99	3.3 89	
cM capacity (veh/h)	937			784			65	= 98 ·	366	80	99	475	
Direction Lane #	EB 1/	WB 1	NID T	(SBT)					keesi sa				
Volume Total	903	649	IND	61				STATE OF	erth in A				
Volume Left	59	1	6	7									
Volume Right	- 0	5	2001 ·	53							Aleks de la		
cSH	937	784	75	294	e or other property	era Particular			11.50 PF V (UK. 10)				
Volume to Capacity	0.06	0.00	0.09	0.21									100
Queue Length 95th (ft)	5	0	7	19		INGRESS TO THE WORLD	CASSTATESTATION	e Provincia de la compositione d	THE PROPERTY AND THE PARTY				
Control Delay (s) Lane LOS	1.7	ALTERNATION OF THE STATE OF THE	57.4	20.4									
Approach Delay (s)	A 1.7	A 0.0	F -57.4	C 20.4						west and the second			
Approach LOS	1.7	0.0	#37.4 F	C									
						en en en en en en en en				V-240 F (0.180 N.55)			
Intersection Summary	e de la companya de			405.6		HE WAR			Control (178 MG 178	100		
Average Delay Intersection Capacity Utilization	atlan		2.0	, in	U Level	aecas:			33 F				
Analysis Period (min)	Addition.		oo.o /o 15	- J.	o revel	or ocivi	∪ C		res Co				
	/SVIII (1)	1000		170					Link Co.			.1	

	1		Ť	1	1	1						
Môvement & & Etc.	3 WBLS	WBR	NBT	≝NBR	:SBL	SBT						1
Lane Configurations	N/	······	Þ		ሻ	†						
Sign Control	Stop		Free			Free		- 100				
Grade	0%		0%			0%					The same of the sa	
Volume (veh/h)	35	45	885	35	20	755						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96						
Hourly flow rate (vph)	36	47	922	36	. 21	786						
Pedestrians	WAR CONTRACTOR		ON THE STREET		a san yan da sa	encentres des estats est	SCOPERSON STATEMEN		RESERVE AND ADDRESS OF			A
Lane Width (ft)	a Calaba											
Walking Speed (ft/s)											COLUMN TO THE PARTY OF THE TAX	
Percent Blockage												
Right turn flare (veh)		r e o o o o o o o o o o o o o o o o o o										enacede en
Median type	None								Y 100		35.63E-5	
Median storage veh)												
Upstream signal (ft) pX, platoon unblocked		C CAREAU				eni-wes		5361		11/21/2015		
	1768	0.00			958			Sept. (5.85)		700000 - 1,1011G		energy ca
vC1, stage 1 conf vol						MISTER 140						
vC2, stage 2 conf vol							A 1985 E			*X505057		
vCu, unblocked vol	1768	940			958			CHARACTER LINES.		COMPRESSIONS		Salar Salar
tC single (s)	6.4	6.2			4.1							
tC, 2 stage (s)	ening die Twee Stades	andre de la company	Tion of left wildlights	io estructura de la como	meralistrance i en 148					Shallo ovidence		
tF(s)	3.5	3.3			2.2							
p0 queue free %	59	85	26,6,023,6,000,000,000,000,000	AND THE PROPERTY OF	97	A TERMINAMENTAL STATE OF THE ST	THE RESIDENCE OF THE PARTY OF T	Files makes () Simmer State and Allesta Materials	a Condition de de la constitue	magagan parana ang ang ang		or in section of the
cM capacity (veh/h)	- 89	320			∂718®	\$400						
Direction & Lane #	WB 1	NB 12	ZCD 1	SB2								
Volume Fotal	83	958	21	786		Acidemica esta Este	Annual Control		A Service			
Volume Left	36	936	21	0								
Volume Right	47	36	0	0								
cSH	150	1700	718	1700		Teddron en					The State of the S	
Volume to Capacity	0.56	0.56	0.03	0.46				THE STORY				
Queue Length 95th (ft)	70	0	2	0		ner benedering		en markennere bled.				
Control Delay (s)	55.5	0.0		0.0								
Lane LOS	F	non varietiesessessessesses	В	COMPANY CONTRACTOR CONTRACTOR SERVICE	emerical and the control of the cont	mente estata transcente principalità	and the control of th	coperation was a series of the control of the coperation of the co	um z na rokulovanje svok 75 d.l.	nerous terror survey area (a) del		e w sametanne i Galles all
Approach Delay (s)	55.5	0.0	0.3									
Approach LOS	F						- And the Annual Control of the Cont		on principal conference (Infantor)			······································
intersection Summary												
Average Delay	on the state of th	1-20 med-2012W-75	2.6	mar entre a service de la constantina	The second second second second	THE THE THE TANK THE	entransis April 1985 Christian Christian		and the second second second second	- No. of the second second		
Intersection Capacity Utili	zation	7.6		i - IC	U Level	of Service	e e		В			
Analysis Period (min)	**************************************	erica disent	15					energe en				
		100										

	1	1	1	1	-	↓						
Movement	WBE	WBR	NBT.	ANBRA	SBL	SBT						
Lane Configurations	ķ ∮		۴Þ			4						
Sign Control	Stop		Free			Free					2.6	
Grade	0%		0%			0%	and the second s	and the second second second second	Security (not have been producted and a	274-24-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	The Production Control Control Control	en-de a-en-de-de-de-de-de-de-de-de-de-de-de-de-de-
Volume (veh/h)	- 5		1365	10	15	1065						
Peak Hour Factor	0.68	0.68	0.92	0.92	0.93	0.93		Park Serva Sarring Strategy		inameles and account of the second		
Hourly flow rate (vph)	7	51	1484	211	16	1145						
Pedestrians Lane Width (ft):			THE BUTTON		TTOO EER					GOOD TO GOOD A		
Walking Speed (ft/s)											1.0	
Percent Blockage				3570 W		e e						
Right turn flare (veh)		w.z.doi		H. Market St. M.								
Median type	None											
Median storage veh)	SECURIOR DISCONSIDIO DI INCIA.	aria ana ana ana ana ana ana ana ana ana a	A STATE OF THE PARTY.	#1 242 E149 E159 E1	and the second second second	n Silva kulon in palagora militar kara			al articological design		Res (September 1984)	Carrier 19
Upstream signal (ft)						516						
pX, platoon unblocked	0.42									AND THE PROPERTY OF THE PARTY O	Service and the second of	ISSNESS CONTRACTOR
vC, conflicting volume	2667	747			1495							* 2.21
vC1, stage 1 conf vol	THE TEXT PROPERTY OF STREET					and companies are server		CONTRACTOR OF THE STREET	DESERTE OFFICE OF COLUMN			
vC2, stage 2 conf.vol vCu, unblocked vol	4944	747			1495							
tC, single (s)	4944	6.9		er postane	1495 4.1				encongress of the		CONTRACTOR STORY	SS 2005
tC, 2 stage (s)		2120.30				Art of the						
(F.(s))	3.5	3.3	177.7		2.2						7 P. C. T.	(SEE SE)
p0 queue free %	0	86		ADAMA KANA	96							
cM capacity (veh/h)	0	360			445							
Direction Lane#	isWB1	ANB II	KID O	SBA	AOL SCHOOL							EDINOCENIA SE
Volume Total	59	989	505	1161	3 (1 () () () () () () () () ()							
Volume Left	7	0	0	16								
Volume Right	51	0.		0						5.04		
cSH	1	1700	1700	445								
Volume to Capacity	41.35	0.58	0.30	0.04	1.5							
Queue Length 95th (ft)	Err	0	0	3		THE CONTRACT OF THE CONTRACT	on a general grant of the state	CONTRACTOR OF THE SECTION OF THE SEC		THE PERSON NAMED IN	on entropy and and analysis and	CONTRACTOR AND
Control Delay (s)	Err	0.0	0.0	ARTICLE REPORT SERVICES								
Lane LOS	F		CONTRACTOR OF THE PARTY OF THE	A		race enverses consenses		e construencement de la construence	THE THE COME IN THE SECOND	Carrier Contract Cont	Ti stungiani kan salaman wa mana wa ina	
Approach Delay (s)		0.0		1.7								
Approach LOS	F											
Intersection Summary												
Average Delay			217.4									
Intersection Capacity Utili	zation -		attended to the second	, IC	U Level	of Service		i D			100	
Analysis Period (min)			15	Salahan Salah	ONE STABLE CONTRACT	THE COLUMN TWO	enter principal de la companya del companya de la companya del companya de la com			VARIATION PROPERTY ASSESSMENT AND THE		
							100000000000000000000000000000000000000	9/4/2014				

	1		†	1	-	1							
viovementa :		WBR	NBT	NBR	SBL	SBT			·				
Lane Configurations	**		ß			41>							MODEL STREET,
Sign Control	Stop		Free:			Free						100	
Grade	0%		0%			0%		al a logicida e compresso de la compresso de l	o de la companya del companya de la companya del companya de la co	unmana miratiron.			
Volume (veh/h)	10	10	985	45	20	800							
Peak Hour Factor	0.61	0.61	0.97	0.97	0.93	0.93	na anno anno anno anno anno anno anno a	2555639683			Mari Salasana		
Hourly flow rate (vph) Pedestrians	16	16	1015	46	22	860							
Lane Width (ft)			7 2 12 12 E	600 martin	E DESERTA								
Walking Speed (ft/s)				ELECTRICAL CO.								Service and Service	
Percent Blockage													
Right turn flare (veh)		Constant Con	e menore anderen	in die Stander in Stade		al action of the Authorities		enalistika ketanggan	e received and the color.	CONTRACTOR OF THE PROPERTY OF	Carlos adol Silve Addition to the Constitution of		200000120018
Median type	None												
Median storage veh)								na leie Nachart VII ballana		en per selven en den de per en appear per	International Control of the Control	nt v mit til merme sternar til me	
Upstream s ignal (ft)			407	365									
pX, platoon unblocked			STRUCTURES CONTROL		24000		TEAST THE THE PERSON NAMED IN						
vC, conflicting volume vC1, stage 1 conf vol	1512	1039		ALC: C	1062								
vC1, stage 1 conf vol													
vCu, unblocked vol	1512	1039			1062		BW STEELS CONTRACT						
tC, single (s)	6.8	6.9			4.1								
tC, 2 stage (s)	- SUNCESSE SERVICE SECTION OF THE SE	ernende en ernende en	COMPANIAN PROPERTY	S AND THE SHARES AS CLASS	enteres Etem care et	er Sonne der Frank in der Seine der	CONTRACTOR STATES AND A	STATE OF STREET STREET,	SERVICE SERVIC	an end our startingship	- Annex Control of State of St	Telegraphy and the second	Contractor Contractor
IF (s)	3.5	3.3			2.2								
p0 queue free %	85	93	FE13562-We250499		97			TERRORETA) TOTAL PORT	CONTRACTOR TO THE PARTY OF THE P	MARINE TERRITORI	and the second second		
cM capacity (veh/h)	109	231			664								
Direction strane # 42 % 45	WB	NB 1	SB 1	SB 2									
Volume Total	33	1062	308	573			E 79.2 F 8						100
Volume Left	16	0	22	0		TOTAL DESIGNATION AND THE COMPANY CONTROL		PEKUNTANTAN PER	THE PERSON CALL AND PROPERTY.	skevietini ili ili ili ili ili ili ili ili ili		TOTAL PROGRAMMENT AND A STREET AND A STREET	
Volume Right	16	46	0.	0			Angus 1	2.5	72				
cSH	148	1700 0.62	664 0.03	1700 0.34								27-2027/15-14	
Volume to Capacity Queue Length 95th (ft)	20 20	0.02 0	3	U.34 0		- 12					X 150		
Control Delay (s)	36.0		2 1.13	-									75-7017
Lane LOS	E		A		GARLEST DALLAS				ous services constructed		AND AND COMES PROPERTY.	STORY SALE LANG.	
Approach Delay (s)	36.0	0.0	0.4								1.5		
Approach LOS	E					and the same of th							
Intersection Summary				and the second									
Average Delay	,	The second second	8.0	and the second second	THE PERSON NEW YORK	The second secon							
Intersection Capacity Utiliz Analysis Period (min)	ation	Y	64.6%	- IC	U Level	of Service	9	- C					
		NEED LOOP AND	and on the little design	Comment of the contract of	and the second		Contract the second second second	the second second second	ROBER CONTRACTOR SECURITY		Contract to the second		

	1	1	1	~	-	+					
Movement 5	WBL	WBR	TEM	NBR	SBL	SBT					
Lane Configurations	P		î»			ર્લ					
Sign Control	Stop*		Free			Free					
Grade	0%	w 772.00 km market 100.00	0%	HAND AND THE STREET AND THE	gette Promotomer totale a Toule	0%		had dulated had been adversarily as			
Volume (yeh/h)	:4∦15	15	970	25	15	805					
Peak Hour Factor	0.84	0.84	0.93	0.93	0.95	0.95		ONE STATE OF STREET, STATE OF STATE OF	SECTION TO THE PARTY OF THE PAR		TO SEE SEE HE HE TO SEE HE HE HE TO SEE
Hourly flow rate (vph)	18	18	1043	- 27	-16	- 847					
Pedestrians	-700				SVCEOSING TO						
Lane Width (ft) Walking Speed (ft/s)			1210.03			Season.					
Percent Blockage						Lagrando					
Right turn flare (veh)		is-threem									
Median type	None										
Median storage veh)	амоне										
Upstream signal (tt)			771			1063					
pX, platoon unblocked	0.91										
vC, conflicting volume	1935	1056			1070			77.7			
vC1, stage 1 conf vol	An in the second second	escale annochracións	PASSA BALANDAR	establicate and a second	SELEGIAN SILIPAN BOSTA	MOVE THE SAME		Terran de Maria de	North Add Control	HANGE WHEREALES	
vC2, stage 2 conf vol											
vCu, unblocked vol	2026	1056		MONTH MANAGEMENT AND	1070	on the Seattle of St. Sector	THE CASE OF CONTRACTOR AND ADDRESS OF THE PARTY.	TO SELECT AND SELECT STATES AND SELECT	v czeszine dzielek rzeginecz	CONTROL OF THE PERSON.	Proposition and the second
tC, single (s)	6.4	- 6.2			4.1						
tC, 2 stage (s)											
JF (6)	3.5	3.3			- 2.2						
p0 queue free %	69	94	CONTRACTOR COMPANY CONTRACTOR	SENS HERE LESS TECHNISMES AND THE	98	NOW MAD THE THE YOUR PARK		BERTYAN TO ALL HELD TO AND AN ORIGINA	onemanan on arrango de	DENG PROPERTY OF STATE OF STAT	
cM capacity (veh/h)	57	276			655						
Direction, Lane # 33	WB.1	NB 14	SB 1								
Volume Total	36	1070	863					30 T 20 T 4			
Volume Left	18	0	16	-							
Volume Right	18	27	0								
cSH	95	1700	655					and the second beautiful to the			
Volume to Capacity	0.38	0.63	0.02								
Queue Length 95th (ft)	38	0	2	en er en	0 4200000000000000000000000000000000000	and the second second		enteroppe veptore			
Control Delay (s)	THE PARTY OF THE P	0.0	0.7							10000	
Lane LOS	F	0.0	A		NIT THE SECOND	101720202555					
Approach Delay (s) Approach LOS	64.4 F	U.U	0.7			weet.					
	Г										
Intersection Summary											
Average Delay			1.5								
Intersection Capacity Utili	zation		64.4%	: IC	U Level	of Servi	ce	C'			
Analysis Period (min)			15	COLUMN STATE		TOTAL CANADA WA		TEXENDESTICAL POP	CONTRACTOR COMPAR	NO ELECTRONIC	NETTO LIVE OF IT OF A TOTAL PROPERTY AND THE

	ⅉ	->	*	•	4 -	1		1	<i>></i>	1	1	1	
Movement 100 and 100	S-EBL	EBT	EBR2	WBL	WBT	WBR .	NBL	NBT	NBR -	SBL	SBT	SBR	
Lane Configurations		4			43>			44		ሻ	₽		
Sign Control		Stop			Stop			Free			Free		
Grade		0%	WINDOWS TO STREET		0%			0%	edines/alternemb vocast	LUCEUS ANTERNACIONALIS	0%		
Volume (veh/h)		5	20	- 10	Ö	275	10	875	10	145	715	5	
Peak Hour Factor	0.69	0.69	0.69 29	0.75 13	0.75	0.75 367	0.80	0.80	0.80	0.95	0.95	0.95	
Hourly flow rate (vph) Pedestrians				ု ၂၁ ၁	. 0	301:	12	1094	- 12	153	753	5	
Lane Width (ft)						200.7475			Siste Police				
Walking Speed (ft/s)				S\$355.455	Alexander (en Ales Sei				s out Pag		10.25
Percent Blockage							40						
Right turn flare (veh)	o di para sa para di	Altan de Sociel	Session in the constant	ica estado de porto dos		daringetsuts		Andrew Autority (1975)					
Median type		None .			None	700							
Median storage veh)								Control of the Contro		P SP NAME OF THE PARTY OF		TOTAL COMPANIONS	Programme and the Control of Cont
Upstream signal (ft) 🚈 🗈											1018		
pX, platoon unblocked	0.53	0.53	0.53	0.53	0.53		0.53	anny yak a gabankan musaka	and the second second	MINITED BY STORES	E TYPICAL PROPERTY	Silver organic vicance	
vC; conflicting volume	2552	2192	755	2216	2188	1100	758			1106			
vC1, stage 1 conf vol										na este pre			Bibliografia de la como
vC2, stage 2 conf vol vCu, unblocked vol	3914	3238	541	3282	3231	1100	545			1106		ilabatea A	
tC; single:(s)		6.5		7.1	6.5	6.2	41		CHEST ON	4.1			
tC, 2 stage (s)						din Zamaka		STEPHEN .	Transportant		QMark State		
(F(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2		78.25	2.2			
p0 queue free %	0	0	90	0	100	0	98	CANCELLO DELL'ELCONO	ACCUSE TO MARKAGE	76			
cM capacity (veh/h)	. > 0	4	290	0.	4	260	548			635	•		
Direction Lane # 3 4 4	EB I	WBT	NB 1	SB 1	SB2	1		10 Table 2					
Volume Total	38	380	1119	153	758		energy and			1			
Volume Left	1	13	12	153	0	Media II o Parti	Maria Society (Carl				a marina n	neral de la compa	
Volume Right	29	367	- 12	:W: 0	- 5					220			
cSH	0	0	548	635	1700	Start Wast in South Strike Strike Strike	North and English the control of the	A STATE OF THE PARTY OF THE PAR	- Marie Cor Majorina	A METAL MATERIAL STATES	Service and Control of the Control o	d LidteSc Release Russics (CLL) (e	energy respectively.
Volume to Capacity	. Err	Err?	0.02	_0.24	0.45								
Queue Length 95th (ft)	Err	Err	2	23	0	Western Description of the	TIO TO DESCRIPTION TO THE	AL ADMINISTRAÇÃO DE SELVERA		- Designation of the control of			
Control Delay (s)	Err	Em	0.9	12.5	0.0			SALES IN					u
Lane LOS	F Em	F	A 0.9	B 2.1		W.CS.B.VIVE	an en			i i reciente de la como	Katha Harania		
Approach Delay (s) Approach LOS	F EU	F	0.9	2.1									
	L.	F"		10H402127									
Intersection Summary					14.0		1-7	•			-1-2		
Average Delay	779	Maria Maria Maria Maria	Err	DOS MESTER CONSIDERATION			TORITY WAS ARREST	olectric state of the second	W. Chicken	ar analysis and a second		***************************************	****
Intersection Capacity Utili	zation	1	and the second second	IC	U Level	of Servi	ce.		H			e al la	
Analysis Period (min)		real and a	15						19841745 <i>6</i> 771	enelocopanio	ograpoposanema	Geograpiones	

	*	>	*	•	4	*	4	Ť	1	-	1	4	
Movemente za a se	EBL	EBI	EBR	WBL	WBT	WBR :	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			43			4			43		
Sign Control		Stop			Stop			Free			Free		
Grade		0%	ATTENDED (*** 224) TV		0%			0%	CONTRACTOR		0%	samere e e e e e e e e e e e e e e e e e e	
Volume (veh/h) Peak Hour Factor	10 0.67	0.67	. 45 0.67	0.63	。0 0.63	0.63		1025 0.95	25 0.95	0.81	710 0.81	45 0.81	
Hourly flow rate (vph)	15	0.07	67	16	0.03	24	53	1079	26	19	877	0.61 56	
Pedestrians					WARREST COM				54.55.	WEET 1997			
Lane Width (ft)	7												
Walking Speed (ft/s)								550.35.36.05.465.465	2004122022	MI-CAMBON STORES	er en		
Percent Blockage						1.22							
Right tum flare (veh)						AV-525-745-750				STOREST NO. OF STREET	2015027005104P	PER CHICAGO	
Median type Median storage veh)		None		Sec. 25.25	None								
Upstream signal (ft)		7.477123								1895/9			
pX, platoon unblocked				Taring and									
vC, conflicting volume	2163	2152	904	2207	2167	1092	932			1105			
vC1, stage 1 conf vol	and Manager			CANCEL CONTRACTOR	119 2002 - 120 - 12	and the second second second	nsa selan sengarangan	CON ACCESSIONED WASHING	CONTRACTOR OF REAL		THE GOVERNMENT OF THE	STATES OF SERVICES	
vC2; stage 2 conf vol	See that the					and the second							
vCu, unblocked vol	2163	2152	904	2207	2167	1092	932			1105			
tC, single (s) tC, 2 stage (s)	7.1	6.5	6.2	7.1	3, 6,5 -	6.2	4.1			4.1			
16, 2 stage (s) 1F (s)	3.5.,	4.0	233	3.5	4.0	33	2.2			2.2	\$0345038F		
p0 queue free %	49	97	80	32	100	91	93	A	25.42 16 3.273	97			
cM capacity (veh/h)	. 29	44	338	23	43	263	738	1000		635			
Direction Lane#	ED4	WB1	XIE 1	SB1									
Volume Total	84	The section of the second	1158	951		28 15 58 10 10 10		ing salah seril. Managan dan s	THE CONTRACTOR	Market Brown		and the second	A TABLE TARREST
Volume Left	15	16	53	19					A More Carlot				
Volume Right	67	24	26	56							70		
cSH	112	51	738	635	The second second		CENTALISATION	Try , to a second constant	SPERIOR CONTRACTOR	CORPANIE OF BUILDINGS	THE CONTRACTOR OF THE CONTRACT	ALTHUR AND AUGUS	THE CAPPENTED SOCIAL SO
Volume to Capacity	0.75	0.77	0.07	0.03			100						
Queue Length 95th (ft)	102	80	6	2			SVJANALISK ETCH	A SECRETARISM CONTRACTOR		********	rassas kiidesida		XICROS CITES AND SECURIOR CONTROL CONT
Control Delay (s) Lane LOS	98.3 F	188.5 F	-25 A	0.9 A									
Approach Delay (s)		г 188.5	2.5	0.9					B 705.75			WATER COL	
Approach LOS	F	F								Carlo Carlo	STANDARDS		
			Ne / San										
Intersection Summary Average Delay		e e	8.7	es vest						370 37			
Intersection Capacity Utiliz	ration			. Tir	U Level	of Sanii	التكافياتهم						
Analysis Period (min)	-4921E-133		15		or revel	AL AGINI				85.55.545.5			

	-	4 —	•	Ť		1	
Lane Group	EBT	WBE	-WBR	NBT	SBL	SBT	
Lane Group Flow (vph)	4	414	200	1410	226	786	
v/c Ratio	0.01	0.89	0.24	0.93	0.79	0.70	
Control Delay	15.8	51.0	10.4	25.6	38.8	17.3	The state of the s
Queue Delay	0.0	0.0	0.0	25.7	€ 0.0	0.0	
Total Delay	15.8	51.0	10.4	51.4	38.8	17.3	
Queue Length 50th (fi)) 1 ₂	210	44	251	75	305	
Queue Length 95th (ft)	8	#368	83	m#353	#198	458	
Internal Link Dist (ft)	278	-285		327		284	
Turn Bay Length (ft)		CHORNES AND	200	NEW TRANSPORT	250	on the same of	
Base Capacity (vph)	576	510	Non-sur-tonia to	A STATE OF BUILDING	287	1118	
Starvation Cap Reductn	0	0	0	177	. 0	0	
Spillback Cap Reductn	. 0	0	. 0	0	65.70 =	0	
Storage Cap Reductn	U	0	0	0	0	0	
Reduced v/c Ratio	0.01	.U.8T	U.24	1.05	::.U:/9 _{]?}	0.70	
Intersection Summary 2		600			77 T.		

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

Queue shown is maximum after two cycles.

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

	♪	→	√	←	1	†	1	1	4	
Lane Group	EBL	EBT	WBL	WBT :	NBL	NBT :	SBL	SBT	SBR	
Lane Group Flow (vph)	511	565	140	433	255	940	100	637	379	
v/c Ratio	0.87	0.94	0.73	0.89	0.84	0.81	0.61	0.81	0.46	
Control Delay	49.0	50.6	57.3	50.6	57.4	31.6	51.9	38.7	9.8	entrophysion permittent in the state of the
Queue Delay	0.0	× 0.0 -	90.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	49.0	50.6	57.3	50.6	57.4	31.6	51.9	38.7	9.8	and and an analysis and an an analysis of the section of the secti
Queue Length 50th (ft)	129	258	69	202	125	228	49	158	60.	
Queue Length 95th (ft)	#212	#459	#153	#364	#250	#338	#112	#237	130	an manamananan si samat manami i salah samon sasang tahung sahung sanah sasang samah mendepaktuak sebagai sala Panamanan pamananan si samat manami i salah samon sasang tahung salah si sasah sasang samah mendepaktuak sebagai salah sa
Internal Link Dist (ft)		854		619		2871		262		
Tum Bay Length (ft)	200		100		100		100	- 2, 0-720-000-00-00-00-00-00-00-00-00-00-00-00-	100	and the state of t
Base Capacity (vph)	590	606	. 193 ·	488	304	1161	-164	793	816	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	THE PROPERTY OF THE PROPERTY O
Spillback Cap Reductn	0	0	0	. 0	0.	0	0	0	- 0 :	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	and the second s
Reduced v/c Ratio	0.87	0.93	0.73	0.89	0.84	- 0.81	0.61	0.80	0.46	

Intersection Summary **
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

		4-	1	1	
Lane Group	EBT	WBT.	NBT	SBT	
Lane Group Flow (vph)	49	20	1134	1011	
v/c Ratio	0.27	0.12	0.72	0.63	
Control Delay	14.5	14.4	7.8	5.0	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	14.5	14.4	7.8	5.0	
Queue Length 50th (ft)	8	3	151	110	
Queue Length 95th (ft)	16	14	#578	272	
Internal Link Dist (ft):	938	531	495	388	
Turn Bay Length (ft)					
Base Capacity (vph)	262	247	1565	1607	
Starvation Cap Reductn	0	0	0	0	
Spillback Cap Reductn	0	0.	0	0	
Storage Cap Reductn	0	0	0	0	
Reduced Wc Ratio	0.19	80.0	- 0.72	0.63	
Intersection Summary			Table 1		
# 95th percentile volume	exceeds	capac	ity, queu	e may t	e longer.

Queue shown is maximum after two cycles.

	۶	†	1	*
cane Groups (4)	EBL		SBT	臺NEL 類
Lane Group Flow (vph)	133	1526	1690	652
v/c Ratio	0.72	and the second	0.88	0.90
Control Delay	60.8	16.8	10.0	51.5
Queue Delay	0.0	0.9	0.1	11.9
Total Delay Queue Length 50th (ft)	60.8 - 74	17.7 317	10.1	63.3 186
Queue Length 95th (ft)	110		m#276	#275
Internal Link Dist (ft)	1038	436	304	1207
Turn Bay Length (ft)	CO. Co. C. Sanctional	PRINCESSES CONTRACTOR	ACTUAL SERVICE SERVICES	THE PARTY OF THE PROPERTY.
Base Capacity (vph)	195	2043	NOW THE PARTY OF T	739
Starvation Cap Reductn	0	0	8	0
Spillback Cap Reducts	9 0	242	0	SOURCE STREET,
Storage Cap Reductn Reduced Vc Ratio	บ ผลก	0 0.85	0 - 0.88	0
			0.00	U.33
Intersection Summary			1. 1.5 / 1	
# 95th percentile volume				ie may be
Queue shown is maxin m Volume for 95th perce				wrtunetros
m	annie di	rene 19 III	icreien r	y upsuec

	≯	→	*	€	←	4	4	Ť	<i>></i>	1	1	
Lane Group 🚜 🐉	EEBL.	EBT	EBR	WBL	WBT	·WBR-	#NBL	NBT	NBR.	SBL	SBT	
Lane Group Flow (vph)	18	18	48	313	329	553	26	1242	835	568	1042	
v/c Ratio	0.46	0.44	0.10	0.86	0.90	0.52	0.07	0.95	0.95	1.00	0.66	
Control Delay	80.4	76.1	8.4	52.5	57.6	13.2	26.6	39.2	35.2	54.1	16.1	A COMMITTER OF THE PROPERTY OF
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.5	0.0	44.9	0.9	0.9	0.0	
Total Delay	80.4	76.1	8.4	52.5	57.6	14.7	26.6	84.0	36.1	55.0	16.2	Property of the Control of the Contr
	€ / 10°	∵-‼10	A THE REAL PROPERTY.	180	191	126	12	349	EXECUTION 255	~186	155	
Queue Length 95th (ft)	#38	#37	23	m#305	NOVE THE COMPANIES WITH THE	m216	m16	m#480	m#460	m#443	m146	
Internal Link Dist (ft)		152			327	Sant Harrison		304		1241	584	
Turn Bay Length (ft)	75	Somethal Printer.	75			150	75		THE THE TAKE THE PARTY OF THE P	350	arin alemana messa	Manager of Versenage and Constitution of the C
Base Capacity (vph)	39	41	NO TOTAL PROPERTY.	365	Particular services and the	1056	390	- ACCOUNT OF THE PARTY OF THE P	, 881	567	2151	
Starvation Cap Reductn Spillback Cap Reductn	0	0	0	0	0	315	0	187	7	0	0	
Storage Cap Reductn	V .	0 0				Water Table of the	0	0	0	PARTY I	79	
Reduced v/c Ratio	0 40	-0.44 =	0 - n + n -	0 88 0	0 0.90	0 - 0.75	0 -0.07	0	0	0 101	0	
a contraction with the next contraction and product and contraction	- U.40 <	U.44	U. IU	- U.OO	0.90	· • U./3	- 0.07	1.10	- U.96	LUI	0.50	
Intersection Summary	200							(4.6				
 Volume exceeds capa 	city, que	ie is the	preticall	y infinite	9.	Sales (Sales)	3 1 1	10a (10a)		7.0		
Queue shown is maxim												Commence of the Commence of th
# 95th percentile volume				e may t	ie longer							
Queue shown is maxim				# EXTENSION STORE OF	TO THE RESERVE OF THE PARTY OF	PERSONAL VIOLENCE AND						
m: Volume for 95th perce	entile que	ue is me	tered b	y upstre	am sign	al.			200000			

	-	1	←	4	†	+	•
Lane Group	E/EBT	EBR	WBT∉	€ NBL	NBT⊈	SBT	
Lane Group Flow (vph)	151	785	20	546	1234	974	
v/c Ratio	0.74	0.67	0.09	- 0.67	0.44	0.93	
Control Delay	59.3	12.8	31.5	12.5	1.0	49.2	
Queue Délay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.3	12.8	31.5	12.5	1.0	49.2	
Queue Length 50th (ft)	82	209	9	91	4	~331	
Queue Length 95th (ft)	#153	289	17	m110	m23	#454	
Internal Link Dist (ft)	445		188		584	705	
Turn Bay Length (ft)		200		150			
Base Capacity (vph)	225	1230	237	870	2776	1050	
Starvation Cap Reductn	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	
Reduced v/c Ratio	0.67	0.64	80.0	0.63	0.44	0.93	
Intersection Summary							
 Volume exceeds capa 	city; que	ue is the	oretical	ly infinite			
Queue shown is maxin	num after	two cyc	les.		or his feet and common consistent	enement en la la companya de la comp	
# 95th percentile volume	e exceeds	s capaci	y, queu	e may b	e longer.		
Queue shown is maxim	num after	two cyc	les.			AND THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS	and a second contraction of the
m Volume for 95th perce	entile que	eue is me	etered b	y upstre	am signa	al.	

	ⅉ		•	4-	4	1	1	1	1	
Lane Group	EBL.	ÆEBT	WBL	WBT	NBL	NBT.	SBL	SBT	SBR	
Lane Group Flow (vph)	511	565	140	433	255	940	100	637	379	
v/c Ratio ≥	0.85	5 0 .90	0.58	0.77	0.82	0.87	0.63	0.82	0.45	
Control Delay	62.9	56.1	58.7	47.9	69.9	48.0	72.2	53.9	10.6	00-00-00-00-00-00-00-00-00-00-00-00-00-
Queue Delay	0.0	0.0	≈0.0 ≎	0.0	0.0	- 0.0	0.0	0.0	0.0	
Total Delay	62.9	56.1	58.7	47.9	69.9	48.0	72.2	53.9	10.6	
Queue Length 50th (ft)	204	421	105	313	195	354	- 77	249	- 66	
Queue Length 95th (ft)	#318	#696	171	432	#352	#482	#159	#344	162	THE PERSON OF TH
Internal Link Dist (ft)		854	1.5	4619		2871		262		
Turn Bay Length (ft)	200		100		100		100		100	
Base Capacity (vph)	620	630	338	628	331	1152	168	± 828	839	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	THE PROPERTY OF THE PROPERTY O
Spillback Cap Reductin	0	- 0	: 0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	recent to the the control of the con
Reduced v/c Ratio	0.82	0.90	0.41	0.69	0.77	0.82	0.60	0.77	0.45	
Intersection Summary		6.56.6								
# 95th percentile volume	ovcood	e canaci	v guali	mayb	o longor	obstració (B.S.			representation of	
a coarpointe voluite	- CVCCCA	o capaci	y, queu	- may b	e iui igei.					

Queue shown is maximum after two cycles.

	-	4-	Ť		
Lane Group	EBT	WBT	NBT	SBT	
Lane Group Flow (vph)	49	20	1134	1011	•
v/c Ratio	0.27	0.12	0.72	0.63	
Control Delay	14.5	14.4	7.8	5.0	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	14.5	14.4	7.8	5.0	The state of the s
Queue Length 50th (ft)		- 3*	¥151	. 110	
Queue Length 95th (ft)	16	14	#578	272	
Internal Link Dist (ft):	938	531/	983	∴388	
Tum Bay Length (ft)		rian make in the second	- Andrews	ZANTAL HESTING - PROTECTION OF	
Base Capacity (vph)	262	247	AND CONTRACTOR OF THE PARTY OF	1607	
Starvation Cap Reductn	0	0	0	0	
Spillback Cap Reductin	.0	0.	×3.7.0	0	
Storage Cap Reductn	0	0	0	0	
Reduced V/c Ratio	0.19	20.08	0.72	0.63	
Intersection Summary	AT .				
# 95th percentile volume Queue shown is maxin				e may b	e longer.

	ⅉ	1	+	لر	<i>*</i>	
ane Group	. EBL	NBT.	≨ SBT	SBR	&NEL®	
Lane Group Flow (vph)	133	1526	1163	582	652	
v/c Ratio	-0.58	0.73	1.20	0.63	1.00	
Control Delay	53.9	18.5	124.3	18.2	79.1	
Queue Delay	1.7	11.8	81.5	8.4	48.8	
Total Delay	55.5	30.3	205.7	26.6	127.9	
Queue Length 50th (ft)	->87	377	~987	245	~237	
Queue Length 95th (ft)	123	488	#1274	381	#361	
Internal Link Dist (ft)	1038	436	304		1207	
Turn Bay Length (ft)	Introduction of the section	(A similaring to perform	(aprilation, a no constituents		TEATH A LOW CONTINUE	
Base Capacity (vph)	A DESCRIPTION OF THE PARTY.	2082	968	924	654	
Starvation Cap Reductn	0	0	128	301	0	
Spillback Cap Reductn	49	555	0 :	0	79	
Storage Cap Reductn	O moreograpisco	0	0	0	0	
Reduced v/c Ratio	0.60	1.00	1.38	0.93	1.13	
Intersection Summary						
Volume exceeds capa	city, que	ue is th	eoreticall	y infinite		
Queue shown is maxin	num afte	r two cy	cles.			A STATE OF THE PROPERTY OF THE
# 95th percentile volume	e exceed	s capac	ity, queu	e may b	e longer.	

	۶	>	*	*	-	4	4	†	~	1	↓	
Lane Group	e EBL	EBT	EBR	WBL	. WBT	WBR .	NBL	NBT.	NBR	SBL	SBT	
Lane Group Flow (vph)	18	18	48	304	318	536	26	1230	827	551	1010	
v/c Ratio	0.14	0.13	0.30	0.82	0.85	∉ 0.55 €	0.21	0.82	0.89	1.24	0:71	
Control Delay	49.8	49.5	18.7	61.2	65.3	17.4	51.6	36.0	25.9	162.4	20.8	ACTION OF A CONTRACTOR STREET,
Queue Delay	0.0	0.0-2	0.5	46.3	25.2	0.0	0.0	91.0	≕ 9.8-	0.0	-1.2	
Total Delay	49.8	49.5	19.2	77.5	90.4	17.4	51.6	126.9	35.8	162.4	22.0	AN A
Queue Length 50th (ft)	12	12;	. 0	209	220	c195	-18	487	4, 309 ·	~511	410	
Queue Length 95th (ft)	33	33	31	#358	#382	306	46	593	#546	#723	574	manuscript, in minutes, desirable representation manuscriptural desirable transfer of the professional manuscripture and the contract of the professional manuscripture and the contract of th
Internal Link Dist (ft)		152			327			304			584	
Turn Bay Length (ft)	75	hodely firster à manurer vo.	75			150	75		185	250		AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
Base Capacity (vph)	148	155	176	372	372	981	164	1506	934	444	1423	
Starvation Cap Reductn	0	0	0	0	0	0	0	480	95	0	0	The second secon
Spillback Cap Reductn 🥶	0	- 0	24	60	60	0	. 0	0	. 0	0	211	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	A THE RESIDENCE OF THE PROPERTY OF THE PROPERT
Reduced v/c Ratio	0.12	0.12	0.32	0.97	1.02	0.55	0.16	1.20	0.99	1.24	0.83	
Intersection Summary					10.5			15.0		A Company		
 Volume exceeds capa 	city due	ue is the	oretical	v infinitė				*****				
Queue shown is maxin					i Gradini da Su					Residents		
# 95th percentile volume	exceed	s canacil	v oueii	e may h	a longer	Tarke 1875						
Queue shown is maxin				ESMINOUS N	TO SHEET			ne desiretes	ALCOHOLD ST			
		- 3 -										

	<i>></i>	→	*	1	4	4	1	Ť	1	1	↓	1	
Movement	EBL	EBT	EBR	WBL	WBT	WBR :	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	(Î		ሻ	ĵ»		ሻ	^ }		ħ	ተተ	7	and the same of th
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	A STATE OF THE STATE OF	1900	1900	1900	1900-	1900	1900	
Lane Width	11	12	12	11	12	12	11	11	10	. 10	10	12	
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		s. 3.0 (3.0	3.0	
Lane Util. Factor Frt	0.97	1.00		1.00	1.00		1.00	0.95	2.000.000.000.000	1.00	0.95	1.00	FTENCHER AND REPRESENTATION OF THE PARTY OF
Fit Protected	1.00 0.95	0.96 1.00		1.00 0.95	0.97 1.00	Y	1.00	0.99 1.00		1.00	1.00	0.85	
Satd Flow (prot)	3351	1.00		1711	1.00		0.95	3408		0.95 1668	1.00	1.00	
Fit Permitted	0.95	1.00		0.95	1.00		.1728 0.95	1.00		0.95	3336 1.00	1599 1.00	
Satd. Flow (perm)	3351	1798		1711	1807		0.93 1728	3408		1668	3336	1599	
Volume (vph)	440	325	135	125	285	70	195	795	80	95	610	330	
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	= 0.89 · ·	0.89	0.92	0.92	0.92	0.95	0.95	0.95	
Adj. Flow (vph)	473	349	145	140	320	79	212	864	0.5 <u>2</u> 87	100	642	347	
RTOR Reduction (vph)	0	- 11	0	0	75	0	2.2 2.0	6	0,	0	042		
Lane Group Flow (vph)	473	483	0	140	392	0	212	945	0	100	642	209	
Heavy Vehicles (%)	1%	1%	1%-	2%	2%	2%		1%	1%	1%	1%		
Turn Type	Prot			Prot	y comes and the entry's	deres and the second	Prot			Prot	**************	pm+ov	OL STREET, STR
Protected Phases		4		3.	8			2		1.0	6		
Permitted Phases	e de la company de la comp	TO SERVICE OF THE SER	iaramakasan Coka	u Sandhaile	419941994199419	ionament	Section of the Market	ules estatues	KARAMPARTIKO			6	
Actuated Green, G (s)	18.3	36.7		12.0	30.4		16.9	36.6		7.3	27.0	45.3	
Effective Green, g (s)	20.3	38.7	2007-12112-151175200	14.0	32.4	-each Allegar acada segre	18.9	38.6	er George Proposition	9.3	29.0	49.3	
Actuated g/C Patio	0.18	0.34		0.12	0.29		0.17	0.34		0.08	0.26	0.44	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0	+4+1100114-14-14-14-14-14-14-14-14-14-14-14-14-
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	604	618		213	520		290	1168		138	859	743	
v/s Ratio Prot	c0:14	c0:27		0.08	0.22		c0.12	c0.28		0.06	0.19	0.05	
v/s Ratio Perm	TO DESCRIPTION OF THE PARK STATE	BERKERSEN CHARLES	KORNALIEDAN KANDONINA	2 february and a second	eres (us montes m. men cue menus	and a state of the						0.08	
v/c Ratio	0.78	0.78		0.66	0.75		0.73	0.81		0.72	0.75	0.28	
Uniform Delay, d1	44.0	33.2	San	47.0	36.5	36576670/0363 5 .2023	44.4	33.7	edectrostroses	50.4	38.4	20.3	TO SUPPLEMENTATION OF THE POST OF THE AND A
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	war berman comments	
Incremental Delay, d2 Delay (s)	6.6 - 50.6	6.4 39.5		7.1 54.1	6.1 42.6		9.1	4.2	H19FOLDAVE ER	17.1	3.6	0.2	TOT DESIGNATION CONTRACTOR
Level of Service	- 00.6 D	ა9.5 D		54.1 D	92.6 D		53.6 D	37.9 D		SPECIAL CONTRACTOR	42.0	20.5	2
Approach Delay (s)	U	45.0		D	45.6		U Marka	40.7	22448X	E	D 37.5	С	
Approach LOS		49.0 D			49.0 D		SMS VE	40 <i>I</i> D			roz.og D		
Intersection Summary													
HCM Average Control Del	av	LOFEREN MARKETA	41.6	H(CM Level	of Serv	ice	COMPANY OF THE PARTY OF THE PAR	D	And services		W. W. A. L. W. S. C.	
HCM Volume to Capacity			0.77					e e e		la program	6.65	N. Water	
Actuated Cycle Length (s)	ni virili Triblindi Tilli		112.6	Sı	ım of los	t time (s) }		6.0		10000		
Intersection Capacity Utiliz	ration		5.4%		U Level o				D.				
Analysis Period (min)			15	orani er er asalakari.	energen in America (America)	energia disensi in tra	carro (Macconti i P. 20)	er, maadaaltaa 1	on a state of the		A SAMPLE PROPERTY.	erane (Karana)	
c* Critical Lane Group					10.0								

Movement BB		۶		-	1	4	*		Ť		-	1	1	
	Movement	EBL.₄	EBT	EBR	WBL	WBT:	WBR.	NBL	NBT	NBR	SBL	SBT	SBR	
						€}			€}>			43>		
Eane Lili Factor 1-00		1900⊭	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	
Fift		NOT CHARLES OF THE PROPERTY.											The state of the state of the state of the state of	et en er ste kontrollere kaar in Skrivet Skriv
File Protected 0.98			The Control of the Control			HATELEAN CO.			The Control of the Control			1.00		
Said, Flow (prot) 1700 1703 1892 1874 Fit Permitted 0.89 0.94 0.94 0.98 Satd, Flow (perm) 1541 1627 1785 1837 Volume (yph) 10 0 2.20 5 0 10 40 900 15 15 825 20 Peak-hour factor, PHF 0.61 0.61 0.51 0.75 0.75 0.75 0.93 0.93 0.95 0.95 0.95 AGI Flow (pph) 16 0 33 7 0 13 48 968 16 16 868 21 RTOR Reduction (pph) 0 31 0 0 12 0 <							aras sancer	Nan decre se se se		POSSOTTE ACTION AND DOC	NASSES CONTRACTOR			
File Permitted			Part of the second ways of the second			AND COMPANY OF STREET STREET,			The second second			Land and section and and		and the second
Said. Flow (perm)							tacion representati	Sections		R-Carrana-cross			Profesional Commission	Distriction of the control of the co
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Peak-hour factor, PHF		40		is one	Sassis +V			40		(TO MANAGEMENT OF THE PARTY.	
Add Flow (vph) 16		12 Cale was ball to be a fine	4 Tel 2 Stant 17		Santa and Police	AND DESCRIPTION	and the second second	1000		PERSONAL COMMENTS	Section of the second section of the least		A Principle of the Control of the Co	
RTOR Reduction (vph)	Adi Flow (vob)	ATTACK S DESCRIPTION OF SECURITION OF SECURITION			TO A STATE OF THE PARTY OF THE									
Lane Group Flow (riph)		THE PARTY OF THE P	2000	Carlo Carlo Control Control		2-12-12-25-25-02	CONTRACTOR OF THE PERSON OF TH	A 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Parkette As Acres	The second second	STREET, DESCRIPTION	PROPERTY AND	The state of the s	
Heavy Vehicles (%)									-					
Perm		THE PARTY OF THE P	The state of the s		2.5.525 ALIS VALUE OF		ACCOUNT OF THE PERSON	17.1 17.1 18.1 18.1 18.1 18.1 18.1 18.1	A Zeroza	A STATE OF THE PARTY OF THE PAR	The Property and	NAME AND ADDRESS OF THE OWNER, THE	The first of the second second second second	
Protected Phases 2 2 1 1 Permitted Phases 2 2 1 1 Actuated Green, G (s) 5.7 5.7 76.0 76.0 Effective Green, G (s) 6.7 6.7 77.0 77.0 Actuated g/C Ratio 0.07 0.07 0.86 0.86 Clearance Time (s) 4.0 4.0 4.0 4.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 Eage Grp Cap (vph) 115 122 1532 1577 v/s Ratio Prot v/s Ratio Prot 0.00 c0.57 0.49 v/s Ratio Prot 0.16 0.07 0.67 0.57 Uniform Delay, d1 38.9 38.6 2.1 18 Progression Factor 1.00 1.00 1.00 1.00 Incremental Delay, d2 0.7 0.2 2.3 1.5 Delay (s) 39.5 38.8 4.5 3.3 Evel of Service D	Tum Type	Perm		7.1		71 75 S			200,000,000	Ale Sala		*/O	170	
Permitted Phases 2		Owa to age. Children	2			2	NAMES AND ASSESSED OF THE PARTY		**************************************	anternior		1		
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Actuated g/C Ratio 0.07 0.07 0.86 0.86 Clearance Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0		TOTAL STANSON OF A STANS		-mentalistik (nintra pep	en e	5.7	COURT CONTRACTOR	CONTRACTOR STATES	76.0	No seemble Debes	ing regions single	76.0		ere en
Clearance Time (s) 4.0 4.0 4.0 4.0 Vehicle Extension (s) 3.0 3.0 3.0 3.0 Lane Grip Cap (vph) 115 122 1532 1677 v/s Ratio Prot v/s Ratio Perm 0.001 0.00 c0.57 0.49 v/c Ratio 0.16 0.07 0.67 0.57 Uniform Delay d1 38.9 38.6 2.1 1.8 Progression Factor 1.00 1.00 1.00 1.00 Incremental Delay, d2 0.7 0.2 2.3 1.5 Delay (s) 39.5 38.8 4.5 3.3 Level of Service D D A A Approach Delay (s) 39.5 38.8 4.5 3.3 Approach TOS D D A A ACUATE Control Delay 5.1 HCM Level of Service A HCM Volume to Capacity ratio 0.63 Actuated Cycle Length (s) 81.6% ICU Level of Service D		100				6.7			77.0			77.0		
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Uniform Delay, d1 38.9 38.6 2.1 1.8			Mary Committee of the Party Committee			to the contract of			Section of Water Con-			The state of the s	S. S.	
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HCM Volume to Capacity ratio Actuated Cycle Length (s) Intersection Capacity Utilization Analysis Period (min) 0.63 Sum of lost time (s) ICU Level of Service D D		oret alfanes N		E 4	L) r	SKA L OUG	l of Coo		\$179972,56	•				
Actuated Cycle Length (s) 89.7 Sum of lost time (s) 6.0 Intersection Capacity Utilization 81.6% ICU Level of Service D Analysis Period (min) 15				PROPERTY CONTRACTOR OF THE	66 S. C.	JW Leve	i oi seiv	ice		治が各層	d:9-1002504			
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				SAME CONTRACTOR OF THE PARTY OF					107					
	c Critical Lane Group		nacion de Palaba nta III VIII (l.	e-anderson affilia.	-serve spour zerzepitze, kitt	中。大山野山IPT 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	en og stærendingsford	www.takkethecitA	PROFESSION 007-02819	en settellikkeis ja ja	enter (STONES DESPE	earne da se estad		F-10 (18) (18) (2) (18)

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Movement	EBL	EBR	NBL	NBT	SBT	SBR S	BR2	NEL	NER	
Lane Configurations	k#			ተተ	†	7	Committee Commit	ካካ	***************************************	
Ideal Flow (vphpl)	1900	1900	1900	1853	1693	THE RESIDENCE OF THE PROPERTY OF THE PARTY O	1900		1900	
Lane Width	12	12	12	12	11	11	11	12	12	
Total Lost time (s)	3.0		1000	3.0	3.0	3.0		3.0		
Lane Util. Factor	1.00			0.95	1.00	1.00	POR MEDITOR STATE	0.97	ann ann ann an an an an an an	
Frt	0.98			1.00	1.00	0.85		1.00		
Flt Protected	0.96			1.00	1.00	1.00		0.95		**************************************
Satd. Flow (prot)	1751	on the second		3486≝	1620	1546		3502		
Flt Permitted	0.96			1.00	1.00	1.00		0.95		
Satd: Flow (perm)	1751			3486	1620	1546		3502	44.	
Volume (vph)	85	15	0	1400	1020	485	10	540	0	
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.92	A CHARLES OF THE PARTY OF THE P	0.92	0.89	0.89	
Adj. Flow (vph)	113	20	0	1474	1109	527	11	607	0	The state of the s
RTOR Reduction (vph)	. 0.	. 0	0.	. 0	0	. 1	0	0	6: 0 :	
Lane Group Flow (vph)	133	0	0	1474	1109	537	0	607	0	
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%	1%	- 0%	0%	
Turn Type	THE TOTAL CONTRACT AND ADMINISTRATION OF A PARTICULAR ADMINIST		de fermina de la compa			Perm				
Protected Phases	3 .			2	6	1.75		. 4		
Permitted Phases	(Bourn) Commission Supplies	specific controllers resear	na is man especie	PROCESS SECTION OF THE SECTION OF TH	6	6	utoma e.e. v te terri	ve a vije na promjejenje singeleniom		·
Actuated Green, G (s)	12.2			62.0	62.0	62.0		18.0		
Effective Green, g (s)	14.2	non-section to consect	monten membersol	64.0	64.0	64.0	oten austrasi	20.0	MARTIN DE THANTEUN DE LA	
Actuated g/C Platio	Comment of the second of the second of the second			0.60	0.60	0.60		0.19	21	
Clearance Time (s)	5.0	WARE TRANSPORTED	A PLANT BUT AND EDGE TO	5.0	5.0	5.0	tage of the control o	5.0	WARREN TO THE TOTAL TO	
Vehicle Extension (s)	2.5			3.0	3.0	3.0		2.5		
Lane Grp Cap (vph)	232	mentin excess over	POSEINA CHURCH FON	2081	967	923	PANEL ESCEPTIONS	653	NO PERSON NO. TO PROPER	
v/s Ratio Prot	c0.08			0.42	c0.68			c0.17		The state of the s
v/s Ratio Perm		and the same	HADEV PUTTEN ABOUT	en a vela de la companya de la comp	perentant or incorporate	0.35	UPST MER GOVERN	NATED OF VEHICLES		
v/c Hatio	0.57				1.15	0.58		0.93		
Uniform Delay, d1	43.7 1.00			15.1	21.6	13.3	E-KONDON GRADA	42.9	manage rate and all	BECCHECARE TO SECURE TO SECURE THE SECURE TO SECURE TO SECURE THE
Progression Factor	AND ALLES OF THE PROPERTY OF	W. 9.52		1.00	1.00	1.00		1.00		
Incremental Delay, d2 Delay (s)	2.8 46.5		NESEMTRASIO	1.1 16.2	78.3 99,9	0.9 14.3		19.6		
Level of Service	, 46.5 D			STATE OF STREET PARTY.	99,9 F	14.3 B		62.5		
Approach Delay (s)	46.5		reamo	B 16.2	72.0	D Daniel Territoria	areenvee	E	CENTRAL MATERIA	
Approach LOS	40.3 D				: 72.0 E			62.5		
	<i>U</i>			D	_			Е		
Intersection Summary				100						
HCM Average Control De			48.3	H	CM Leve	of Servic	е		D	
HCM-Volume to Capacity			1.02							
Actuated Cycle Length (s)	gangeriaggan, is analysis an		107.2			t time (s)			9.0	3 (A) (A) (A) (A) (A) (A)
Intersection Capacity Utili	zation	i C	11.3%	i le	U Level	of Service			.⊮F.	
Analysis Period (min)	Belgingen op Some versionere	uses copeanies	15	neskaja grandreno	gergyger som	en e	7-9-2-2-70	DEVELOPMENT THE PROPERTY OF THE	6 SECTION SECT	
c Critical Lane Group	Year in									

	﴾	-	*	•	←	*	1	Ť	1	-	1	4	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBI	∈NBR	SBL	SRT	SBR	
Lane Configurations	ħ	^	7	¥	र्स	Ŋ	ሻ		7	ኝ	∱ }		
Ideal Flow (vphpl)	1900	1900	1900	2023	2011	2261	1900		÷1900	1897	1900	1900	
Lane Width	12	12	12	12	12	12	12	12	12	11	11	11	
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-3.0	3.0	3.0	- 3.0		
Lane Util. Factor	1.00	1.00	1.00	*0.99	*0.99	1.00	1.00	*0.79	1.00	1.00	*0.65	PROVINCE SECTION AND AND ADDRESS OF THE PARTY.	
Fit State of the s	- 1.00	1.00	0.85	- 1.00	1,00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Sald. Flow (prot)	1805	1900	1615	1884	1884	1884	1805	3944	1599	WATER CO.	2358		
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	TO THE PROPERTY AND ADDRESS OF THE PROPERTY AND THE PROPE	
Satd. Flow (perm)	1805	1900	1615	1884	1884	1884		3944	1599	C. C. Manager Co. St. Co.	2358		
Volume (vph)	15	15	40	450	15	385	25	1275	650	415	1025	20	
Peak-hour factor, PHF	0.83	0.83	0.83	0.92	0.92	0.92	0.97	0.97	0.97	0.86	0.86	0.86	
Adj. Flow (vph) RTOR Reduction (vph)	18 0	18 - 0	48	489	16	418	26	1314	670	483	1192	23	
Lane Group Flow (vph)	. u 18	CHECK PLANTS	45	0	0.0	75	0.	0	0	0	1.1	0	
Heavy Vehicles (%)	0%	18 0%	3 	246 1%	259 0%	343 2%	26	1314 0%	670	483 1%	1214	. 0	
Tum Type	Split	U /o	Prot	PAUL AND AUGUST TO A SERVICE AND A SERVICE A	C-10.0 10.0 - 41.00 A-10.00	SCHOOL PRODUCTS	The second second second	AND DESCRIPTION OF THE PROPERTY OF	ON OTHER RESERVOIRS	CHRESCO 1017/400	1%	0%	
Protected Phases	3)	3 :-		Split 4	4	om+ov 1	Prot 5		om+ov	Prot	-		
Permitted Phases		3			4.	4) . .	2 · 2 ·	4 · 2	1	6		
Actuated Green, G (s)	5.4	5.4	S-5.4	18.7	18.7	47.0	4.2		57.8	28.3	6 63.2		
Effective Green, g (s)	6.9	6.9	6.9	20.2	20.2	50.0	5.7	41.1	61.3	29.8	65.2		
Actuated g/C Ratio	0.06	0.06	0.06	0.18	0.18	0.45	0.05		0.56	0.27	0.59		
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.5	4.5	5.0		
Vehicle Extension (s)	~3.0°	3.0	3.0	3.0	3.0	2.0	2.0			2.0	3.0		
Lane Grp Cap (vph)	113	119	101	346	346	908	94	1474	891	467	1398	N TO SERVE AND SERVE	All the second s
v/s Ratio Prot	c0.01	0.01	0.00	0.13	0.14	0.10	0.01	0.33	c0.14		c0.51		
v/s Ratio Perm	Ber Collection on State of House C	emant substrain (New Association)	MARKAL MELANIST	and the second second	and the second second second	0.08	Marie Viet Con Labore		0.28	74.12.16.19.27(6.1)		Market et et et e	Y 20120 3-00
v/c Ratio	0.16	0.15	0.03	0.71	0.75	0.38	0.28	0.89	0.75	1.03	0.87		
Uniform Delay, d1	48.8	48.8	48.4	42.2	42.5	19.8	50.2	32.4	18.6	40.1	18.8	Vicialisti dingko ski	Simposio Dalamanania
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00%	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.7	0.6	0.1	6.7	8.6	0.1	0.6	8.5	3.6	50.8	6.0	CACOMMON CONTRACTOR	Secretary Company Company
Delay (s)	49.5	49,4	48.5	48.9	51.1	19.8	50.8	40.9	22.2	90.9	24.8		
Level of Service	D	D	D	D	D	В	D	D	С	F	С		AND CONTRACT SECTIONS SECURISHED
Approach Delay (s)		48.9%			36.4			34.8			43.6		
Approach LOS		D			D			С			D		
Intersection Summarys	P. DA SALTIMON A ANNUAL OF		AUTHOR CONTRACTOR SHOP			195		r e					
HCM Average Control Dela		rational turning and an arrangement	38.5	HO	CM Leve	of Serv	ice		D				
HCM Volume to Capacity r	atio		0.84					2.50				4.4	7.5
Actuated Cycle Length (s)	CONTRACTOR SAN		110.0			t time (s			9.0	CONTROL MANAGEMENT (FROM -			
Intersection Capacity Utiliz	ation	~ 7	8.7%	. IC	U Level	of Service	e .		D.				
Analysis Period (min)	angsiense:		15	Section of the sectio	120%ET##		ecessa escensiones e con	verenementensor		CTYPES/CERTIFIER PR	THE COMES TO SERVICE STATE OF THE SERVICE STATE OF	DOMESTIC SANGERS AND SERVICE OF THE	
c . Critical Lane Group													

	>	>	1	*	4-		4	†	1	1	1	1	
Movement	EBL	EBT	EBR	WBL	WBT.	WBR	NBL	NBT	NBR -	SBL	SBT	SBR	
Lane Configurations		र्स	T.		€\$		ሻ	朴			4B	MANUSCO CONTRACTO	
Ideal Flow (vphpl)	1900	1900	1900.	1900	1900	1900	1900	1863	1900	1900	2083	- 1900	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	ACCOUNT OF THE PARTY OF THE PAR
Total Lost time (s)		3.0	3.0		3.0		3.0	3.0			3.0		
Lane Util. Factor		1.00	1.00	SMIN NEW YEAR	1.00	nerode de la recurs	1.00	0.95	io total companyes	White Strap Knop to take	0.95	TOTAL CHESTON CANADA	
Frt Flt Protected		1.00	0.85		0.99		1.00	1.00			0.99		
Satd: Flow (prot)		0.95 1915	1.00 1812		0.98 1682		0.95 1787	1.00		Nestri tucie	1.00	ENGINERATE EN	
Flt Permitted		0.72	1.00	SASAL TO S	108∠ 0.87		0.95	3500 = 1.00			3872		
Satd. Flow (perm)		1445	1812		1491	eta o kara	1787	3500		- 7 X 50 240	0.94 3623		
Volume (vph)	125	5	660	5	5	1	520	1145	10	10	ುಂ23 795	65	
Peak-hour factor, PHF	0.86	0.86	0.86	® 0.55	0.55	0.55	0.98		0.98	0.86	0.86	0.86	
Adi. Flow (vph)	145	6	767	9	9	2	531	1168	10	12	924	76	
RTOR Reduction (vph)	0	0	20.	0	2	0.	0.	1 1	0	0	6	. 0	
Lane Group Flow (vph)	0	151	747	0	18	. 0	531	1177	0	0	1006	0	
Heavy Vehicles (%)	1%	1%	1%	⇒. 9%	9%	9%	1%	1%	1%	1%	1%	1%	7775 7725
Turn Type	Perm		om+ov	Perm		201101010101010101010101010101010101010	Prot		The second second	Perm	ALCONOLINA TO YES	32-27-02-09-08/406	G-10-00-Calculation-College Sc 139
Protected Phases		. 8	5		4		. 5	2	- 7		6		
Permitted Phases	8	8	8	4	4			2	a commence of the contract of the second	6	6	environment en en employ (f)	and a resident of the second o
Actuated Green; G (s)		11.4	42.2		11.4		30.8	66.2			30.4		
Effective Green, g (s)	40040550000000	13.4	46.2	OF ENGINEERING	13.4	mentere objections	32.8	68.2	Dido #1/o activizare each o	Breging Line (gl. billig break) (gl. big	32.4		
Actuated g/C Ratio		0.15	0.53		0,15		0.37	0.78			0.37		
Clearance Time (s) Vehicle Extension (s)		5.0 - 2.5	5.0 2.5		5.0	60 ESSENCER ESSANS	5.0	5.0		nerodorus andrus	5.0	THE CONTRACTOR	EFF TFLAND CON AND A THE SPECIAL OWN
Lane Grp Cap (vph)					2.5	0.00	2.5	3.0			3.0		
v/s Ratio Prot		221	1018 c0.27		228	P. 500 1950 1960	669 c0.30	2725 0.34			1340		Octobro Charles
v/s Ratio Perm		0.10	0.14		0.01	U.S. See	cg.sg.	U.34			c0.28		
v/e Ratio	F-75-F17-00-E4	0.10	0.73		0.01		0.79	0.43			0.75		The state of the s
Uniform Delay, d1		35.1	16.0	orali mas	31.8		24.4	3.2			24.1		
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	120	
Incremental Delay, d2	CTIN SECTIONS SECTION	7.7	2.6	ZORDANIA SISSE	0.1	nes de la company	6.2	0.1			2.4		
Delay (s)		42.8	18.6		31.9		30.6	3:3			26.5		
Level of Service		D	В		С	and an analysis of the second	С	A	Marin or Militaria are an	CARL CHARGE	С	Ottoeku, roset, ji 500 get	
Approach Delay (s)		22.6			31.9			11.8			26.5		
Approach LOS		С			С	,		В			С	The second of th	TO SHEET OF THE COURSE PROCESSING SECTION SECT
Intersection Summary 🐇		4.5						75					
HCM Average Control De	lay		18.7	HC	CM Level	of Servi	ice	COLUMN TO SERVICE SERV	В	200000000000000000000000000000000000000	TEST TO SELECT THE	4-10-10-10-10-10-10-10-10-10-10-10-10-10-	ACCUPATION ASSESSMENT
HCM Volume to Capacity		100	0.77				APPENDING						
Actuated Cycle Length (s)		- Commence of the	87.6		m of lost			re automorphology (1995)	9.0	owner were	erendarista, ili		
Intersection Capacity Utili	zation		78.3%	i i i i i i	J Level o	of Servic	e :		D				500.2
Analysis Period (min)	is an assistant management	en resolution en	15	antantaa maarin	CONTRACTOR OF SHIP	area cores or reported with	a the state of the						monomento en el Carlo de Carlo
c Critical Lane Group							N. Dr.						

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Movement	EBL	EBT	EBR.	WBL	WBT	WBR	NBL	I NBT	NBR 8	SBI	SBE	SBR	
Lane Configurations	ሻሻ	ĥ		ሻ	\$		ኝ	ት ሴ	ALCOT 25.00 TO	ኝ	^	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900:	1900	1900	1900	
Lane Width	11	12	· 12	11	12	12	11	11	10	10	10	12	
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00	~ ~~~	1.00	1.00		1.00	0.95		1.00	0.95	1.00	THE ARMS LIGHT FRANKS PROPERTY CONTROL
Frt.	1.00	0.96		1.00	0.97		1.00	0.99		1.00	1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00	and the second s
Satd: Flow (prot)	3351	:1798:		1711	1805		1728	- 3406 ·		- 1668⊬	3336	1599	
Flt Permitted	0.95	1.00	DAMES OF STREET	0.95	1.00	er alle supplier bette signe alle	0.95	1.00		0.95	1.00	1.00	
Satd. Flow (perm).	3351	1798		1711	Commonweap of the common of th		1728	3406	a part	1668	3336	1599	
Volume (vph)	425	310	130	120	270	70	190	770	80	90	590	315	
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.92	- 0.92	0.92	0.95	0.95	0.95	
Adj. Flow (vph)	457	333	140	135	303	79	207	837	87	95	621	332	
RTOR Reduction (vph)	0	11	. 0	0	. 8	0	0.	6	Ö,	0.	0	137	
Lane Group Flow (vph)	457	462	0	135	374	0	207	918	0	95	621	195	
Heavy Vehicles (%)	1%	1%	1%	2%	- 2%	2%	CONTRACTOR CONTRACTOR	1%-	1%	1%	1%	1%	
Turn Type	Prot	ACCUSATION PROPERTY.	entra company and a	Prot		au emercensenungs.co.	Prot	California spilana von	VP1 777707 - 200-200-201-201-	Prot		pm+ov	
Protected Phases	7.	4		3	8		5.	2		. 1	6	7.	
Permitted Phases		- A- A-	FANCE AND A	SOUTH CONTRACTOR	PARTITION OF THE	earchean ar ann an		SOUTH CONTROL ON FOR	ACTAR GRAND IN	Same and the second	ene incumento a applicações e	6	
Actuated Green, G (s)	17.8	35.3		11.5	29.0		16.5	35.4		7.2	26.1	43.9	
Effective Green, g (s) Actuated g/C Ratio	19.8	37.3		13.5	31.0	Svedgaringe o vinc	18.5	37.4	thing have present.	9.2	28.1	47.9	Die De GRADENSCHE Harberten was en en
Clearance Time (s)	0.18 5.0	0.34 5.0		0.12	0.28		0.17	0.34		0.08	0.26	0.44	
Vehicle Extension (s)	3.0	5.0 3.0		5.0 3.0	5.0		5.0	5.0	SECONOCIOSOS	5.0	5.0	5.0	DATE: A TREE CASE TO THE TOTAL OF THE CASE OF
Lane Grp Cap (vph)	606	613		The second second	3.0	Ty make the	3.0	3.0		San San Art State Company		3.0	
v/s Ratio Prot	c0.14	c0.26	***	211 - 0.08	511 0.21	\$255724757756	292	1164	STEER CONTRACTOR	140	857	744	
v/s Ratio Perm	S.CU. 14	U.20		- 0.08	U.ZI		c0.12	CU.2/		0.06	0.19	0.05	
v/c Ratio	0.75	0.75	WTT 450FF	0.64	0.73		0.71	0.79		NO COL	- 6 3 6	0.07	
Uniform Delay, d1	42.5	32.0	POSITE OF T	45.6	35.4	ace in the con-	42.9	32.4		0.68 48.7	0.72 37.1	0.26	
Progression Factor	1.00	1.00		1.00	1.00			32.4 31.00		1.00		19.5 1.00	
Incremental Delay, d2	5.3	5.2		6.2	5.4	TWE ST	7.7	3.6		12.3	3.1	0.2	
Delay (s)	47.8	37.2	25807.149	51.9	40.8		50.6	36.1	VE.W. 7122	61.0	40.2	0.∠ 19.7	
Level of Service	D	D		D	D		D.O	D		E	но. <u>г</u> D	1 <i>3.7</i> B	
Approach Delay (s)		42.4			43.7	Silver State		38.7			35.6 ⅓		
Approach LOS		D	Base Data (CR. 1977)		D			D			D		
Intersection Summary					_					*******			No. 2 Parish and the second
HCM Average Control Del			00.5	2.4500				900				经验证金	
HCM Volume to Capacity			39.5	H	CM Level	of Servi	ce	THE CHARGE WATER	D	ELZ-MARCHES W	naar-solendess st	Sillia MCMONTERNATA ANCIA	-1927-No arkingan orang
Actuated Cycle Length (s)	ialiO -	B#1	0.75 109.4										
Intersection Capacity Utiliz	zation		109.4 3:0% _		m of lost U Level o			MARKATAN COSTA	6.0	aa o faarkooda saa			FEEDWANT CONTRACTOR AND THE
Analysis Period (min)	-GUOFF	emilia ek	ა.⊍ ⁄。 15		o revel (n Servic			12 P	数 公报证	Fullet Sign		
c Critical Lane Group						ERF CORTEN			APPENDING STA			SERFE PERM	
		10-17 (14 74) M			11 PS 5 F40		e e e e e e	KARANA M		met inte			

	<i>></i>	-	-	•	≪	*	1	Ť		-	1	4	
Movement	EBL	EBT	EBH	WBE.	WBT	WBR	NBE	NBT 2	NBR	SBL	SBT	SBR	
Lane Configurations		4			4		***************************************	44			43		ON THE SECOND SE
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		3.0			3.0			3.0			3.0	***************************************	mananyan mpandangan
Lane Util. Factor		1.00			1.00			1.00			1.00		
Frt	OWNER WILLIAM SALE	0.91			0.91			1.00			1.00	an a construction of the c	
FIT Protected		0.98			0,98			1.00			1:00		
Satd. Flow (prot)	AND THE PROPERTY OF SHAPE	1701	THE PERSON NAMED IN COLUMN 2 I	TOTAL CONTROL CONTROL	1703	and the same and t	Complete the control of the control	1893			1876		
Fit Permitted		0.88			0.91			0.97			0.98		
Satd. Flow (perm)	No.	1523	200		1577	ACTION TO BEING A STREET	***************************************	1835			1839		-
Volume (vph)	5	0.	10	5	* 0 ·	10	25	875	15	15	800	10	
Peak-hour factor, PHF	0.61	0.61	0.61	0.75	0.75	0.75	0.93	0.93	0.93	0.95	0.95	0.95	
Adj. Flow (vph)	- 8	0	16	7	0	13	27	941	16	16	842	11.	
RTOR Reduction (vph)	0	15	0	0	12	0	0	0	0	0	0	0	er gen Tilgensein untersen unt einem seine seine
Lane Group Flow (vph) Heavy Vehicles (%)	0 0%	9	0	0.	. 8	0	0	984	0	· 0 ·	869	0 -	
Turn Type		0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	
rum rype Protected Phases	Perm			Perm :			Perm			Perm			
Permitted Phases	2	2			2	CEUTONIETHELD		1		P-1215100000000000	1	Consideration of the Constant	OU SCHOOLS With the service of the s
Actuated Green, G (s)	Zicc	3.8		۷.		Statistics.				1.			
ffective Green, g (s)		3.6 4.8	1576 775 787		3.8 4.8	erene kenanto		84.1 85.1			84.1	ELIZA GENERALE	
Actuated g/C Ratio		0.05			0.05			0.89			85.1 0.89		
Clearance Time (s)		4.0			4:0			4.0		4.1.1911 S	4.0		50777855555
/ehicle Extension (s)		3.0	HISADIDA I		3.0		.46255	3.0	i de la		3.0		
ane Grp Cap (vph)	10 T	76		3103957553	79	W. SPORGE	21641C1157	1628	w.Fart.2334.44514	100 31 4170	1632	Joseph Committee	THE STREET
r/s Ratio Prot	indian'i General					SELMALIYA S		1020		TAY TO MELLIN	iuoz		
//s Ratio Perm	() a.v. () v. ()	c0.01			0.00		527 SETAS	c0.54		eri Iraya	0.47		
√c Ratio		0.12		endertie	0.10	NOTE A SECT	A 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0.60		karangan	0.53		
Jniform Delay, d1		43.5	7 Pag-		43.5			1.3			1.2		
Progression Factor	PARTICIPATION TO	1.00	articulated energy		1.00	KEN ZOFISHLEDE		1.00		entil verke	1.00		
ncremental Delay, d2		0.7			0.5			1.7			1.2		
Delay (s)	. W. Prest St. von P. Prinsender de Liber.	44.2	NAMES OF THE PERSON OF THE PER		44.0	Market Street,	CENTRA NO-PRIMIENTA	3.0	eronande Grand De	SEED STATE OF STATE O	2.4		
evel of Service		D			D."			A			: A		
Approach Delay (s)		44.2			44.0	Maria Madamara Colonia Canada	The state of the s	3.0	x x 2 2 000 000 000 000 000 000 000 000	AND ARREST ALT SARRAN	2.4	Kiri nin termanukan gidi den-	
Approach EOS	30.00	: D			D.			A:			A		
ntersection Summary										ne en en			
ICM Average Control Dela	SCHOOL STATE OF THE PARTY OF TH		3.7	Цí	CM Leve	200 Jal	ica	Roman Britis		200 (1975) 177	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		
ICM Volume to Capacity ra			0.58		SM FEAS	ror octv	ISS ALCOHO	Maria de la como	7				
ctuated Cycle Length (s)		uo a sa	95.9	Ç,	ım of los	t time le	Year Land		6.0		MARINEW		
ntersection Capacity Utiliza	ition	234755662 7	71.8%		U Level				C	eranistis.	- F - F - F - F - F - F - F - F - F - F		
(malysis Period (min)			15										
: Critical Lane Group	G. 2. SAV SA SESSE MEDICAS	TOTAL PROPERTY.	tiboliana i pastali	SAR PERANCES			economic d	.99292238743 		nioriskorii(F		eru igerer	o desta de recissión.
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Movement	EBL	EBR =	NBL	NBT	SBT#	SBR	BR2	NEF #	NER#	
Lane Configurations	k4	2000		^	A	7		ካ _ካ		
Ideal Flow (vphpl)	1900	1900	1900	1917	1693		1900	1900	1900	
Lane Width	12	12	11	11	11	11	11	12	12	
Total Lost time (s)	3.0			3.0	3.0	3.0		3.0		
Lane Util. Factor	1.00	endercontrate enveres	ALL ELECTRICATE CONTROL	0.95	1.00	1.00	Series des Carries de S	0.97	ape applicable for well out	
Fit	0.98			1.00	1.00	0.85		1.00		
Flt Protected	0.96	Secretary and the second	CONTRACTOR AND	1.00	1.00	1.00	Sept.	0.95	a Current (Although County) . Later (Although Co	
Satd. Flow (prot)	1751			3486	1620	1546		3502		
Flt Permitted	0.96			1.00	1.00	1.00		0.95	**************************************	and the state of t
Satd_Flow (perm)	1751			3486	1620	1546		3502		
Volume (vph)	85	15	0	1350	985	465	10	515	0	
Peak-hour factor; PHF	0.75	0.75	0.95	0.95	0.92	0.92	0.92	0.89	0.89	
Adj. Flow (vph)	113	20	0	1421	1071	505	11	579	0	
RTOR Reduction (vph)	0	0.	. 0	0	0	1	0	0	. 0	
Lane Group Flow (vph)	133	0	0	1421	1071	515	0	579	0	
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1% _	1%:	0%	0%	
Tum Type					2	Perm				
Protected Phases	3			- 2	6,			4		
Permitted Phases					6	6				arman and a second second memory. The second memory is to the second memory of the first second memory flowers
Actuated Green, G (s)	12.2			62.0	62.0	62.0		17.9		
Effective Green, g (s)	14.2			64.0	64.0	64.0		19.9		The state of the s
Actuated g/C Patio	0.13			0.60	0.60	0.60		0.19		
Clearance Time (s)	5.0	COMPANY OF A CONTRACTOR	nance e nencessem	5.0	5.0	5.0		5.0		
Vehicle Extension (s)	2,5			3.0	3.0	3.0		2.5		
Lane Grp Cap (vph)	232			2083	968	924		651		
v/s Ratio Prot	c0.08			0.41	c0.66			c0.17		
v/s Ratio Perm	NECESTER ENGINE SHOWS		· Same Contraction of the Lawrence		CANADA SERVICIO DE	0.33				
v/c Ratio	- 0.57			0.68	1.11	0.56		0.89=		
Uniform Delay, d1	43.6		one en en en en en en	14.6	21.6	13.0	Soldier - Ord Product State	42.5	CLEONER PROPERTY NAMED IN STREET	
Progression Factor	1.00			1.00	1.00	1.00		1.00		
Incremental Delay, d2	2.8			0.9	62.7	0.7	enalization entre	14.0	S COST TO THE POSSIBLE	
Delay (s) Level of Service	46:4	34.5	i de la constant	15.6	84.2	13.7		56.5		
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• •				В	E			E		
Intersection Summary ***								F		
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Intersection Capacity Utiliz	ation	8 8	8.5%	i lC	U Level	of Service			E	
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c Critical Lane Group										

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Movement	# EBL	EBT	EBR	WBE	WBT	WBR	NBE	NBT'	NBR	SBL	SBT	SBR	
Lane Configurations	ሻ	4	7	ሻ	લ	7	ĸ	^	7	ሻ	↑ ₽		
Ideal Flow (vphpl)	1900	1900	1900	2023	2011	2261	1900	2496	1900	1897.	1900	1900	
Lane Width	12	12	12	12	12	12	12	12	12	11	11	11	Control of the section of the sectio
Total Lost time (s)	3.0	- 3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0 ⋅		
Lane Util. Factor	1.00	1.00	1.00	*0.99	*0.99	1.00	1.00	*0.79	1.00	1.00	*0.65		COMPANY OF THE PROPERTY OF THE PARTY OF
Fn	1.00	1.00	0.85	1.00%	1,00	0.85	1.00	1.00	0.85	1.00	1.00		
Fit Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd: Flow (prot)	1805	1900	1615	1884	1884	1884	1805	3944	1599	1725	-2358		
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd:/Flow (perm)	1805		1615	1884	1884	1884	1805	3944	1599	1725	A LANCOUNTAIN THE THE THE PARTY AND A PART		
Volume (vph)	15	15	40	430	15	365	25	1225	625	390	990	20	
Peak-hour factor, PHF	0.83	0.83	0.83	0.92-	0.92	- 0.92	0.97	0.97	0.97	0.86	.0.86	0.86	
Adj. Flow (vph)	18	18	48	467	16	397	26	1263	644	453	1151	23	
RTOR Reduction (vph)	0.	. 0	45	0	0	81	The second second	0	· 0	0	1	0	
Lane Group Flow (vph)	18	18	3	235	248	316	26	1263	644	453	1173	0	
Heavy Vehicles (%)	0%	0%%	0%	1%	0%	2%	0%	0%	-1%	1%	1%	0%	
Turn Type	Split		Prot	Split		pm+ov	Prot		om+ov	Prot	v SSSAMO PONESS SAFTY CENTRO	TO SECURE OF THE OWNER, SEC.	CC TANGETTON COMPANIES AND TO SERVE
Protected Phases	3	3	. 3	4	4	1.0	5		4		. ↓ 6		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Permitted Phases		. 3				4	maryisi iyi	2	2	procesor programme	6		NAMES AND A CONTRACT OF THE PARTY OF THE PAR
Actuated Green, G (s)	5.2	5.2	5.2	17.7	17.7	42.3	4.1	42.2	59.9	24.6	62.7		
Effective Green, g (s) Actuated g/C Ratio	6.7 0.06	6.7 ○0.06	6.7 - 0.06	19.2 0.18	19.2 0.1 8	45.3	5.6	44.2 0.41	63.4	26.1	64.7	Corespondence	Service of the servic
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	0.42	0.05	A Comment of the Comm	0.59	0.24	-0,60		
Vehicle Extension (s)	4.5 3.0	4.5 3.0	4.5 3.0	4.5 3.0	4.5 3.0	4.5 2.0	4.5 2.0	5.0 3.0	4.5 3.0	4.5 2.0	5.0 3.0	STATE OF THE PER	
Lane Grp Cap (vph)	112	118	100	334	MANAGE SECTION A	And the second second second	WEST TOWNS TO SERVICE THE	radionational arrevers		THE PARTY OF STREET, S	and the same of th		
v/s Ratio Prot	60.01	0.01	0.00		334 c0.13	841 0.09	93 0.01	1611 0:32	937 0.12	416 c0.26	1410		
v/s Ratio Perm		0,01		U.IZ.	CUSTO	0.08	0.0 F.	0.02	0.12	.co.∠o ⊹	ະບ.ວບຸ		
v/c Ratio	0.16	0.15	0.03	0.70	0.74	0.08	0:28	0.78	0.28	1.095	0.83		
Uniform Delay, d1	48.1	48.1	47.7	41.8	42.2	21.7	49.4	27.8	15.5	41.0	17.4		
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.7	0.6	0.1	6.6	8.6	0.1	0.6	3.9	2.1	70.2	4.4	Albania 2	
Delay (s)	48.8	48.7	47.8	48.4	50.8	21.8	50.0	31.7	17.6	1113	21.8		
Level of Service	D	D	D	D	D	C	D	C	В	F	C		
Approach Delay (s)		48.2	100		37.1			27.3	(3755)		46.7		
Approach LOS		D			D	Translation Conditions		C	Sala in a decident		D		2000-00-000-00-00-00-00-00-00-00-00-00-0
Intersection Summary								1 A					
HCM Average Control Del			36.6	H	CM Leve	el of Serv	rice		D				
HCM Volume to Capacity		1975	0.83										
Actuated Cycle Length (s)			108.2			st time (s			9.0				The state of the s
Intersection Capacity Utili	zation	7	5.7%	IC	U Level	of Servi	e		D				
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c - Critical Lane Group													

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	® NBT	NBR	SBI	SBT	SBR	
Lane Configurations		ની	7		4	and the second	ሻ	^ }			ፈቱ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	.1900		1900	1900	2083	1900=	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	
Total Lost time (s)		3.0	3.0		3.0		3.0	3.0			3.0		
Lane Util. Factor	The Control of Control of Control	1.00	1.00	ent consideration for a	1.00	entay the cell of the block	1.00	0.95			0.95		
Fit		1.00	0.85		0.99		1.00	1.00			0.99		
Flt Protected	•	0.95	1.00		0.98	The second second	0.95	1.00	Mary Control of the C	Condex STATES AND	1.00	Property of the Control of the Contr	
Satd. Flow (prot)		1915	1812		1682		1787	€3500			3870		
Flt Permitted		0.72	1.00		0.85		0.95	1.00	TOTAL TERMINATION WILLIAMS	One of the Asset of the Control of t	0.94	ALANES SAN SAN SERVICES	
Satd: Flow (perm)		1445	1812		1458		1787	3500%			3624		
Volume (vph)	120	5	640	5	5	1	505	1090	10	10	755	65	
Peak-hour factor, PHF	0.86	0.86	0.86	0.55	0.55	0.55	0.98	0.98	0.98	0.86	0.86	0.86	
Adj. Flow (vph)	140	6	744	9	9	2	515	1112	10	12	878	76	ROUTE SEE CONTROL CONT
RTOR Reduction (yph)	0	0	22	0	2	0	0	110	0	0	- 6	- O	
Lane Group Flow (vph)	0	146	722	0	18	0	515	1121	0	0	960	0	AN CONSTRUCTOR OF THE PROPERTY
Heavy Vehicles (%)	1%	1%	1%	9%	9%	9%	A. P. C.	1%	1%	1%	. 1%	1%	
Turn Type	Perm		pm+ov	Perm			Prot			Perm			
Protected Phases		8	5		4		- 5	2			-: 6		
Permitted Phases	8	8	8	4	4			2		6	6	Control Manual Control	COLUMN CONTRACTOR NOTICE NOTICE
Actuated Green, G (s)		8.7	38.8		8.7		30.1	64.3	*		29.2		
Effective Green, g (s)	(AND A ETTINGS THREE TARRESTS	10.7	42.8	TOPE MACHINET CHARLES	10.7		32.1	66.3			31.2		and a 1 miles representation of the second s
Actuated g/C Ratio		0.13	0.52		0.13		0.39	0.80			0.38		
Clearance Time (s)	NOTES TO SERVICE AND SERVICE A	5.0	5.0	DECEMBER OF SERVICINES ON ANY	5.0	TO MAKE A SECTION OF LETTER AND	5.0	5.0			5.0		
Vehicle Extension (s)		2.5	2.5		2.5		2.5	3.0		Red S	3.0		
Lane Grp Cap (vph)	TOWN ALVENOUS TANKS	186	1000	entraconomia	188		691	2796			1362		
v/s Ratio Prot			c0.28				0.29	0.32					
v/s Ratio Perm	SEASTING STOPMS	c0.10	0.12	entrepenson ness	0.01	oursesses and other sections	reconstruction	ETILENTALANINA (PER APERA)	rillianen erwaneren witten	Militaria de Caracteria de Car	c0.27		
v/c Ratio		0.78	0.72		0.10		0.75	0.40			0.71		
Uniform Delay, d1		35.0	15.5		31.9	TENNESS CONTRACTOR	21.9	2.5	T SAMPLE STREET STREET	SARREN POR SUPERIOR STATE	22.0	Particular to a state a beautiful	
Progression Factor		1.00	1.00%		1.00		1.00	1.00		y sale	1.00		
incremental Delay, d2 Delay (s)	Satistem i	18.6	2.4 17.9	FURSTER LANCE	0.2	E CONTROL CONTROL CO	4.1	0.1		erangen anderen	1.7	THE STREET, ST	STORE COLUMNS OF THE SERVICE STATE STATE STATE STATE OF THE SERVICE STATE S
Level of Service		53.6 D	- 17.9 B		32,1		26.1	2.6			23.7		
Approach Delay (s)		- 23.8 	d Sesseres		C 32.1	ACONONIO DE PER	C	A		CONTRACTOR CONTRACTOR	C	STA STREED KAS VIEW MEDING ME	elisativa ilmanna fiscolomica communi
Approach LOS	in a second	-∠≎.o C			32.1 C	1.56		10:0			23.7		
		C			C			Α			С		
Intersection Summary	TO THE PARTY OF TH												
HCM Average Control Dela			17.4	HC	CM Level	of Servi	ce		В				
HCM Volume to Capacity i	atio		- 0.72						1.6			16 1207	
Actuated Cycle Length (s)			83.0		ım of lost			A CONTRACTOR OF THE PERSON AND THE P	6.0	maner established	o no configuration (1967-1965)	on a come with the latest field	and the second s
Intersection Capacity Utiliz	ation		75,2%	i le	Ú Level č	of Servic	e		. D				
Analysis Period (min)	SERVICE STATES CONTROL	unite intervene	15	Na Spanish regge 12" between 12"								- La - Campana Salahin	normalise althornal part (Material Saffe).
c - Critical Lane Group													
													The same property of the same state of the same

Evening Peak Hour Queue Results – Existing vs. Build Comparison

•	1	200	4 Existing Cond		2007 Build	d Condition with	
ocation	Movement	Storage °	Average	95 th Percentile	Storage	Average	95 th Percentile
orest Avenue at	EB L/T	500	79	185	500	82	153
Varren Avenue	EBR	250	263	439	250	209	289
Tanon Monao	WB L/T/R	250	9	20	250	9	17
	NB L	250	253	425	150	91	110
	NB T/R	650	90	112	650	4	23
	SB L/T/R	500	251	352	500	331	454
orest Avenue at	EBL	75	12	33	75	10	38
Allen Avenue	EBT	75	12	33	75	10	37
Alien Avenue	EBR	75	0	31	75	0	23
	WB L	400	154	242	400	180	305
	WB L/T	400	164	255	400	. 191	330
	WBR	150	112	194	150	126	216
	NB L	75	18	46	75	12	16
	NB T	375	498	616	375	349	480
	NB R	185	195	286	375	431	460
		250	361	528	350	186	443
	SB L SB T/R	650	530	750	650	155	146
Forest Avenue at	EB L/R	500	87	123	500	74	110
Stevens Avenue /	NB L/T	325	333	432	325	317	406
Bishop Street	SBT	375	854	1134		π/a	
Distrop Officer	SBR	375	204	316		ıνα	
	SB T/R		n/a		375	276	276
	NEB L/R	500	203	302	500	275	275
Allen Avenue at	EB L/T/R	300	5	13	300	8	16
Plymouth Street/	WB L/T/R	300	4	. 15	300	3	14
Northfield Green Drive	NB L/T/R	500	0	216	500	151	578
Nothinola aloon pinto	SB L/T/R	500	0	162	500	110	272
Allen Avenue at	EB L	200	174	265	200	129	212
Washington	EB T/R	500	325	495	500	258	459
Avenue	WB L	100	99	168	100	69	153
Avenue	WB T/R	500	264	369	500	202	364
	NB L	100	151	254	100	125	250
	NB T/R	500	335	467	500	228	338
	SB L	100	72	147	100	49	112
	SBT	500	230	334	500	158	237
	SB R	100	37	117	100	60	130
Allen Avenue at	EB L/T/R				50	1	8
proposed site drive	WB L/T	e e e			500	210	368
hiohogea gire arive	WBR				200	44	83
	NB L/T/R		n/a		400	251	353
	SBL				250	75	198
	SB T/R		***		350	305	458

Comment 2

See attached summaries of historical traffic information at all study intersections for which VHB has collected such data.

Historical Traffic Comparision- Forest Avenue at Warren Avenue

		Forest Avenue	Forest Avenue	Warren Avenue
Date	Day	(West of Warren Avenue)		(East of Warren Avenue) (South of Forest Avenue)
September 29, 2005	Thursday	1,751	2,533	1,092
October 5, 2004	Tuesday	1,924	2,850	1,271
May 18, 2004	Tuesday	1,956	2,851	1,264

Historical Traffic Comparision- Allen Avenue at Woodlawn Avenue

		>		
		Woodlawn Avenue	Allen Avenue	Allen Avenue
Date	Day	(East of Allen Avenue)	(North of Woodlawn Avenue)	(North of Woodlawn Avenue) (South of Woodlawn Avenue)
October 5, 2004	Tuesday	. 22	1,626	1,643
May 18, 2004	Tuesday	76	1,250	1,280

Historical Traffic Comparision- Forest Avenue at Bishop Street/ Stevens Avenue

		Forest Avenue	Forest Avenue	Stevens Avenue	Bishop Street
Date	Day	(West of Bishop Street)	(East of Bishop Street)		(SE of Forest Avenue) (South of Forest Avenue)
August 18, 2005	Thursday	2,724	1,939	855	113
October 5, 2004	Tuesday	3,037	2,201	906	120
May 18, 2004	Tuesday	2,861	2,174	770	147

Historical Traffic Comparision- Allen Avenue at Washington Avenue

	Washington Street (East of Allen Avenue) 1,757
	Washington Street (West of Allen Avenue) 2,107 1;914
Ington Avenue	Allen Avenue (South of Washington Street) 1,525 1,401 830
Avenue at Washington Avenue	Allen Avenue (North of Washington Street) 877 806 618
o compans	Day Tuesday Tuesday Tuesday
	Date October 5, 2004 August 10, 2004 May 18, 2004



PORTLAND MAINE

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Planning and Development Department Lee D. Urban, Director

Planning Division Alexander Jaegerman, Director

December 29, 2005

John M. Hession, P.E. Senior Project Manager Vanasse Hangen Brustlin, Inc 101 Walnut Street Post Office Box 9151 Watertown, MA 02471-9151

Dear John,

In preparation for the upcoming workshop meetings with the Planning Board, I wanted to outline a structure for reviewing the Morrill's Crossing proposal in order to address each standard for review and highlight any outstanding issues. Attached for your review is a spreadsheet of the topics and standards for review, a well as a list of issues/concerns. My hope is that we will be able to add and clarify aspects of this chart to keep ahead of the review.

City staff will be meeting over the next two weeks to identify any concerns and request any additional information.

Today, I met with Captain Cass of the Fire Department and the Parking Manager, John Peverada. Their comments are listed below and also appear on the chart.

1. Fire

- A. improved access will be required to the apartments and recreation field to the rear of the site. Details of gates, roadway improvements, fire lanes/access will be needed.
- B. A formalized emergency access point along Allen Avenue is needed to provide emergency access. (One had been shown earlier, but is not evident now.)
- C. If access is shown on Guilford land, we will need to see permission.
- D. An evacuation plan should be submitted for worst-case-scenarios, including an accident at the signalized entrance, and/or a train blocking the roadway.
- E. Sprinklers will be required in all retail and residential spaces.
- F. Hydrant locations appear sufficient.

2. Parking

- A. Is Bruno's parking demand/supply indicated anywhere?
- B. Please create a chart indicating on one column, the breakdown of square footages for each use; and a second column showing the parking spaces provided for each use.
- C. There may be a need for an off-site shuttle parking service during the Christmas season for employees of the center.
- D. Please give more information on the responsibilities of the "Rideshare Coordinator".
- E. There may be conflicts between the residents of the rear apartments and the boxing club attendees.
- F. Is there the possibility of moving the recreation field and detention area to the east, so that additional parking can be created?
- G. Can there be an illustration, similar to the plan for boxing event parking, showing which parking spaces will be used during a Saturday in December?

I have also received a letter from METRO expressing their support of the cul de sac design and their plan to be present at the January 17 workshop. The letter is attached.

I'll forward additional comments as I receive them.

Would you like to set up a time to meet before the Planning Board workshop?

Sincerely,

Sarah Hopkins

Development Review Manager

cc.: Alexander Jaegerman, Planning Division Director

Capt. Cass, Fire Prevention

John Peverada, Parking Manager

Transportation **Land Development Environmental**

Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 24, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Sarah Hopkins Development Review Services Manager Department of Planning & Development City of Portland 389 Congress Street Portland, Maine 04101

Re: Morrill's Crossing - Response to Fire and Parking Comments

Dear Sarah:

The following are VHB's responses to the comments provided by Captain Cass of the Fire Department and the Parking Manager, John Peverada as presented in your letter dated, December 29, 2005. Since your meeting with Captain Cass and Mr. Peverada, we have had several meetings where these comments have been discussed and where input has been provided from several City departments and peer review consultants. These meetings have in included you, Captain Cass, Mr. Peverada, Alex Jaegerman, Kathi Earley, Eric Labelle, Penny Littell, and Tom Errico. It is our understanding that these comments have been adequately addressed and this letter provides a summary of the agreed upon actions.

FIRE

A. improved access will be required to the apartments and recreation field to the rear of the site. Details of gates, roadway improvements, fire lanes/access will be needed.

An Overall Emergency Access Plan has been prepared which illustrates the access locations to the site (main entrance, one-way access from Morrill Street to the townhome drive, and apartment access from Morrill Street) and the emergency vehicle access locations (Allen Avenue and Morrill Street). The internal circulation is also shown for emergency vehicles within the site, including access to the apartments and recreational field. The Overall Emergency Access Plan, the Morrill Street emergency access exhibit, and the Emergency Access Details are included as Attachment A. The Allen Avenue emergency access exhibit is included as Attachment B.

A formalized emergency access point along Allen Avenue is needed to provide emergency access. (One had been shown earlier, but is not evident now.)

An emergency vehicle access is provided from Allen Avenue to the main parking field in the vicinity of Bruno's. The location and detail of the access is included as Attachment B.

www.vhb.com

email: info@vhb.com

Sarah Hopkins Project No.: 07334.00 February 24, 2006 Page 2

C. If access is shown on Guilford land, we will need to see permission.

An emergency access across the Guilford right-of-way (off Allen Avenue adjacent to Bruno's restaurant) was considered by the applicant. We were informed by the Fire Department that this is a location that they use to access the portions of the site that abut the railroad today. Packard contacted Guilford in an attempt to acquire a portion of Guilford's right-of-way or to obtain easement rights for emergency vehicle access. Packard was not able to acquire either the right-of-way or easement from Guilford.

An alternative location for emergency vehicle access has been provided from Allen Avenue as has been identified in the response to Comment B above.

D. An evacuation plan should be submitted for worst-case-scenarios, including an accident at the signalized entrance, and/or a train blocking the roadway.

There are now five points of access to the proposed Morrill's Crossing development; the main access drive, the one-way access from Morrill Street to the townhome driveway, the access to the apartments from Morrill Street, the emergency vehicle access from Allen Avenue in the vicinity of Bruno's, and the emergency vehicle access from Morrill Street/apartment drive to the loading area of the supermarket. As discussed with Captain Cass, in the event that an incident occurs that blocks the signalized entrance and/or a train blocks the roadway, all of these locations can be used as emergency points of egress for customers and residents of the development. Please refer to the Overall Emergency Access Plan provided as Attachment A.

E. Sprinklers will be required in all retail and residential spaces.

Sprinklers will be provided for all buildings, whether retail, residential or other, as required by local and state building codes.

F. Hydrant locations appear sufficient.

No further response required.



Sarah Hopkins Project No.: 07334.00 February 24, 2006 Page 3

PARKING

G. Is Bruno's parking demand/supply indicated anywhere?

The Bruno's parking demand, based on the ITE <u>Parking Generation</u> was presented in the Traffic Impact and Access Study and Technical Appendix dated November 2005. However, a more detailed analysis of the Bruno's parking demand and supply, based on ULI <u>Shared Parking</u>, has been provided in the Parking Demand memorandum addressed to Sarah Hopkins and dated, February 7, 2006.

H. Please create a chart indicating on one column, the breakdown of square footages for each use; and a second column showing the parking spaces provided for each use.

The hourly parking demand, by use, has been provided for both the weekday and weekend "Non-Peak" and "Peak" seasons in the Parking Demand memorandum addressed to Sarah Hopkins and dated, February 7, 2006.

 There may be a need for an off-site shuttle parking service during the Christmas season for employees of the center.

The Parking Demand memorandum addressed to Sarah Hopkins and dated, February 7, 2006 shows that there is adequate parking provided on-site even during the Christmas season. An off-site shuttle parking service for employees is not needed.

J. Please give more information on the responsibilities of the "Rideshare Coordinator".

The "Rideshare Coordinator" is essentially a part-time position (most times filled by an employee of the site and in this case will likely to be an employee of the property management company or Stop & Shop as the largest tenant) whose job it will be to coordinate and promote the various rideshare and TDM programs in place. They will serve as the point person for the site employees (and residents) who are seeking to form carpooling arrangements. Generally, employees will make known to the coordinator that they are looking for opportunities to carpool. It will then be the Rideshare Coordinator's job to match this person with another person, if available, so that they can carpool together. Alternatively, the rideshare coordinator could also provide that individual with information on METRO and other transportation opportunities that might be available.

Another responsibility for this specific site might also be to coordinate (and enforce) the peak season employee parking plan; reminding/providing employees information on when and where they should be parking during those busy times of the year.



Sarah Hopkins

Project No.: 07334.00 February 24, 2006

Page 4

K. There may be conflicts between the residents of the rear apartments and the boxing club attendees.

With the new access alternative for the apartments (Attachment C), there is no direct vehicular connection from the boxing club to the apartments. We feel that this addresses the potential for conflicts between the two uses.

L. Is there the possibility of moving the recreation field and detention area to the east, so that additional parking can be created?

The recreation field and detention area are located on the "Burt Property" at the easterly end of the site. This portion of the site is constrained by Milliken Brook and wetland resource areas associated with the brook. The design, as presented, maximizes the parking provided adjacent to the recreation field and no additional parking can be created in this area. It is important to note that there is a surplus of parking provided adjacent to the boxing club that can be used as overflow parking for the recreation field if needed.

M. Can there be an illustration, similar to the plan for boxing event parking, showing which parking spaces will be used during a Saturday in December?

An exhibit was prepared and attached to the Parking Demand memorandum addressed to Sarah Hopkins and dated, February 7, 2006 that shows parking space supply, by use, for the "Peak Season" weekend condition.

Also included are two additional attachments. The first (Attachment D) shows our proposed Night (off-hour) Lighting Exhibit and Photometric Plan for your review and comment. The second (Attachment E) shows the originally proposed Boxing Club and our revised proposal for the Boxing Club. The new Boxing Club is a single-story, 14,000 square foot building.

We are looking forward to our next workshop scheduled for the 7^{th} of March. Please give me a call if you have any questions or need additional information.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

ohn Hession

Senior Project Manager

Capt. Greg Cass, Portland Fire Department John Peveroda, Parking Manager

VHB

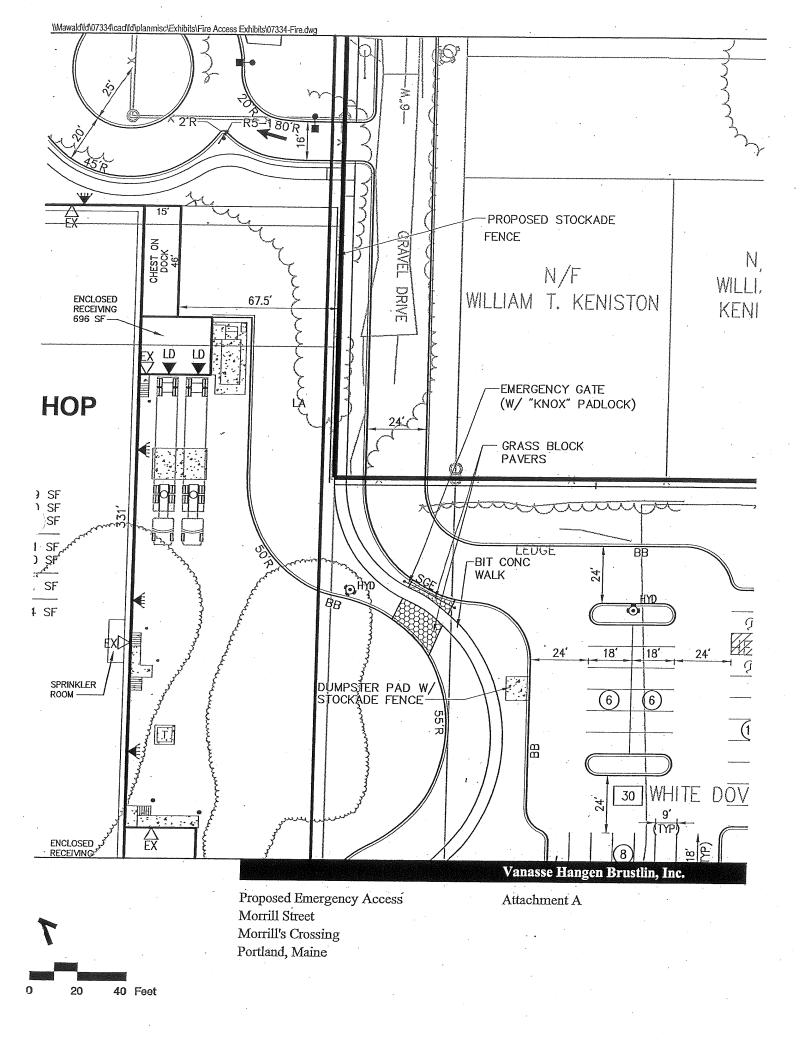
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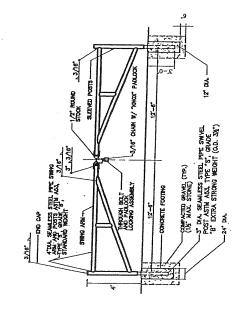
Attachment A

101 Walnut Street, P.O. Βοπ 9151 Watertovn, Massachusetts 02471 617 924 1770 • FAX 617 924 2236 WOODLAWN STREET UNIVERSITY STREET PRINCETON STREET AERIAL TOWER feet CORNELL STREET PROPOSED STOP & SHOP SUPERMARKET ENGINE TRUCK feet
Width .8.00
Track .8.00
Luck to Lock Time .6.00
Steering Angle .35.00 Morrill's Crossing Allen Avenue Portland, Maine Site Plan Approval Overall Emergency Access Plan ACCESS POINTS

- FIRE ACCESS

- AMBULENCE ACCESS



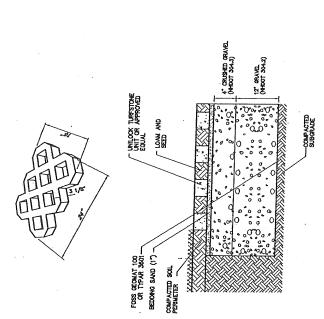


1. SHOP PRIME PAINT EXPOSED SUPFACES HELD PAINT EPOXY ENAMEL—YELLOW.

2. PROVIDE "MASTER" PACLOCK WITH 6 WORRDING KEYS.

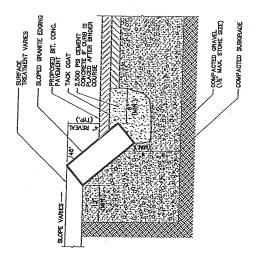
A 3,000 PSI CONCRETE FOOTING

Emergency Gate (Double) 6/02 N.T.S. Source: WHS REY LD-46



Some WB Some WB NIES.

Grass Block Paver



Sloped Granite Edging (SGE)

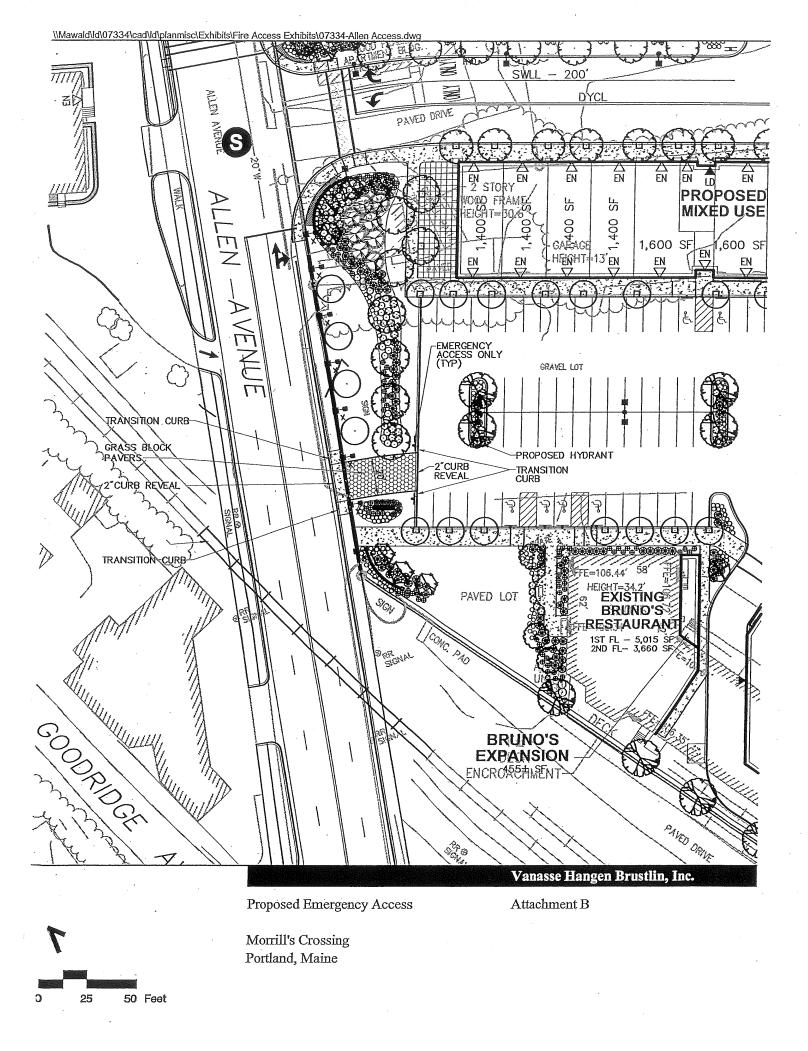
Vanasse Hangen Brustlin, Inc.

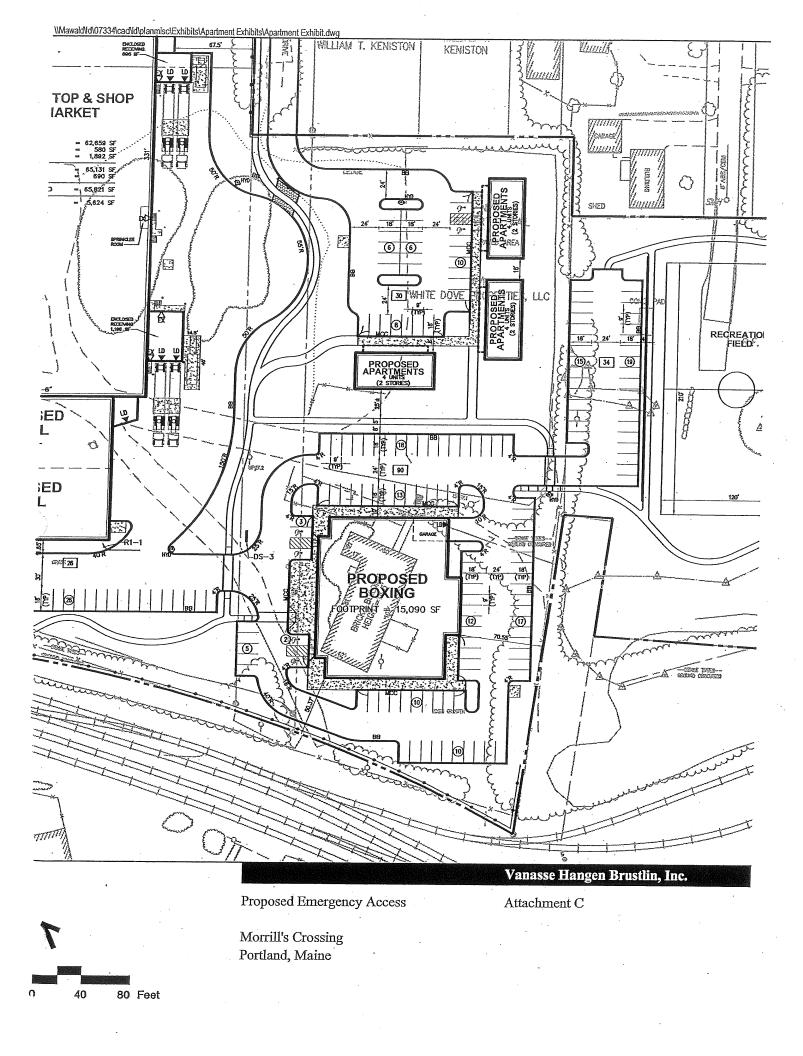
Attachment A

Emergency Access Details Morrill's Crossing

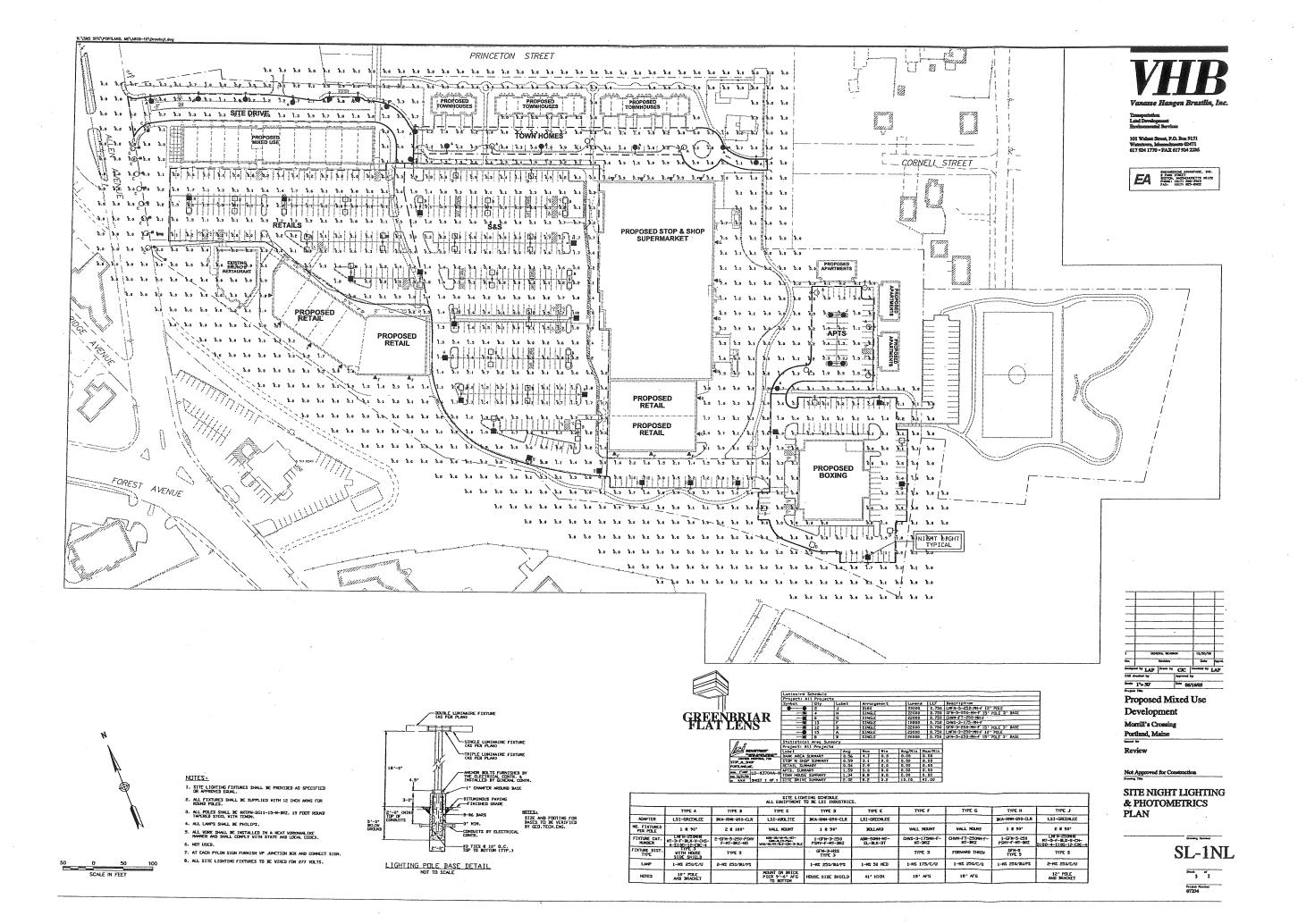
Portland, ME

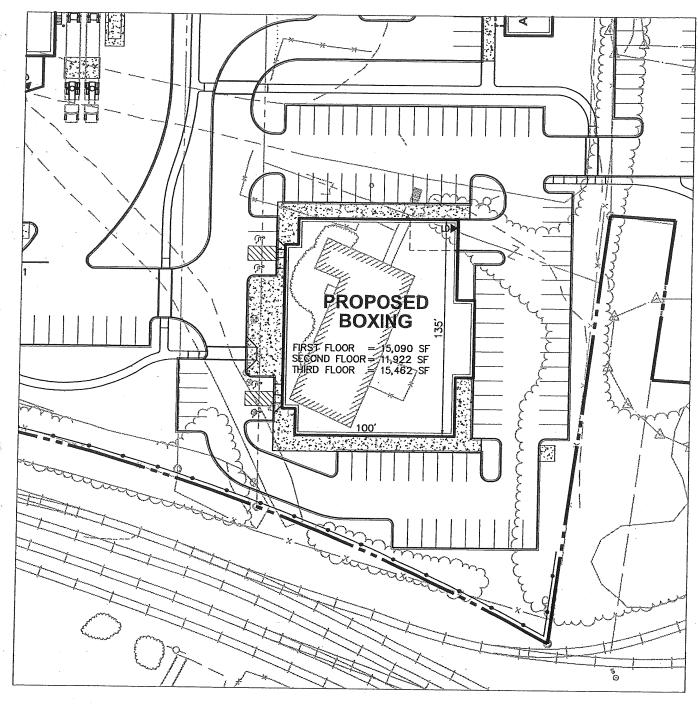
Attachment B



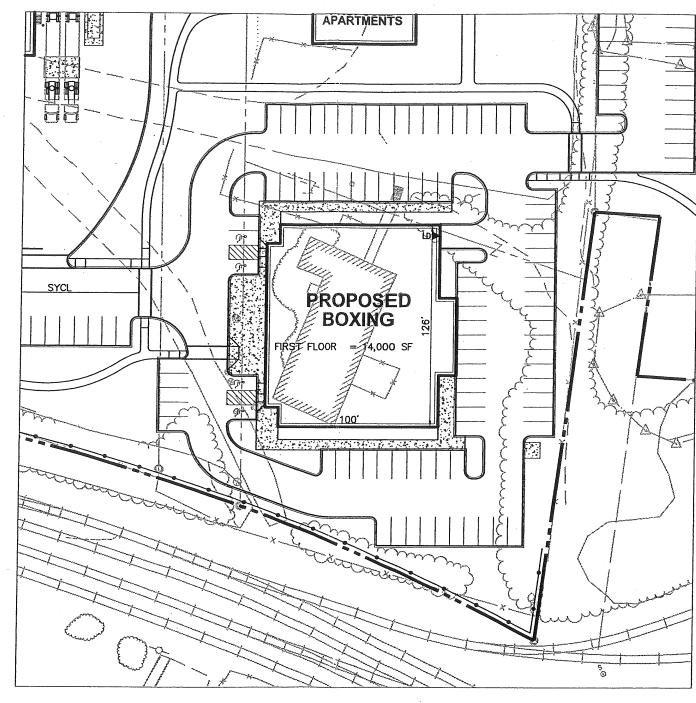


Attachment D





PROPOSED BOXING CLUB - SITE PLANS 7/1/05

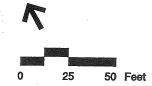


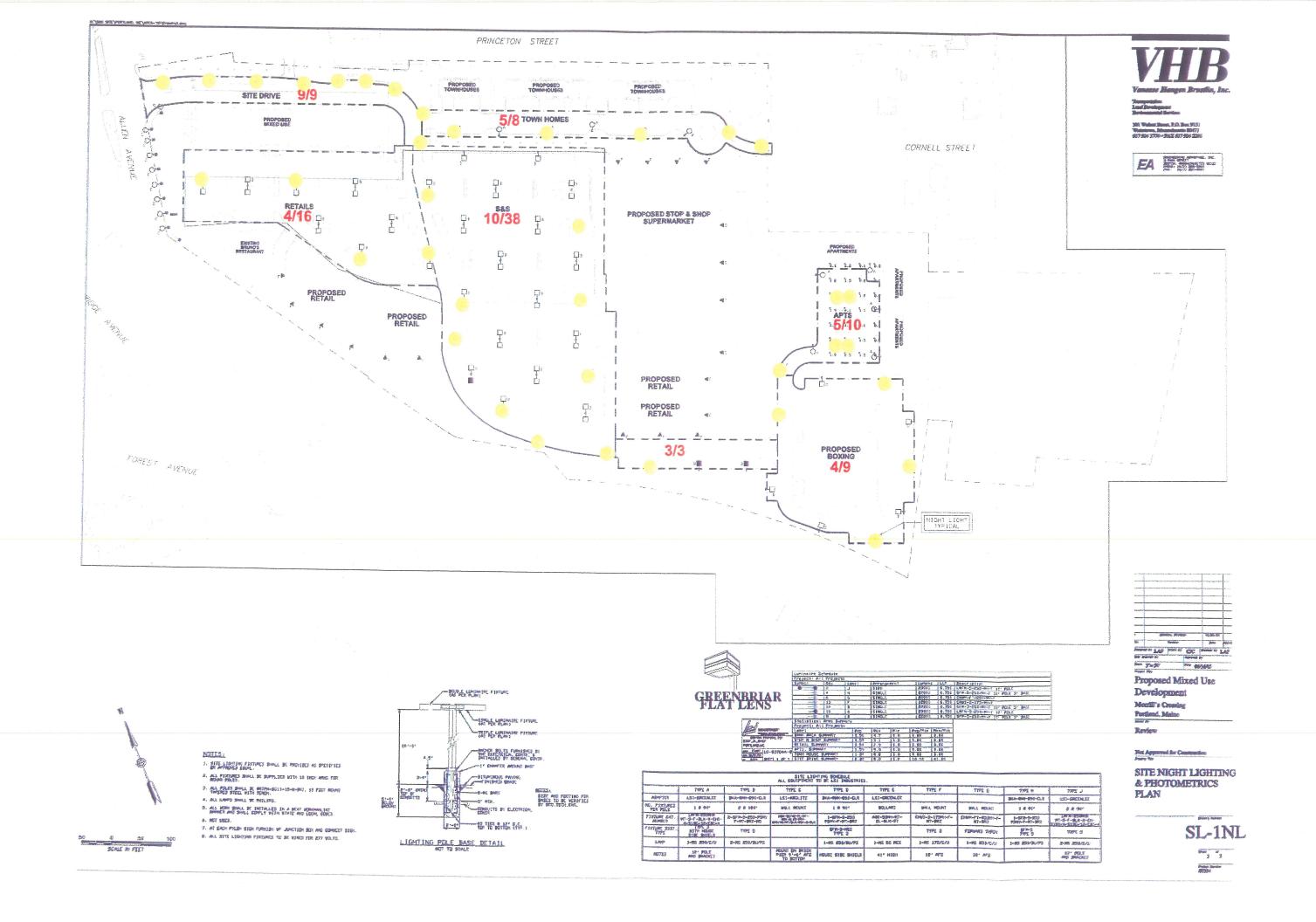
REVISED BOXING CLUB - 2/24/06

Vanasse Hangen Brustlin, Inc.

2/24/06

Boxing Club
Building Areas Comparison
Morrill's Crossing
Portland, Maine







DeLUCA-HOFFMAN ASSOCIATES, INC. CONSULTING ENGINEERS

778 MAIN STREET SOUTH PORTLAND, MAINE 04106 TEL, 207 775 1121 FAX 207 879 0896

ROADWAY DESIGN

ENVIRONMENTAL ENGINEERING TRAFFIC STUDIES AND MANAGEMENT

PERMITTING

AIRPORT ENGINEERING SITE PLANNING

CONSTRUCTION ADMINISTRATION

MEMORANDUM

DATE:

November 15, 2005

TO:

Sarah Hopkins, City of Portland

C:

John Hession, PE VHB

FROM:

Stephen R. Bushey, P.E.

SUBJECT:

Morrill's Crossing Site Plan Review

DeLuca-Hoffman Associates, Inc. has reviewed the application materials prepared by VHB and submitted 7/1/05. This includes the full size drawing set with drawing sheets C-1 through C-14, the Stormwater Management Report and the application with supporting materials. The project involves a complex development activity over a previously developed area and we understand that multiple City staff across several departments will be providing reviews in addition to our own. For that reason we have generally kept our review oriented to the primary issues of stormwater management, erosion control and technical plan design relating to the Site layout, grading plans, utility layout and details.

We offer the following comments for consideration at this time.

Layout and Materials Plans

- 1. We trust that Staff and the City Traffic Engineer will provide feedback as necessary regarding the circulation and layout of the project. The layout appears to be generally considerate of typical shopping center style layouts and allows for customer access as well as truck deliveries. Signage, however, directing the various users of the site seems critical given the multiple development functions occurring on the property. We assume the traffic engineer will consider the need for the Shopping Center entrance configuration developed in accordance with DOT standards.
- 2. The applicant is proposing parking space sizes of 9' x 18' which is below the City standard of 9' x 19'. We generally support this request as it allows for the placement of a longitudinal island in the parking lot as well as greater buffering to the Townhouses.
- 3. The circulation of the bus route should be presented to the City and the route pattern confirmed for adequate radii and maneuvering.

3 - 1 - 1 - 1 - 1 - 1

3 - 1 - 1

3 - 2 - 2 - 2 Sarah Hopkins Project No.: 07334.00 February 17, 2006 Page 4

Grading, Drainage and Erosion Control Plans

Comment 1:

The project design includes a closed storm drainage system consisting of catch basins, manholes and pipes. The system also includes as a major component, several underground storage systems and water quality treatment devices. We applaud the engineer's use of the TSS removal devises and simply request that the sizing criteria and manufacturer's information be provided prior to final review of the project.

Response:

The proposed water quality structures have been sized according to the manufacturer's guidelines. The sizing criteria and typical structure details are included in Attachment G.

Comment 2:

The proposed drainage system includes several flared inlets on the north side of the property. These flared inlets appear to collect runoff from the offsite contributing watershed area to the north. We have not specifically walked the adjacent properties to ascertain exact drainage patterns, however, we recommend that the engineer verify the existing drainage conditions and locations for their new inlets to assure that the development activity will not result in drainage issues within these offsite residential properties. The planned locations appear reasonable, however, as is often the case, additional inlets may be necessary. The currently planned inlets also leave little area for ponding at the inlet point onsite and may result in new ponding conditions on the adjacent properties, thus creating potential problems with abutters. We also recommend that these inlets be stabilized with riprap or other measures as necessary.

Response:

VHB has walked the adjacent properties where these inlets are proposed and believes that they are sized and located properly to not create drainage problems on adjacent properties.

However, VHB will field verify during construction the location of the inlets to ensure that they are located properly to avoid drainage issues within the off-site residential properties. The plans have been modified to include specific stabilization methods at the appropriate inlets and are shown on Attachment H.



Comment 3:

The engineer should review the offsite drainage systems in Princeton Street with the Public Works Department and discuss the disposition of any storm drainage within the street. There may be little to no drainage infrastructure of concern, however, it is currently unclear as to the existence of combined or separated drainage measures within the street and what, if any, impact may result from the project.

Response:

VHB met with the DPW to review the existing utilities within Princeton Street. Based on the existing conditions survey, Princeton Street is an unaccepted and unimproved roadway. To the best of VHB's and the City's knowledge the only utility within the street is an 8-inch sewer running west to east. VHB does not anticipate that construction activities associated with this project will impact the utility infrastructure within Princeton Street. A copy of the existing utility plan received from the City is included as Attachment I.

Comment 5:

We recommend that the written Erosion Control requirements be provided on a plan sheet(s), as is customary with larger projects reviewed by the DEP.

Response:

VHB has added Erosion Control Plans to the set of Site Plans. The new plans are included in Attachment J.

Comment 6:

The applicant should provide a Drainage Maintenance program that outlines the specific measures, maintenance requirements and record keeping measures for the project. This is especially important given the complexity of the infrastructure proposed for the project that includes underground stormwater storage systems and Water quality treatment devices.

Response:

VHB has prepared an Operation and Maintenance Plan for the stormwater management system. The plan is included as Attachment K.



- 7. We recommend that additional spot grades be provided around the parking lot islands to the extend practicable since the number of catch basins is being minimized by the use of double grated structures.
- 8. We recommend that the access drives be crowned to the extent possible, particularly at the entrance. This would require additional catch basin inlets along the entry drive.
- 9. We note that several light poles appear to be located within the underground storage systems. This may be possible; we simply suggest this be confirmed with the product vendor.
- 10. The plans should clarify the size of all drainage structures since some of the manholes may need to be larger than 4' dia. to allow for multiple pipes and sizes.
- 11. Within the erosion control program for the site we suggest the use of organic filter (mulch) berms as often as possible in place of silt fence.
- 12. The erosion control requirements must be revised to include the DEP's standard procedures for Wintertime activities. A copy of these requirements can be provided to the engineer if necessary.
- 13. We recommend that engineer confirm the jurisdictional status of the brook as it crosses the far eastern side of the site and any regulatory (NRPA) restrictions including setbacks that the DEP may require. The City has more recently encouraged a setback of up to 100' for the urban streams in the City. Given the applicant's intentions to install a detention basin near the stream in an area that is now an unsightly open area, it seems that this development activity seems reasonable and well within consideration for relaxation of the setback requirements. The engineer should confirm that the stream is not considered wetlands of special significance. Are there any Shoreland zoning issues pertaining to the stream?
- 14. We understand that the Public Works Department is considering their position regarding the need for quantity control measures on the site. This is due to the site's proximity to Milliken Brook and the downstream infrastructure that is in place to handle flows from this area. We note that the stormwater analysis suggests only a modest increase in the imperviousness level of the developed site, however, to further support the potential for the design approach of minimizing the quantity control measures we recommend the design engineer provide an analysis that provides the predicted increases to peak discharges and volumes that would result form the site without the benefits of the quantity control measures now incorporated into the design and analysis. This will allow the City a better understanding of the potential for downstream impacts if quantity control measures are not fully implemented as part of the project. Our current perspective is that the project should provide quantity and quality control, however, the level of quantity control may be able to be adjusted depending upon the findings of the additional analysis suggested above.
- 15. Assuming the construction of a basin will remain part of the project, we recommend that a basin detail sheet that includes a larger scale plan, cross sections and details be provided for the Final plans. Additional information including underlying soils conditions, embankment design and surface stabilization measures should be provided.

- 1. The Portland Water District may require the installation of a Fire Line Supply meter and meter pit into the development since there will be multiple services for both domestic and Fire supply. Will a meter be required for the Morrill Street connection? The Final Plans should include these measures as required by the District.
- 2. The layout includes multiple hydrant locations that should be reviewed and approved by the Fire Department.
- 3. The applicant should confirm the need for utility easements for power and telephone.

Details

- 1. The geotechnical engineer should review the Pavement Section detail on Sheet C-11 and a pavement section derived from the onsite soils conditions provided. The section appears to be a bit thin.
- 2. The outlet control structure on Sheet C-13 must be modified to allow for the 48" outlet pipe size.
- 3. We are uncertain as to where the sediment forebay berm and the low flow sediment forebay berms are to be located. This should be clarified.

We trust these comments are helpful and we look forward to continued discussions and plan revisions from the Applicant.

If you have any questions please call.

Steve Bushey, PE Senior Engineer DeLuca-Hoffman Associates, Inc.

Transportation Land Development Environmental •

Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 17, 2006

07334.00

Vanasse Hangen Brustlin, Inc.

Ref:

Sarah Hopkins City Planner City of Portland 55 Main Street Portland, Maine

Re: Morrill's Crossing-Response to Site Plan Peer Review

The following are VHB's responses to the site plan peer review recommendations offered by Mr. Stephen Bushey of Deluca Hoffman Associates in his memo addressed to you dated, November 15, 2005 regarding Morrill's Crossing. In his review, Mr. Bushey has offered recommendations that we discussed in a meeting with him where you were present. A majority of Mr. Bushey's recommendations have been considered and are addressed below. Draft copies of the site plan drawings reflecting the changes discussed below are included as an attachment to this letter.

Additional input from the Maine Department of Environmental Protection (ME DEP) will be required to address Comments 4, 14, and 15 within the Grading, Drainage and Erosion Control section. VHB has contacted Linda Kokemuller with the DEP to schedule a meeting discuss these items. The responses to the above reference comments will be submitted under a separate cover once all the necessary information has been compiled.

Layout and Materials Plans

Comment 1:

We trust that Staff and the City Traffic Engineer will provide feedback as necessary regarding the circulation and layout of the project. The layout appears to be generally considerate of typical shopping center style layouts and allows for customer access as well as truck deliveries. Signage, however, directing the various users of the site seems critical given the multiple development functions occurring on the property. We assume the traffic engineer will consider the need for the Shopping Center entrance configuration developed in accordance with DOT standards.

www.vhb.com

Page 2

Response:

The City Traffic Engineer, Mr. Thomas Errico of Wilbur Smith Associates, has reviewed the site plans for circulation and layout. He provided his comments to the city via email on January 23, 2006. A copy of the comments, as well as VHB's responses, is included as Attachment A.

VHB has added internal directional signage in four locations that we believe to be appropriate. The directional signage has been added to the plans and is highlighted in Attachment B.

VHB references Appendix D of the Maine DOT Driveway and Entrance Rules, which states that the Shopping Center Entrance configuration does not apply within Urban Compact Areas of Urban Compact Communities. A copy of Appendix D is attached for reference as Attachment C. The driveway has been designed to function adequately for vehicular movements entering and exiting the site.

Comment 2:

The applicant is proposing parking space sizes of 9' x 18' which is below the City standard of 9' x 19'. We generally support this request as it allows for the placement of a longitudinal island in the parking lot as well as greater buffering to the Townhouses.

Response:

VHB concurs with this comment.

Comment 3:

The circulation of the bus route should be presented to the City and the route pattern confirmed for adequate radii and maneuvering.

Response:

VHB met with the Peter Cavanaugh, GM/Director of Operations of the Greater Portland Transit District (The Metro), on November 21, 2005 to discuss bus route circulation within the site. At this meeting, the Metro proposed that the bus route be located such that the bus travels on the road adjacent to the town houses and reverses direction by use of the turning circle at the end of the road.

VHB has revised the turning circle to ensure that it is adequately sized to accommodate the Metro buses. The revised layout with the Autoturn turning movement simulation can be found in Attachment D.

A letter has been submitted by Metro to the City regarding their approval of the route.



Comment 4:

We trust the Traffic Engineer will comment on the alignment and geometry of the turning circle adjacent the Townhouses.

Response:

Per Attachment A, Mr. Errico has reviewed the layout and circulation of the site.

Comment 5:

We suggest that stop bars and stop signs be placed on the plans at strategic locations. For example it is unclear if they are proposed at the end of each drive aisle, as is common in shopping center parking areas. Given the through movement nature of some of the traffic, additional control measures may be warranted.

Response:

The drawings have been modified to include stop bars and signage along the main drive aisle in locations we feel appropriate and highlighted in Attachment E.

Comment 6:

We suggest that the Final drawings contain a baseline layout, coordinate system or centerline layout of the drive aisle.

Response:

The drawings have been modified to include a centerline layout of the drive aisle, which is highlighted in Attachment F.



Comment 7:

We recommend that additional spot grades be provided around the parking lot islands to the extend practicable since the number of catch basins is being minimized by the use of double grated structures.

Response:

VHB has updated the plans to provide additional spot grades to ensure positive drainage flows to all structures. The revised plans are highlighted in Attachment L.

Comment 8:

We recommend that the access drives be crowned to the extent possible, particularly at the entrance. This would require additional catch basin inlets along the entry drive.

Response:

The entrance has been crowned from Allen Avenue to the Allen Avenue Apartments connection. A new catch basin has been added to the south side of the entrance. The remaining portion flows south to north across the roadway due to the restrictions resulting from the architectural design of the mixed use building, which maintains a constant finished floor elevation for a distance of approximately 185 feet. The changes are highlighted in Attachment L.

Comment 9:

We note that several light poles appear to be located within the underground storage systems. This may be possible; we simply suggest this be confirmed with the product vendor.

Response:

The detention structure layouts have been modified to avoid any conflicts with the subsurface drainage structures. The changes are highlighted in Attachment M.

Comment 10:

The plans should clarify the size of all drainage structures since some of the manholes may need to be larger than 4' dia. to allow for multiple pipes and sizes.

Response:

The plans have been modified to clarify the sizes of drainage structures larger than 4' diameter. The highlighted plans can be found in Attachment L.



Page 7

Comment 11:

Within the erosion control program for the site we suggest the use of organic filter (mulch) berms as often as possible in place of silt fence.

Response:

VHB has updated the Erosion Control Plan to include the use of organic filter berms in appropriate areas, specifically in the areas of the proposed town houses, the wetlands south of the recreational field, and the residences at the eastern part of the site. The changes are highlighted in Attachment N.

Comment 12:

The erosion control requirements must be revised to include the DEP's standard procedures for Wintertime activities. A copy of these requirements can be provided to the engineer if necessary.

Response:

The erosion control requirements have been revised to include the DEP's standard procedures for Wintertime activities, they can be found on the Erosion Control Plan (Attachment J).

Comment 13:

We recommend that engineer confirm the jurisdictional status of the brook as it crosses the far eastern side of the site and any regulatory (NRPA) restrictions including setbacks that the DEP may require. The City has more recently encouraged a setback of up to 100' for the urban streams in the City. Given the applicant's intentions to install a detention basin near the stream in an area that is now an unsightly open area, it seems that this development activity seems reasonable and well within consideration for relaxation of the setback requirements. The engineer should confirm that the stream is not considered wetlands of special significance. Are there any Shoreland zoning issues pertaining to the stream?

Response:

VHB met with Linda Kokemueller with the Maine DEP to review the jurisdictional status of the stream. The stream is within the jurisdiction of the Maine DEP. Given that much of this area has been previously disturbed the DEP has requested a 25-foot wooded buffer and bank restoration for Milliken Brook. The plans have been modified accordingly and are shown in Attachment O. We will be meeting with the DEP to present our modified buffer/bank landscape design.



Utility Plans

Comment 1:

The Portland Water District may require the installation of a Fire Line Supply meter and meter pit into the development since there will be multiple services for both domestic and Fire supply. Will a meter be required for the Morrill Street connection? The Final Plans should include these measures as required by the District.

Response:

VHB contacted Portland Water District (PWD) to confirm their requirements for the installation of a Fire Line Supply meter. Since then we've been coordinating the layout of the system. A meter has been installed on the Allen Avenue connection. In addition, PWD requested that we eliminate the connection at Morrill Street. A fire flow analysis has been preformed to confirm adequate flow for the site. A copy of the correspondence, plans, and fire flow report are included in Attachment P.

Comment 2:

The layout includes multiple hydrant locations that should be reviewed and approved by the Fire Department.

Response:

The Fire Department has reviewed the hydrant locations. At a meeting in September '05, a fire department representative requested a hydrant be placed near the emergency access off of Allen Avenue. This has been updated on the plans and is highlight in Attachment Q. A December 29, 2005 letter received from the City summarizes a meeting with Captain Cass which confirms the approved locations.

Comment 3:

The applicant should confirm the need for utility easements for power and telephone.

Response:

The applicant will coordinate all required easements with the utility providers.



Page 9

Details

Comment 1:

The geotechnical engineer should review the Pavement Section detail on Sheet C-11 and a pavement section derived from the onsite soils conditions provided. The section appears to be a bit thin.

Response:

The pavement section detail has been adjusted based on the recommendation of the preliminary geotechnical evaluation prepared by R.W. Gillespie & Associates, Inc. The detail is highlighted in Attachment R. Upon final geotechnical evaluation the pavement detail with be adjusted if necessary based on further recommendations.

Comment 2:

The outlet control structure on Sheet C-13 must be modified to allow for the 48" outlet pipe size.

Response:

The detail has been updated accordingly and is highlighted in Attachment S.

Comment 3:

We are uncertain as to where the sediment forebay berm and the low flow sediment forebay berms are to be located. This should be clarified.

Response:

Sheet C-6 has been updated to show the location of the sediment forebay berm and Sheet C-13 has been updated to eliminate the Low Flow Sediment Forebay Berm. The modification is highlight in Attachment T.

Please give me a call if you have any questions or need additional information.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

John Hession

Project Manager

Project Engineer



Attachment A

Transportation Land Development Environmental •

Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 17, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Sarah Hopkins Development Review Services Manager Department of Planning & Development City of Portland 389 Congress Street Portland, Maine 04101

Re: Morrill's Crossing - Response to Tom Errico Site Plan Comments

Dear Sarah:

The following are VHB's responses to the site plan comments raised by Mr. Thomas Errico of Wilbur Smith Associates in his e-mail addressed to you dated, January 23, 2006 regarding Morrill's Crossing. Mr. Errico has raised several constructive comments that we believe improve the overall site design. Where these comments result in changes to the site plan, our proposed revisions are shown on attachments to this letter.

Comment 1:

It seems that two different crosswalk treatments are being proposed for the project. An explanation on the selection of treatment should be provided. I would also ask that the City Engineer review and approve the specification for the "stamped" pavement proposal. I would also note that the city should provide guidance on whether the stamped treatment should be applied to the crossings on Allen Avenue.

Response:

The proposed plan does specify two different crosswalk treatments for the project. The "stamped" pavement crosswalks serve as an urban streetscape treatment along the main entrance and along the primary pedestrian routes. They are intended to provide a visual interest and to clearly delineate the pedestrian corridors through the commercial and townhome portions of the development. Standard striped crosswalks are proposed in all other locations.

VHB discussed the use of the "stamped: pavement treatment with Mr. Errico and Mr. Eric Labelle from the Public Works Department. It is our understanding that Mr. Labelle approves of its use given that it is part of a private development.

Comment 2:

I would suggest that the applicant provide a sidewalk on the easterly side of the main entrance roadway from the bus pullout to Allen Avenue.

Response:

As discussed with Mr. Errico, Mr. Patrick Carroll of Carroll Associates, and Planning staff, a sidewalk from Allen Avenue to the bus stop on the easterly side of the main entrance has been added to the plan. The change is highlighted on Attachment A.

Comment 3:

The location of the crosswalk on the main entrance roadway at Allen Avenue seems to be set back to far.

Response:

The crosswalk has been modified to be set closer to Allen Avenue. The new location is based on the turning movements requirements of entering vehicles. The new layout is highlighted on Attachment B.

Comment 4:

I would suggest that the applicant provide crosswalks on all approaches at the Allen Avenue/Main entrance roadway intersection.

Response:

VHB believes that the crosswalk, as originally proposed (crossing the northerly leg of Allen Avenue) provides adequate crossing opportunities, especially in light of the additional sidewalk provided along the site drive (see response to Comment 2). The addition of a crosswalk, crossing the southerly leg of Allen Avenue, would result in a reduction of the available queue storage between the railroad crossing and the site drive. VHB recommends that a single crossing of Allen Avenue remain in the location originally proposed.

Comment 5:

The Main entrance roadway has a cross section dimension of 12' exit lanes and one 20' entry lane I would suggest that the dimensions be adjusted to allow for some shoulder area exiting the site for bicyclists.



Response:

The main entrance drive has been modified to allow for shoulder area exiting the site. The new lane configuration consists of one 18 foot wide entry lane, one 12 foot wide exit lane, and one 14 foot wide exit lane. The new configuration is highlighted in Attachment C.

Comment 6:

The main circulatory roadway through the site is proposed to be 30' wide. The applicant should document how this roadway shall be marked. It is my opinion that the roadway be designed with such treatment that it appears to be the primary or highest classification roadway.

Response:

VHB has added a single yellow centerline along the main site roadway. The change is highlighted in Attachment D.

Comment 7:

Two crosswalks are illustrated from the parking aisle to the Stop and Shop store frontage. I would rather not have a crosswalk terminate in a travel lane. Elimination or alternatives are recommended.

Response:

The crosswalks as shown are a Stop & Shop design requirement to delineate the accessible route from the store entrance/exit to the accessible parking spaces. According to Chapter 5: General Site and Building Elements of the <u>Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines:</u> "Accessible routes must connect parking spaces to accessible entrances. In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids."

Comment 8:

The applicant should document the winter maintenance program, particularly for all sidewalks and trails on their site.

Response:

As part of the general maintenance program, all sidewalks and trails will be cleared during snow storm events.



Comment 9:

All regulatory signage and pavement markings should be illustrated on a plan.

Response:

A regulatory signage chart, as well as the pavement markings, was illustrated on the Layout and Material Plans originally submitted. Those plans have been updated to reflect revision requested. Please refer to Attachment E.

Comment 10:

A waiver for the parking stall dimension standard will be required. The parking stalls are proposed to be 18' long. The standard is 19'.

Response:

The applicant has submitted a waiver request for the parking stall dimension to under a separate cover. Please note that the parking stall dimension was supported by Mr. Steve Bushey of Deluca-Hoffman in his review of the Site Plans.

Comment 11:

Traffic control at key on site intersections needs to be illustrated. An example of this is at the intersection in front of the Boxing Facility.

Response:

Stop signs have been added to the parking aisle approaches to the main drive aisle in appropriate locations as per Mr. Bushey's comments. Additional signage has been provided in the area of the Boxing Club intersection. The changes are highlighted in Attachment F.

Comment 12:

Based upon the different land uses and size of the site, I would suggest that the applicant implement a wayfinding signage program that provides destination information.

Response:

Directional signage has been added to the plans. The changes are highlighted in Attachment G.



Comment 13:

The pavement arrows exiting the site should be revised to account for movements to Paul White Tile.

Response:

The pavement arrow in the left exiting lane has been modified to show a through-left movement to account for movements to Paul White Tile. The change is highlighted in Attachment H.

Comment 14:

The applicant should confirm that the bus stop pullout dimensions have been approved by METRO.

Response:

The townhome drive cul-de-sac radii have been revised to provide for adequate turning movements for both busses and Fire Department vehicles. Updated plans have been sent to Metro for review. The revised cul-de-sac design is provided in Attachment I.

Comment 15:

I would suggest providing a crosswalk on the truck delivery driveway entrance and appropriate sidewalk connections to the store front. A good pedestrian connection should be provided between the proposed apartments and the retail portion of the site.

Response:

A sidewalk has been added to the side of the retail and a crosswalk connection has been provided on the truck delivery driveway connecting the store to the apartment walkway. The changes are highlighted in Attachment J.

David Fenstermacher Project Engineer

Please give me a call if you have any questions or need additional information.

Very truly yours,

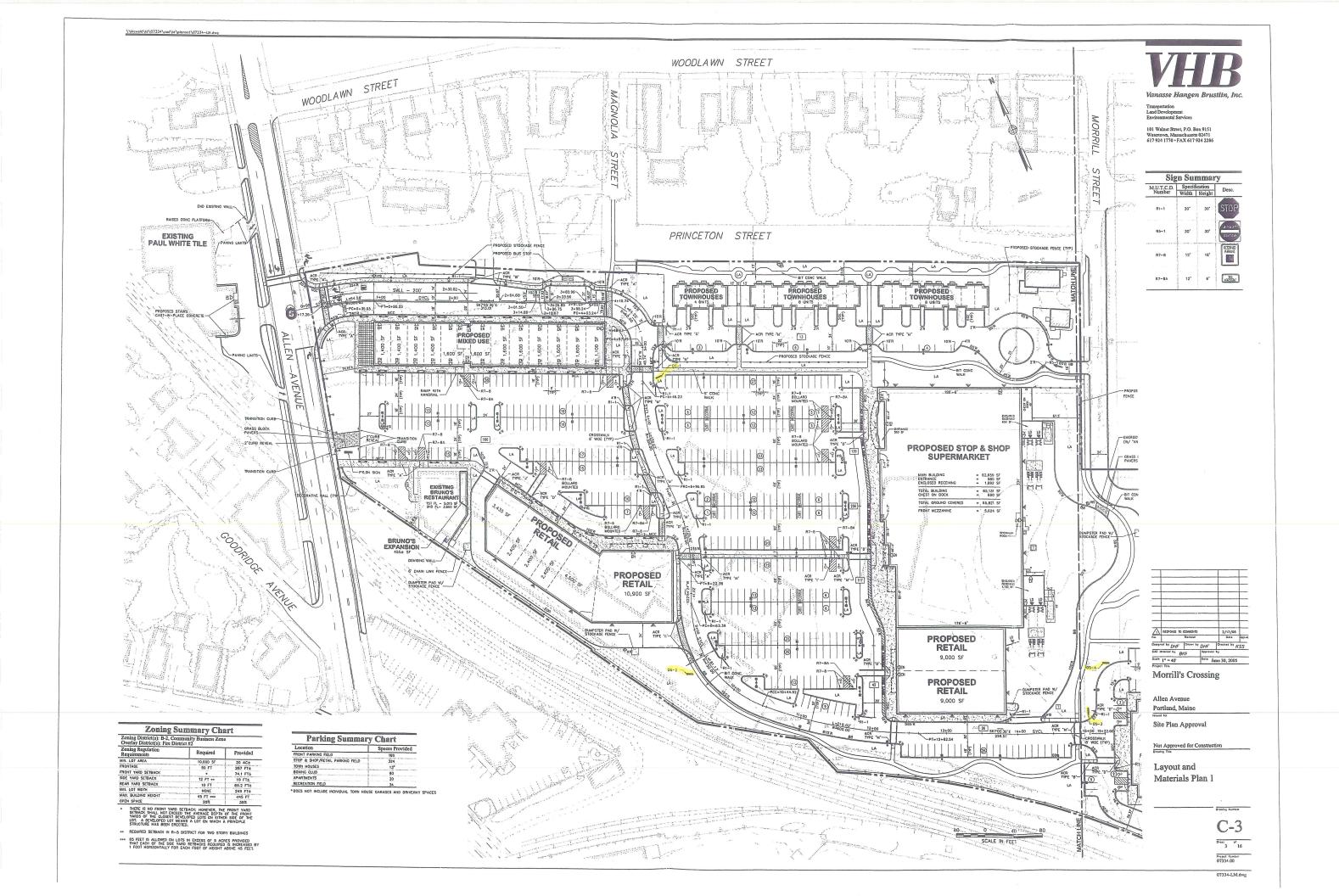
VAMASSE HANGÆN BRUSTLIN, INC.

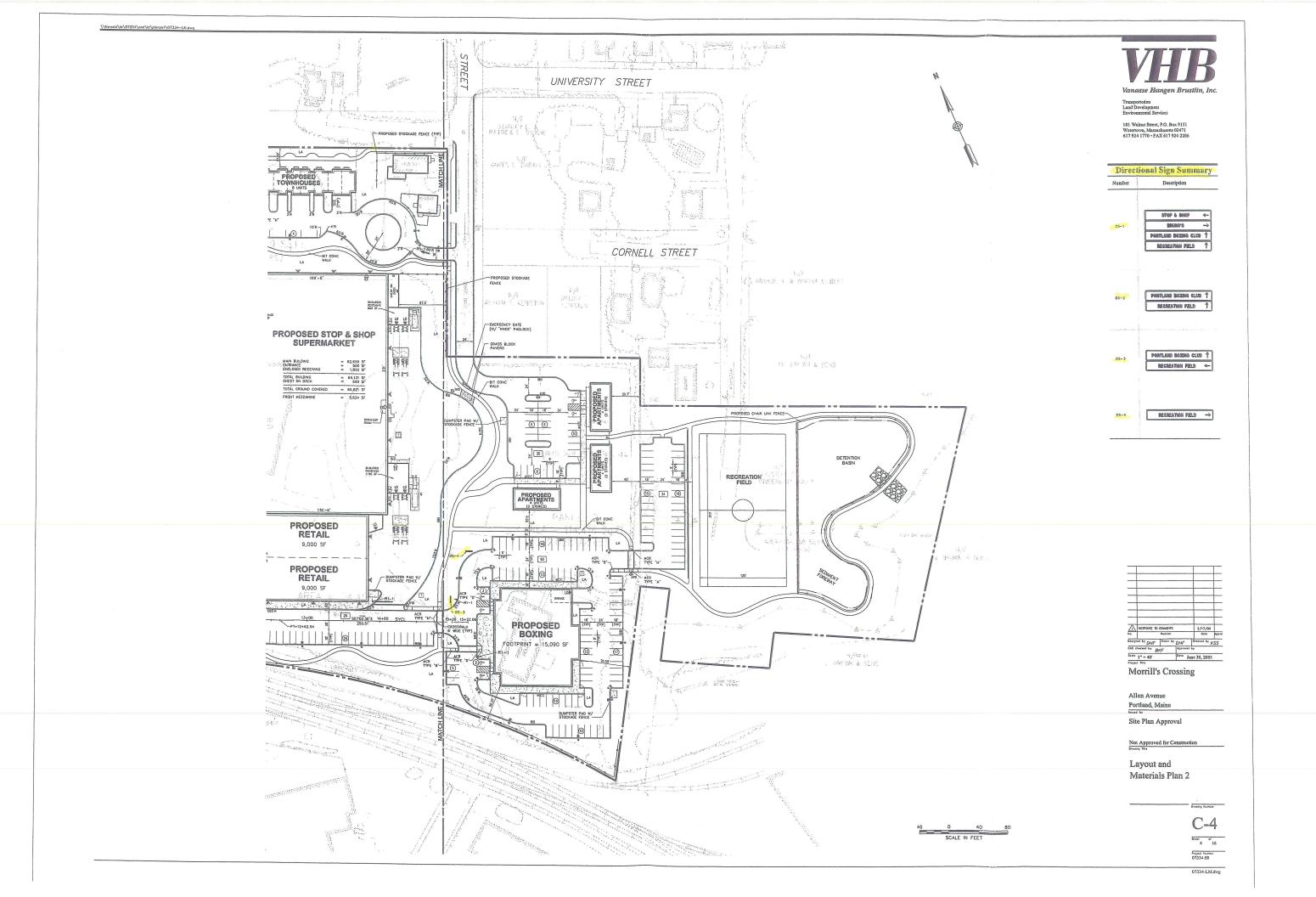
Jøhn Hession Project Manager

With attachments cc: Thomas Errico – Wilbur Smith Associates

VHIB

Attachment B





APPENDIX D - URBAN COMPACT AND SERVICE CENTER COMMUNITIES

MDOT Driveway and Entrance rules do not apply within Urban Compact Areas of Urban Compact Communities. They do apply to State and State Aid Highways outside Urban Compact Areas of the Urban Compact Communities listed below.

Municipalities with Urban Compact Areas are those in which the population according to the last United States census;

- 1. Exceed 7,500 inhabitants.
- 2. Is less than 7,500 inhabitants but more than 2,499 inhabitants, and in which the ratio of people whose place of employment is in a given municipality to employed people residing in that same municipality is 1.0 or greater, and when the municipality has not exercised the opt-out provision of this section.

"Compact" or "Built-up sections" means a section of the highway where structures are nearer than 200 feet apart for a distance of ¼ of a mile, unless otherwise defined; reference M.R.S.A. 23 §754, revised July 1, 1999.

Presently there are 43 Urban Compact Municipalities.

Auburn	Augusta	Bangor	Bath
Belfast	Biddeford	Brewer	Brunswick
Cape Elizabeth	Caribou	Fairfield	Falmouth
Farmington	Freeport	Gardiner	Gorham
Houlton	Kennebunk	Kittery	Lewiston
Lisbon	Millinocket	Old Orchard Bead	ch Old Town
Orono	Portland	Presque Isle	Rockland
Rumford	Saco	Sanford	Scarborough
Skowhegan	South Portland	Standish	Topsham
Waterville	Wells	Westbrook	Windham
Winslow	Yarmouth	York	

NOTE: Some communities may have "built up sections" as defined above but are not considered Urban Compact Communities. Chapter 299 Parts A & B, Driveway and Entrance Rules will apply in these communities.

SERVICE CENTER COMMUNITIES

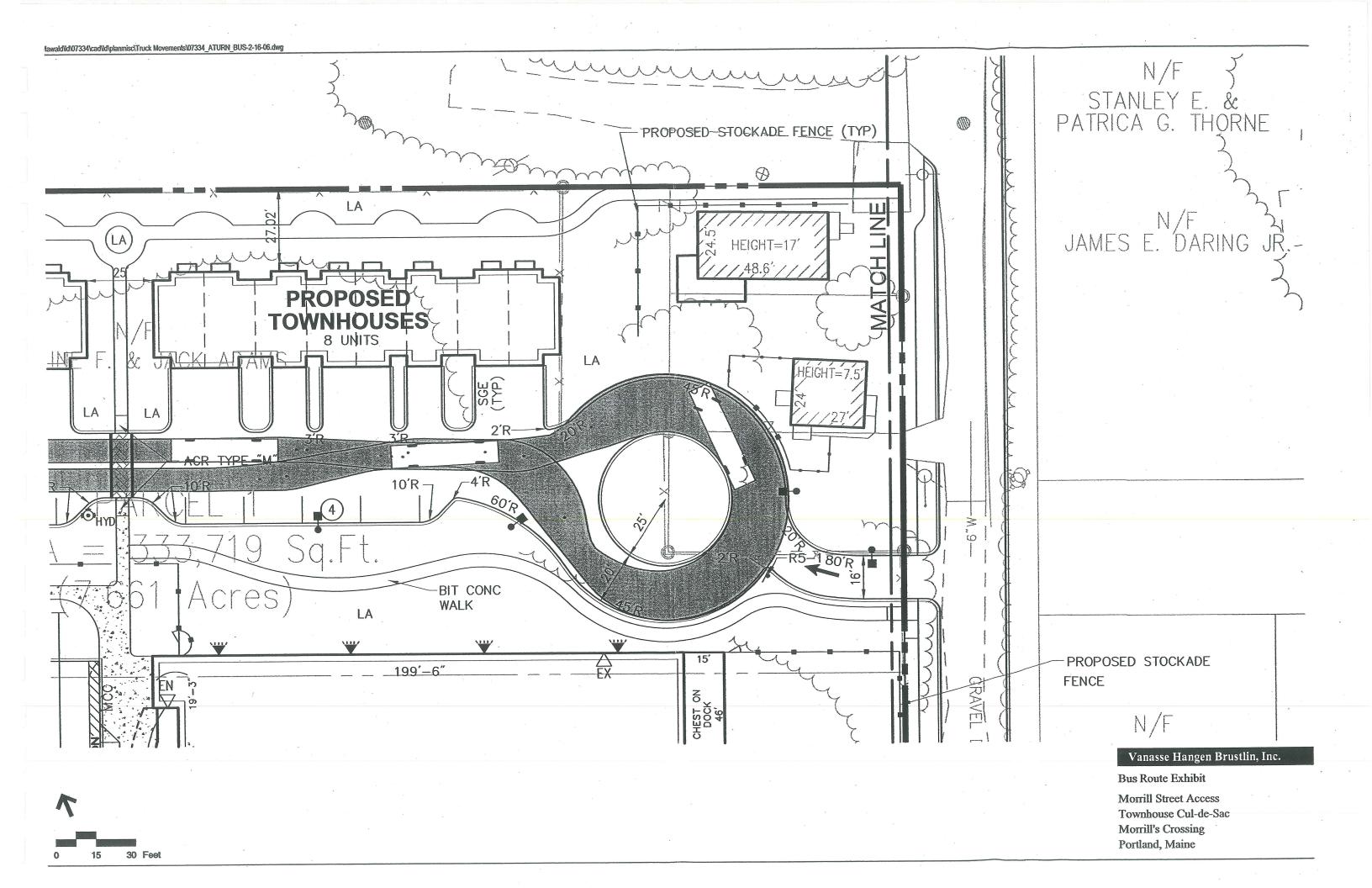
The MDOT Driveway and Entrance Rules include a reference to Service Center Communities when defining "Mobility Arterial Corridors".

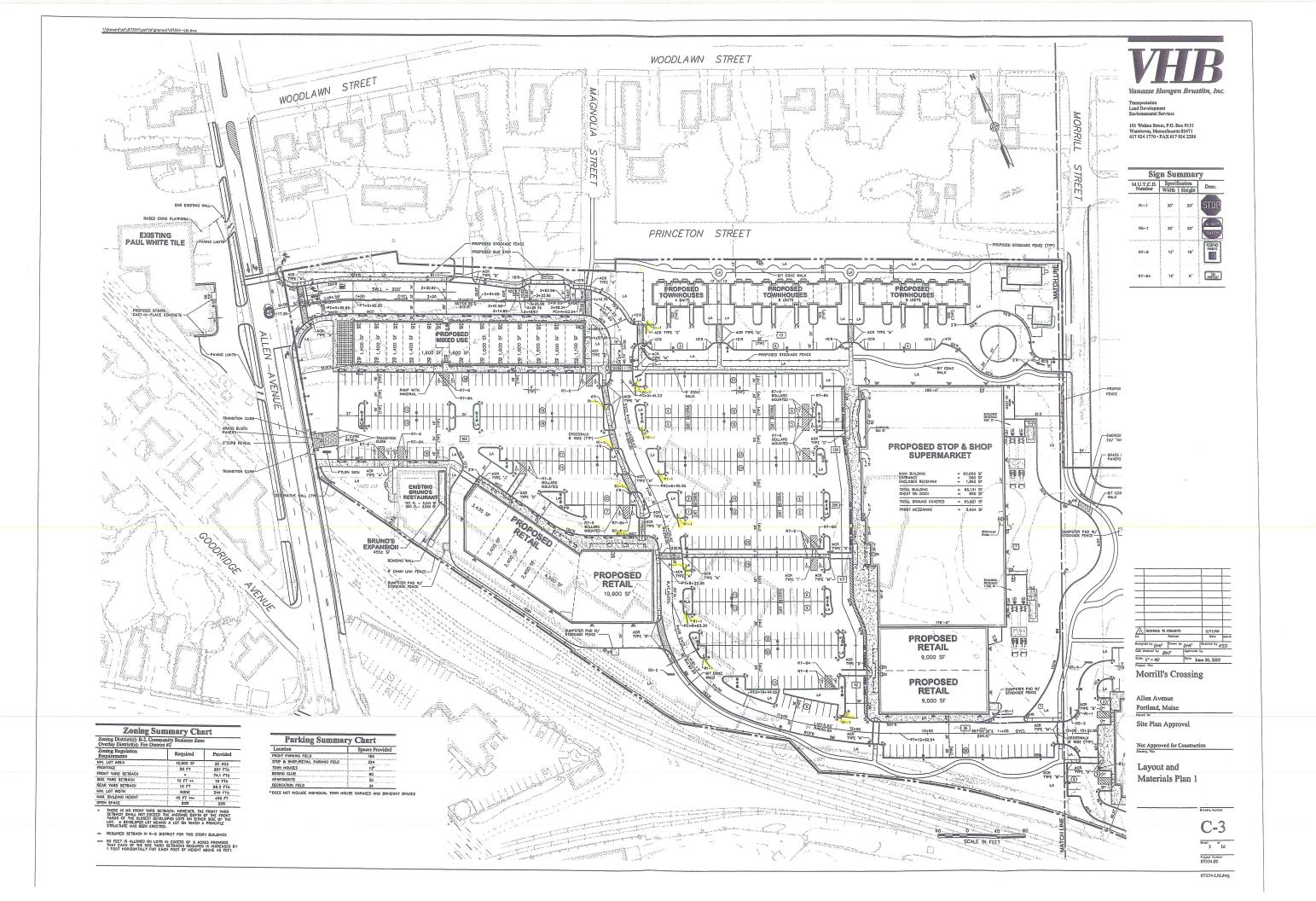
The communities where we work, shop, get medical care or a cultural experience are an important subset of Maine's nearly 500 cities and towns. We call them many things: cities, hubs, shire towns, county seats and market towns. Whether living within them or outside them, we all depend upon them in some way.

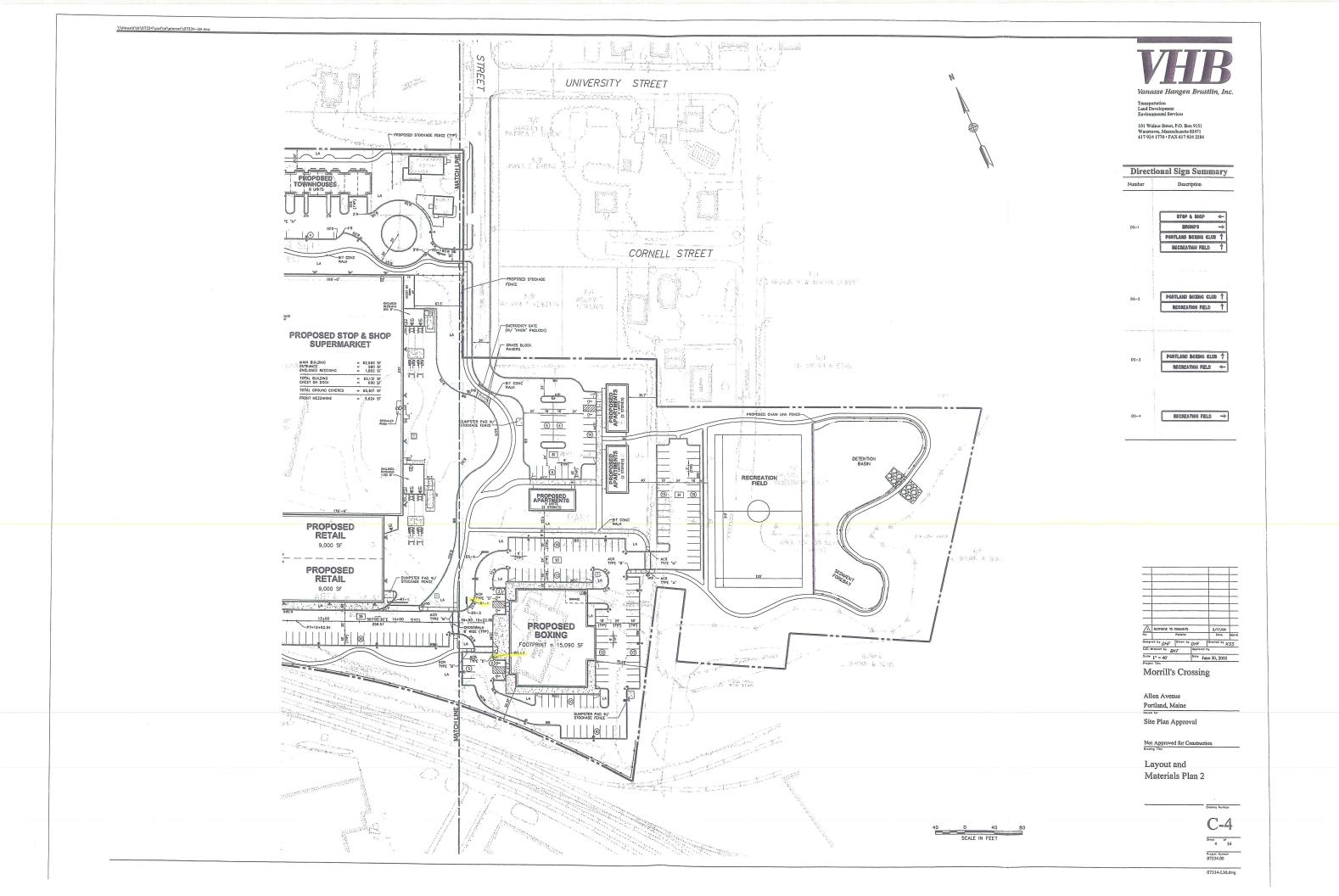
The State Planning Office has defined 69 such communities statewide and termed them "service centers." These communities vary tremendously in size and appearance, but share three attributes:

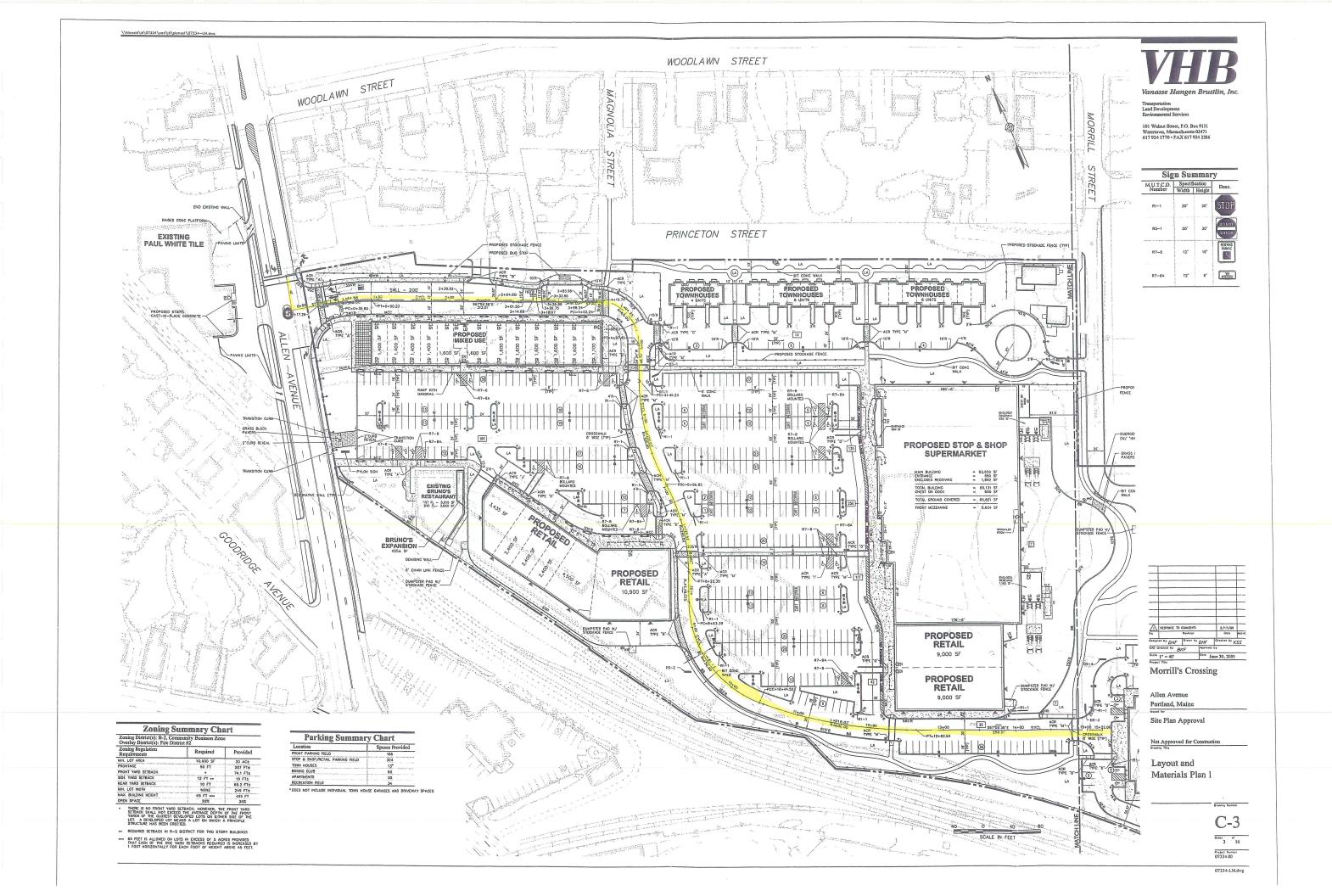
- a) they are job centers -- importing workers,
- b) they are retail centers -- with sales exceeding the needs of the local population, and/or

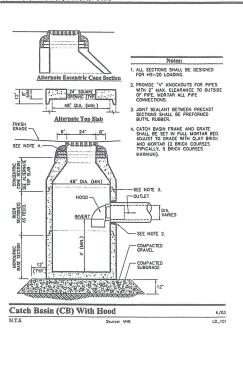
Attachment D

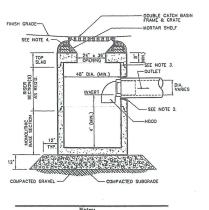










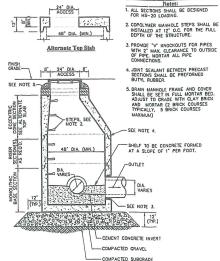


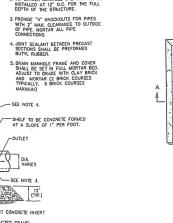
- 1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS. 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RURRER.
- 4. DOUBLE CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL.
 MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR
 (2 BRICKS TYPICALLY 5 BRICK COURSES MAXIMUM)

Double Grate Catc	h Basin (DCB) with Hood	6/03
N.T.S.	Source: VHB	LD_103

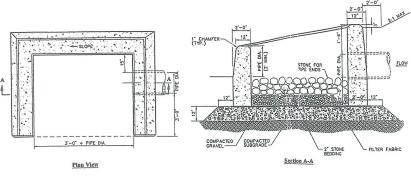
Plan View

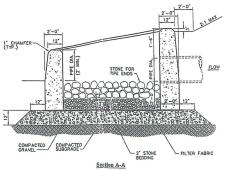
CONTINUE CHANNEL SHAPE TO BOTTOM OF SLOPE







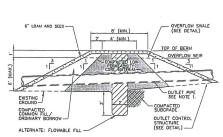




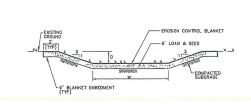
Notes: SHOP DRAWINGS FOR PLACEMENT OF REINFORCING, SHALL BE SUBMITTED TO THE ENGINEER BY THE

Directional Headwall

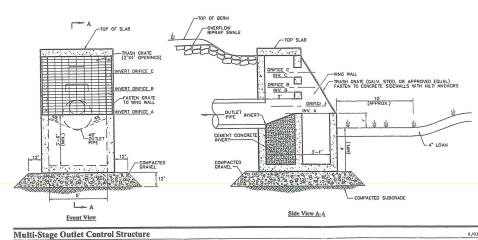


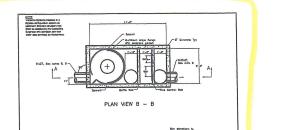


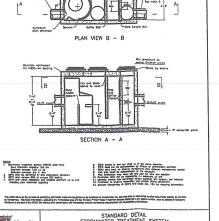
STRU	PACTED SRADE ET CONTROL CTURE DETAIL)	CONCRETE CURB (PO COMPACTED LO PERMEABILITY C	w /	1'-0' STONE FOR PIPE ENDS
Notes:		BASIN SIDE	6' MMI. DI	STONE FOR PIPE E
WHERE PPES PENTHATE THE LOW PERMEABULTY CORE, PIPE SHALL BE BEDDED IN THE LOW PERMEABULTY CORE MATERIAL. THE BERM SECTION IS SUBJECT TO CHANGE AND BE BASED ON THE RESULTS OF FURTHER CEOTECHNICAL INVESTIGATIONS.	WLL	FILTER FABRIC- PCC WITH MOR	/	COMPACTED LOW PERMEABILITY CORE
Detention Basin Berm Section	6/03	Overflow Stone	Swale	
T.S. Source: VHB	LD_160	N.T.S.	Source:	L
DEGIT MODE	1			

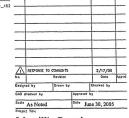


Grassed Swale		6/03		
N.T.S.	Source: VHB	REV	LO_17	









Morrill's Crossing

Allen Avenue Portland, Maine

Transportation Land Development Environmental Services

101 Walnut Street, P.O. Box 9151 Watertown, Massachusetts 02471 617 924 1770 • FAX 617 924 2286

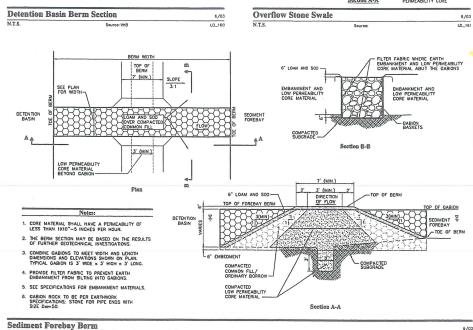
Site Plan Approval

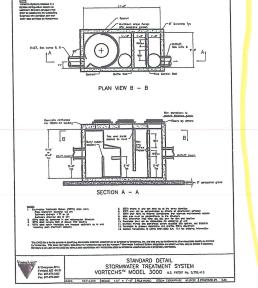
Not Approved for Construction

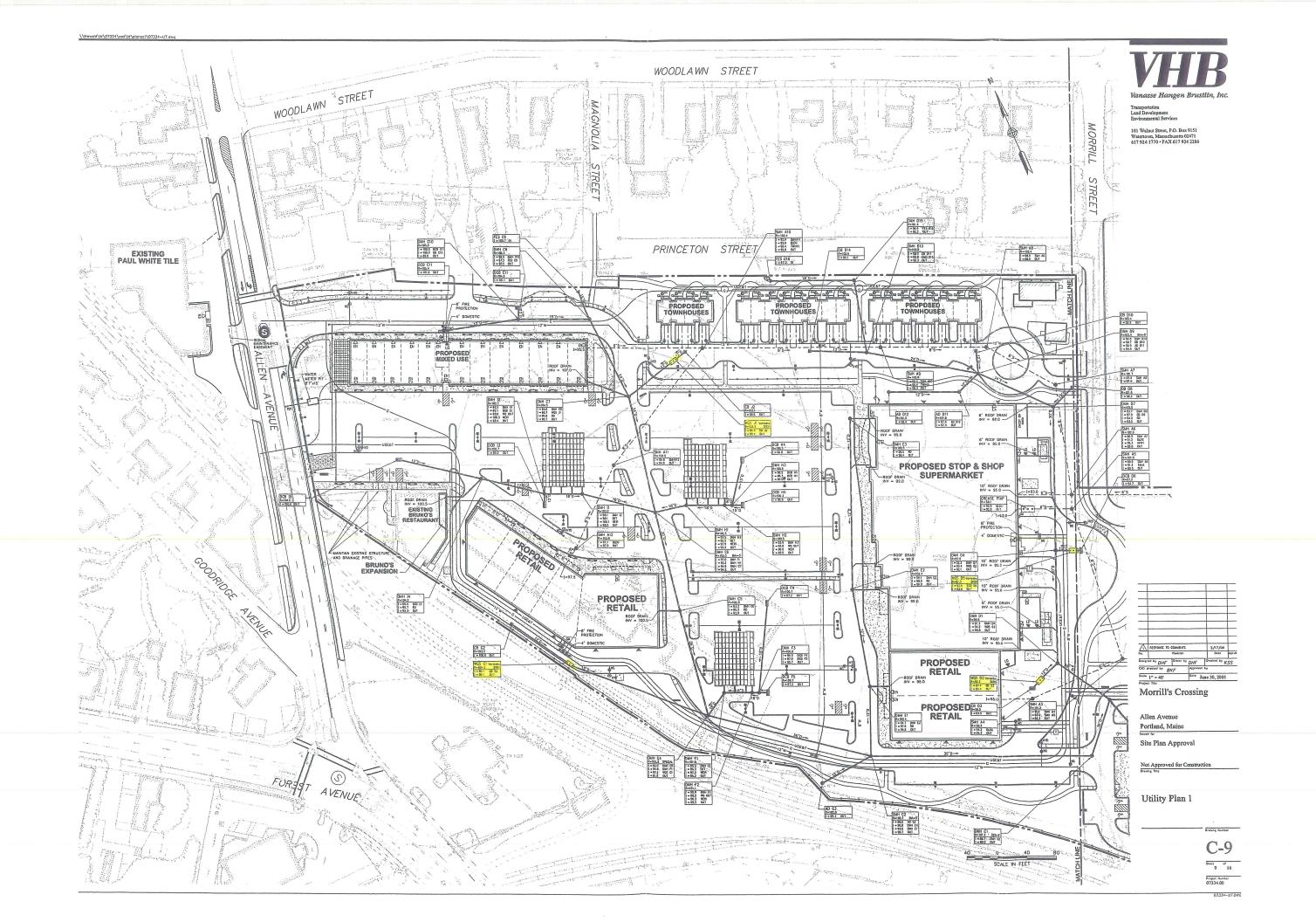
Site Details 3

Organie Number C-15

Projet Number 07334.00







MORRILL UNIVERSITY STREET SMH A7
R=101.7
1=87.5 SMH A8
(1=87.4 GUI

C8 D8
R=101.8
(1=98.3 GUI CORNELL STREET 6" ROOF DRAIN (NV = 98.0 -DRAIN 99.0 -DMH E3 R=102.5 1 = 98.5 RO (= 98.4 QUT 6" ROOF DRAIN PROPOSED STOP & SHOP SUPERMARKET CLEANOUT CREASE TRAP R=00.1 1=92.9 0LDC 1=02.0 0J1 FES K1 1=01.0 OUT SMH A1 R=80± 1=50.2 SMH A2 1=80.1 CUT -ROOF DRAIN DETENTION BASIN ROOF DRAIN PROPOSED APARTMENTS PROPOSED RETAIL NO BOOK NOW - 98.0 DMH A2 R=90.2 DA=5' I=65.0 BMH A3 I=84.9 QJT PROPOSED CO DO TO THE POST OF PROPOSED BOXING COLOR WITH DMH C1 R=101.2 CA=2] = 60.7 ORN C2] = 60.0 OUT



Vanasse Hangen Brustlin, In

Land Development Environmental Service

101 Walnut Street, P.O. Box 9151 Watertown, Massachusetts 02471 617 924 1770 * FAX 617 924 2286



Morrill's Crossing

Allen Avenue Portland, Maine

Site Plan Approval

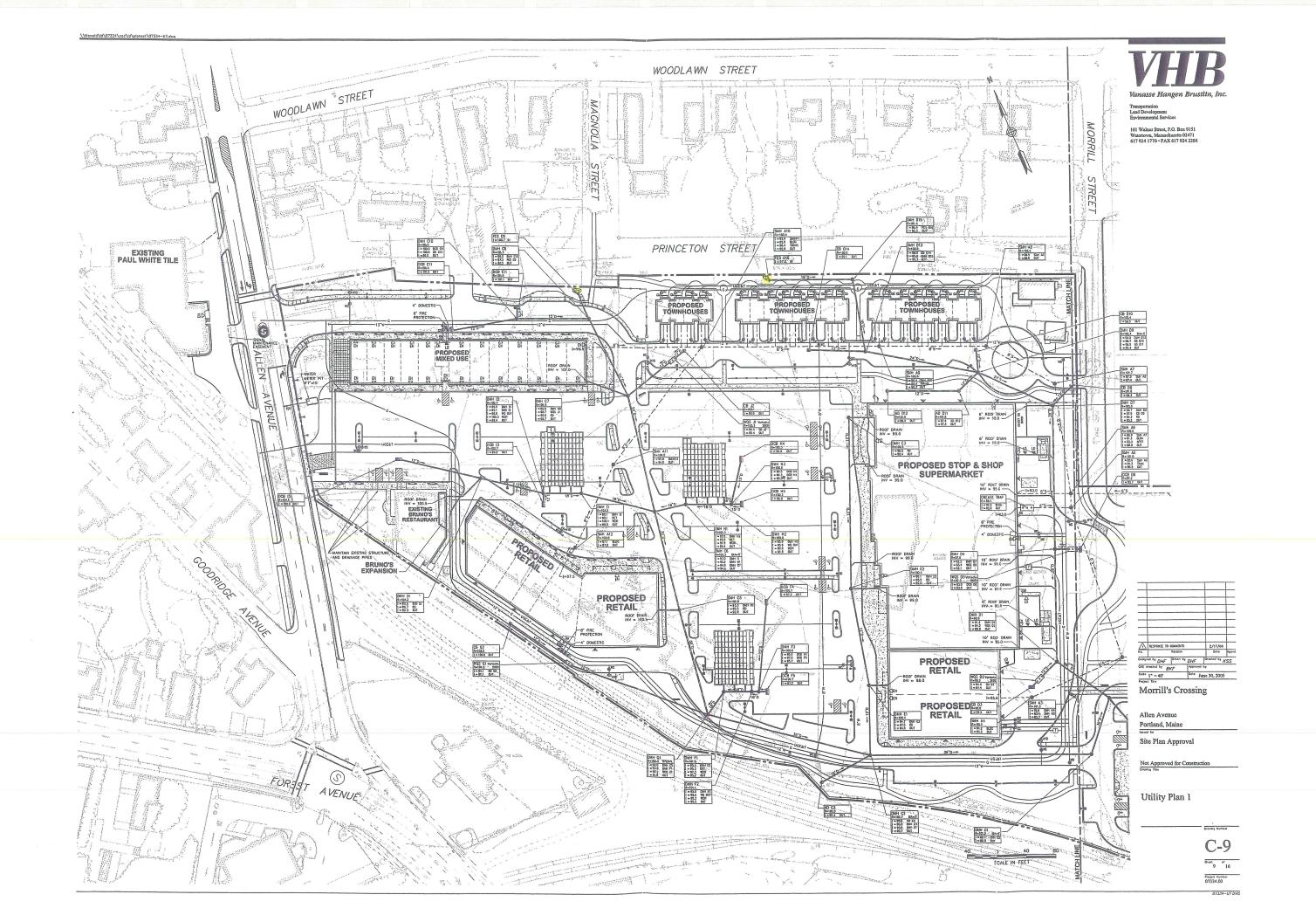
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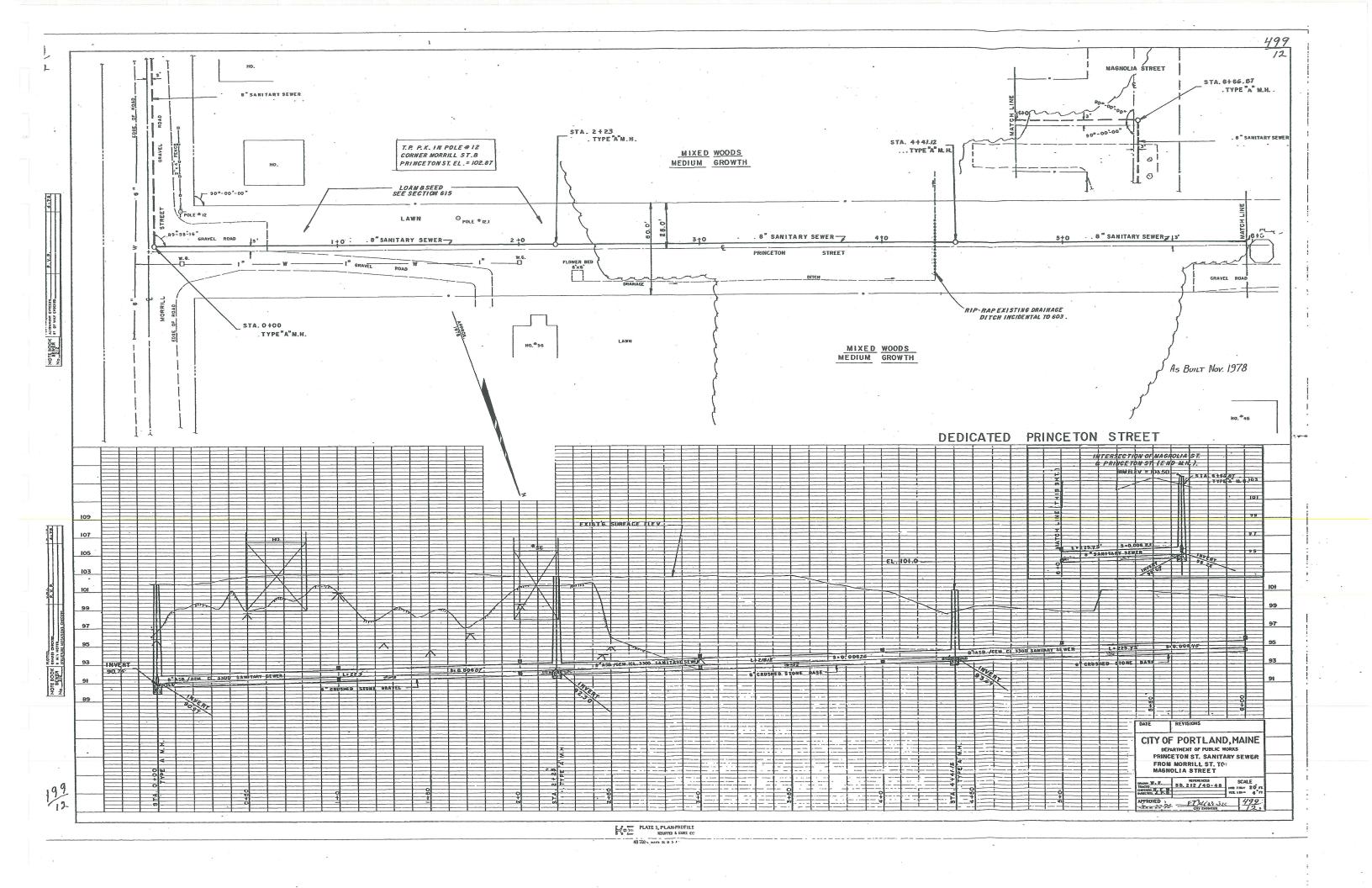
Utility Plan 2

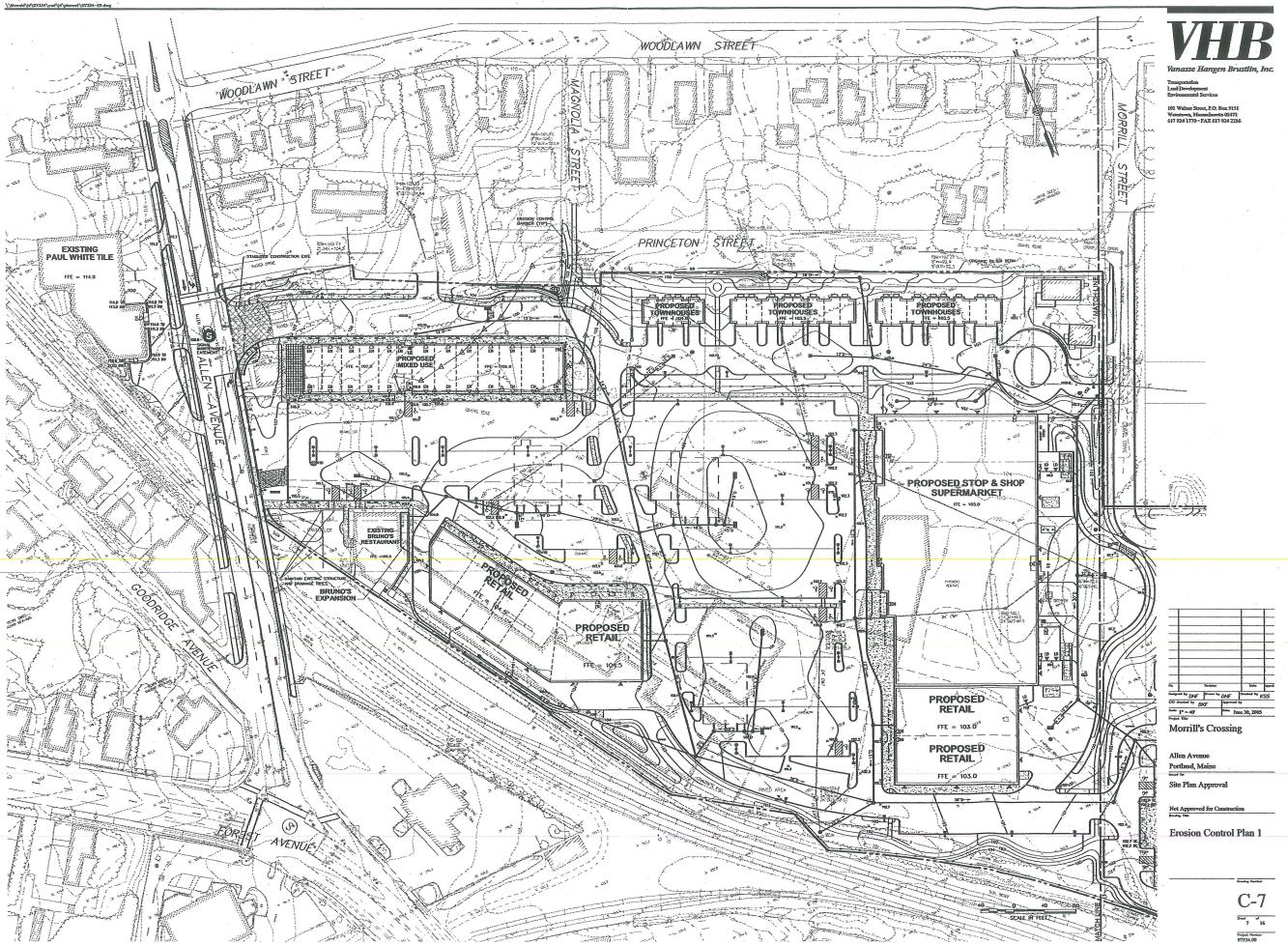
C-10

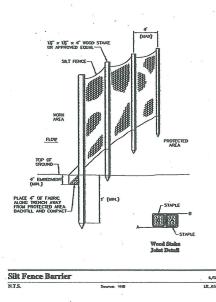
Drest of 10 16 Project Number 07334.00

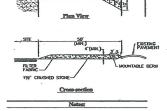
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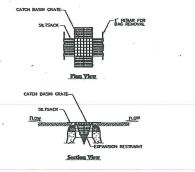




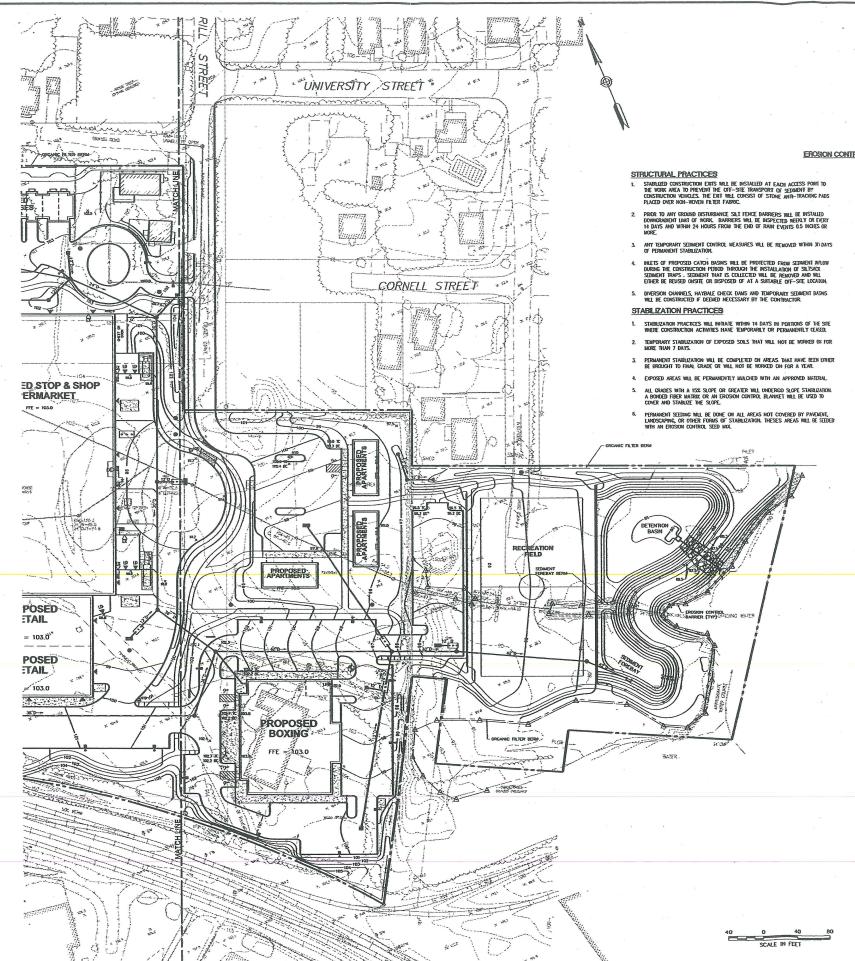
ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIOUNG, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INCRESS OF FIGHESS OCCURS

3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.





Siltsack Sediment Trap





101 Welmit Street, P.O. Box 9151 Watestown, Massachusetts 02471 617 924 1770 - FAX 617 924 2286

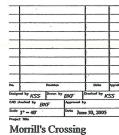
EROSION CONTROL NOTES

WINTER CONSTRUCTION

- 1. BY NOVEMBER 15 ALL AREAS OF THE SITE NOT STABLIZED WITH PAVEMENT, ROAD GRAVEL BASE, 75% VEGETATION OR RPRAP SHALL UNDERCO WINTER STABILIZATION PRACTICES.
- 3. MARCHENC WILL CONSIST OF A COMBINATION OF HAY AND STRAW APPLIED AT A MINIMADA 4 NICH INCIDIOESS AT A RATE OF 150 LB. FER 1,000 ST. IT WILL BE PLACED ON 100 OF THE SYNON, AT THE DIE OF EARDH ANY LA MEANS OF BROUGHT TO FINAL GRADE, WILL BE STRABUZED WITH HAY, STRAW, OR ENGSOW CONFROL MATTION AND WILL BE FROPERLY MINISTRAM, SITAM, OR ENGSOW
- . ALL AREAS WITHIN 100 FT. OF NATURAL RESOURCES WIL BE STABILIZED BY 7:5% NATURE VECETATION OF BE INDICH WITH PROTECTION BY AN ERGOON CONTROL COVER IN ADMITTOR A COURSE ROW OF STABILINE BRANGERS WILL BE PLACED BETWEEN THE NATURAL RESOURCE AND DISTURBED AREA.
- 5. STOOGPLES OF SOIL WILL BE MULCHED WITH HAY OR STRAW AT TWO TIMES THE MORBAR RATE OR WITH A FOUR-HICH LAYER OF ERSON CONTROL MIX. MALCHING MILL OCCUR WITHIN 24 HOURS OF STOOGPLING OR BEFORE A MAJOR RABIFAL/STOWEALE CHOILT. MILL STOOGPLES WILL BE PLACE AT LEAST 100 FL. FROM JAYT MARKER RESOURCES.
- I. ANY AREA HAVING A GRADE GREATER THAIN 15% IS CONSIDERED A SLOPE. IF NOT STARLIZED BY SEPTEMBER 1ST THEN THE SOU, WITH BE STARLIZED BY TEMPORARY VECETATION AND ERGISON CONTROL MATS OR SUD OR AN ERGISON CONTROL MIX OR WITH STONE REPRAP.
- T. MAINTENANCE ON EROSION CONTROL MEASURES WILL BE PREFORMED THROUGHOUT CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR A VISUAL INSPECTION OF ALL MEASURES AFTER EACH RAINFALL, SNOWFALL OR PERIOD OF THANKING AND RUNGET TO DISJURE FULLIONALITY.

OTHER CONTROLS

ON DRY AND MODY DATS WHEN DUST GENERATION IS A CONCERN, A WATER TRUCK WILL TRAVERSE THE STE AND SPRAY WATER AS NECESSARY TO PREVENT DUST FROM FORMING.



Allen Avenue Portland, Maine

Site Plan Approval

Not Approved for Construction

Erosion Control Plan 2

Drowing Humber C-8

Project Number 07334.00

07334-ER.DWG

Operation and Maintenance Plan

Site

Morrill's Crossing Portland, Maine

Site Developer

Morrills Corner, LLC c/o Packard Development, LLC One Wells Avenue Newton, Massachusetts 02459

Maintenance Supervisor

To be determined upon completion of project.

Operation and Maintenance Plan

This Operation and Maintenance Plan includes details on pavement maintenance, stormwater system maintenance, snow management plan and trash removal. Each of these items is described below.

The site manager shall keep detailed records/documentation of all inspection and maintenance activities performed on the site.

Pavement Maintenance

Sweeping is an effective initial treatment for reducing pollutant loading into stormwater. The parking lots and driveways will be vacuum swept at least once per week. In addition, the parking lot will be inspected on a weekly. Trash and debris will be removed as needed.

Snow Management Plan

Improper snow management can cause erosion in buffer zone or wetland resources, can be a source of contamination, and can impede the performance of the stormwater management system. Snow plowed from paved surfaces at the site will not be stockpiled within the wetlands or the buffer zones. Snow storage shall be on paved areas to allow melt water to be routed through and treated by the stormwater management system. If necessary, excess snow will be removed from the parking lot and disposed of off-site. Deicing compounds will only be used when conditions could result in pedestrian injuries or vehicle damage. Nontoxic substances will be used whenever practicable.

Stormwater Management System

All components of the stormwater management system for the proposed project will be inspected and maintained on a regular basis as described below.

Catch Basins

All catch basins will be inspected at least four times throughout the year. Inspection will focus on excessive sand, sediment and debris buildup. In addition indications of malfunction or structural damage will be checked Maintenance on the catch basins will conducted in the Spring and Fall of every year. Sand, sediment, or debris (when it reaches a depth of more than 6 inches) will be removed. Floating debris and oil will also be removed and disposed of properly.

Water Quality Structures- Vortechs

The water quality structures will be inspected quarterly. The removal of sediments, oil, and debris will be conducted yearly and as outlined by the manufactures guidelines.

Subsurface Detention Facilities-StormTech

The subsurface detention facilities will be inspected quarterly. The removal of sediments, oil, and debris will be conducted yearly and as outlined by the manufactures guidelines.

Stormwater Detention Facilities

A broad inspection of the on site detention facility will be conducted during the fall of every year. The embankment to the detention pond will be inspected for settlement and slope erosion. Internal piping and

downstream swamping also will be inspected. The outlet control structure will be inspected for sediment and debris buildup. The sediment forebay, which is included in the detention facility, will be inspected for excessive sediment and debris buildup. Maintenance on the detention facility will be conducted every Fall. Woody vegetation will be controlled where necessary. Repair on debris guards will be conducted to ensure they are in proper working order. Debris and sediment buildup at the outlet control structure will be removed. Every two to five years or when deemed necessary, excessive sediment and debris will be removed from the sediment forebay.

Culverts

All culverts will be inspected every spring for sediment and debris buildup. Sediment and debris will be removed every Spring and Fall from inside the conduit, the inlet and outlet. Erosion at the inlets and outlets will also be repair.

Stormwater Channels

All open stormwater channels, swales and ditches will be inspected every Spring and Fall. Removal of all obstruction to flow in the channels will be conducted every fall and spring. Repair on ditch lining erosion, slumping slopes and rip rap will be made every Fall if necessary. Mowing and control of vegetated and woody growth will also be conducted.

Vegetated Areas

To prevent increased runoff and erosion vegetated areas on site will be inspected in the spring of every year. Vegetated areas with sparse growth or bare spots will be replanted.

Trash Removal

The on-site buffer zone and resource areas will be inspected for litter and trash on a monthly basis. Any accumulated trash, litter, and discarded materials in this area will be removed and will be disposed of at a suitable location.

No disposal of materials will be permitted within the wetlands or buffer zone on the project site. This prohibition applies to trash, fill material, construction debris, grass clippings, collected leaves and cut branches.

Other Practices and Measures

Other long term inspection and maintenance practices and measures that are deemed necessary by the site engineer and City of Portland can be included in the operation and maintenance plan at a later date.

Reporting and Documentation

The Site Manager will be responsible for maintaining a proper inspection and maintenance log. This log will be available to the City of Portland, upon request.

Morrill's Crossing, Portland, ME Long-Term Inspection & Maintenance

Driveways and Parking Surfaces

Inspector		Performed by		
Date Inspected		Date of Maintenance		
Frequency	Weekly	Frequency	Weekly	Early Spring of every year or as needed
Inspection	Inspect parking lot/ driveway for sediment and debris build up	Maintenance	Sweep Pavement to remove sediment	Clear accumulated "winter" sand in parking lots and along driveways

Catch Basin Systems

Maintenance	Frequency	Date Inspected	Inspector	Comments
Inspect all catch basins for excessive sand, sediment and debris buildup, Also, inspect for structural damage or indications of malfunction	Quarterly			

Maintenance	Frequency	Date of Maintenance	Performed by	Comments
Remove and legally dispose of accumulated sediments and debris from bottom of the basin, inlet grates, inflow channels to the basin and pipes between basin	Spring and Fall of every year			
Remove floating debris and oils:	Spring and Fall of every year			

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Inspection	Frequency	Date Inspected	Inspector	Comments	
Inspect the embankment for settlement, slope erosion, internal piping, and downstream swamping	Fall of every year				
Inspect Outlet Control Structure for sediment and debris buildup	Fall of Every Year				
Inspect sediment forebay for excessive sediment and debris buildup	Fall of Every Year				
Maintenance	Frequency	Date of Maintenance	Performed by	Comments	-
Mow the embankment to control woody vegetation	Fall of Every Year				
Remove and dispose of sediments and debris within the control structure	Fall of Every Year				
Repair any damage to trash racks or debris guards	Fall of Every Year				
Control woody vegetation and replace any dislodged stone in riprap spillway	Fall of Every Year				
Remove and Dispose of accumulated sediments within the impoundment and forebay.	Every 2 -5 Years				

Comments		
Inspector		
Date Inspected		
Frequency	Spring every year	
Inspection	Inspect culverts for sediment and debris buildup	

	Frequency	Date of Maintenance	ce Performed by	led by	Comments
	Spring, Fall of every				
sediment and debris at the	year	to .			
outlet, and within the conduit					
Repair any erosion damage at	Spring, Fall of every	-			
the culvert's inlet and outlet	year				

Stormwater Channels

Comments		
Inspector		
Date Inspe <mark>c</mark> ted		
Frequency	Spring and Fall of every Year	
Inspection	Inspect ditches, swales and other open stormwater channels	

Maintenance

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Comments		
Inspector		
Date Inspected		
Frequency	Spring of every Year	
Inspection	Inspect all Slopes and Embankments	

Comments

Performed by

Date of Maintenance

Frequency

Maintenance

Spring of every Year

Replant Bare Areas or Areas with Sparse Growth

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	Performed by				
	Date			A STATE OF THE STA	
Medsales	Frequency				
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Water Quality Structures*

Inspect all water quality structures (StormTech and Vortechs) for excessive sediment/debris buildup. Also inspect for etrictural	
damage or indication of malfunction	

V Comments	
Performed by	
ite of tenance	
Date	
Frequency	Yearly and as outlined by manufacturing guidelines
Maintenance	Removal of sediments, oil and debris from water quality structures

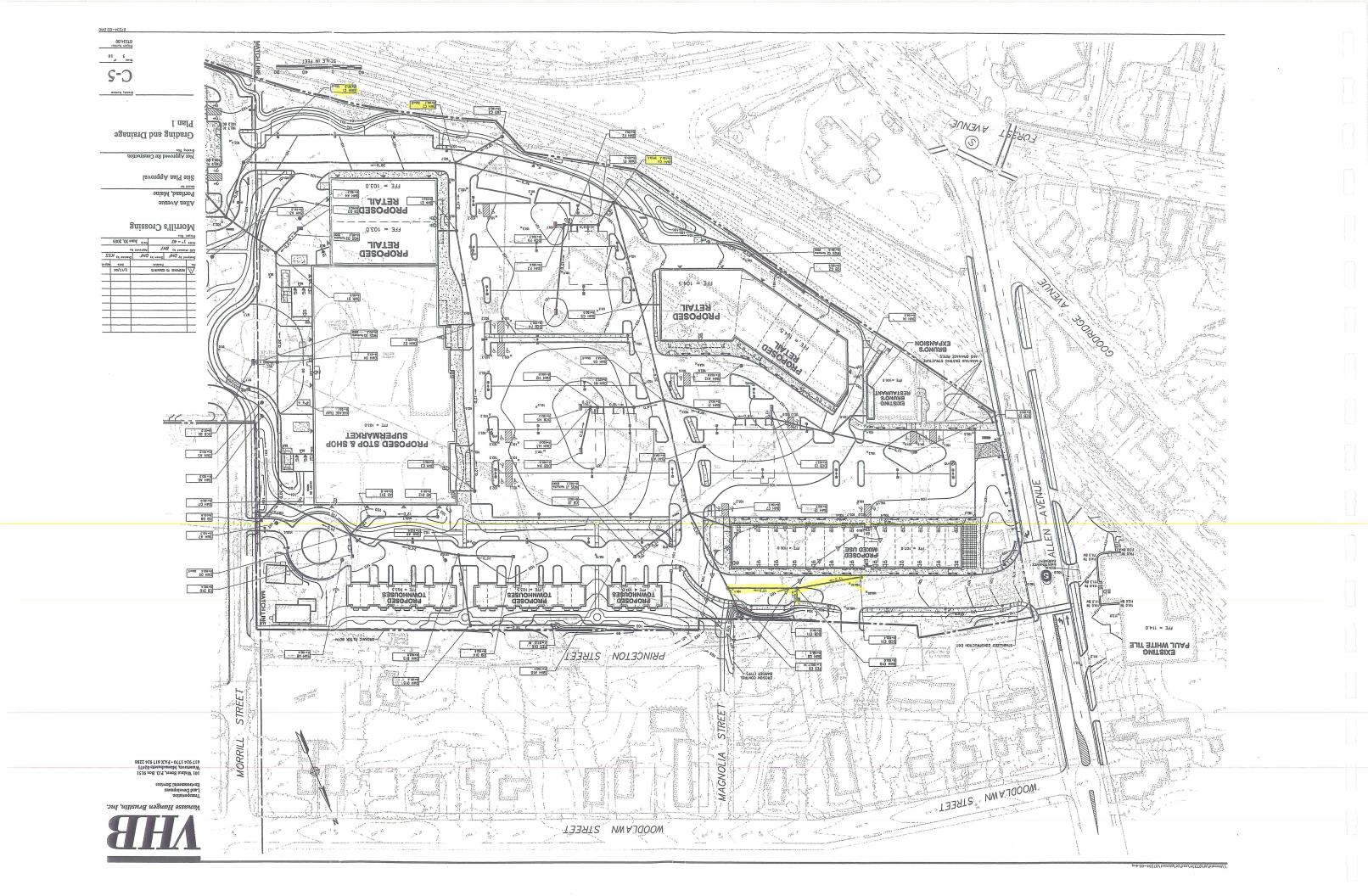
*refer to insert of manufacturing guidelines

Subsurface Detention Facilities*

Inspection	Frequency	Date Inspected	Inspector	Comments
Inspection of subsurface detention (Isolator Row)	Quarterly			
, , , , , , , , , , , , , , , , , , ,		Date of		

		Date of		
Maintenance	Frequency	Maintenance	Performed by	Comments
Removal and disposal of				
accumulated sediments and	Yearly			
debris (Isolator Row)				

*refer to insert of manufacturing guidelines



UNIVERSITY STREET CORNELL STREET CB D8 R=101.6 DMH D7 R=102.0 SMH A6 R=102.0 SMH A5 R=101.0 PROPOSED STOP & SHOP SUPERMARKET DCB D6 R=97.2 FFE = 103.0 FES K1 ORGANIC FILTER BERM PROPOSED RETAIL EROSION CONTROL FFE = 103.0 PROPOSED (B D3) FFE = 103.0 PROPOSED BOXING FFE = 103.0



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Morrill's Crossing

Allen Avenue Portland, Maine

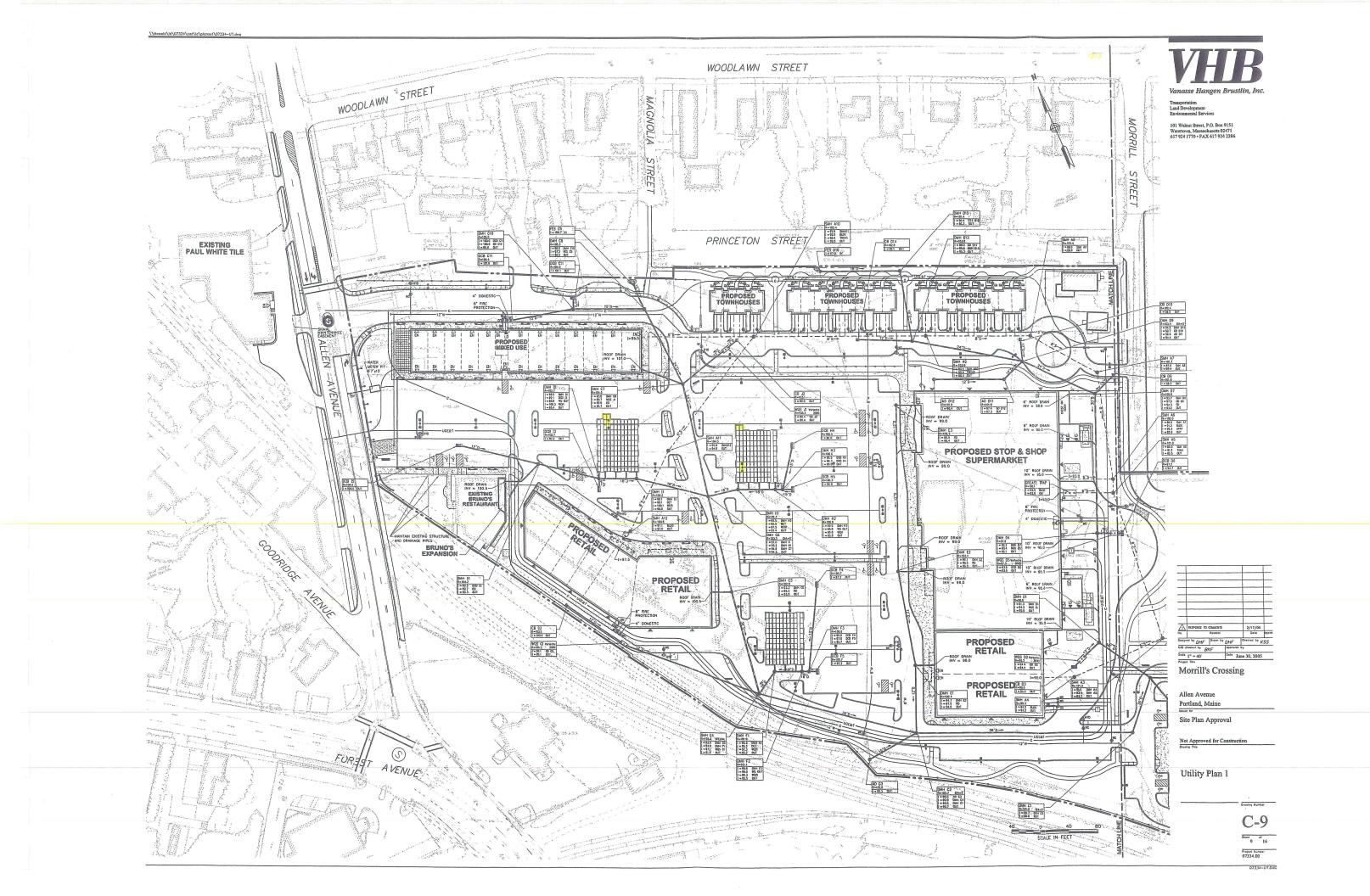
Site Plan Approval

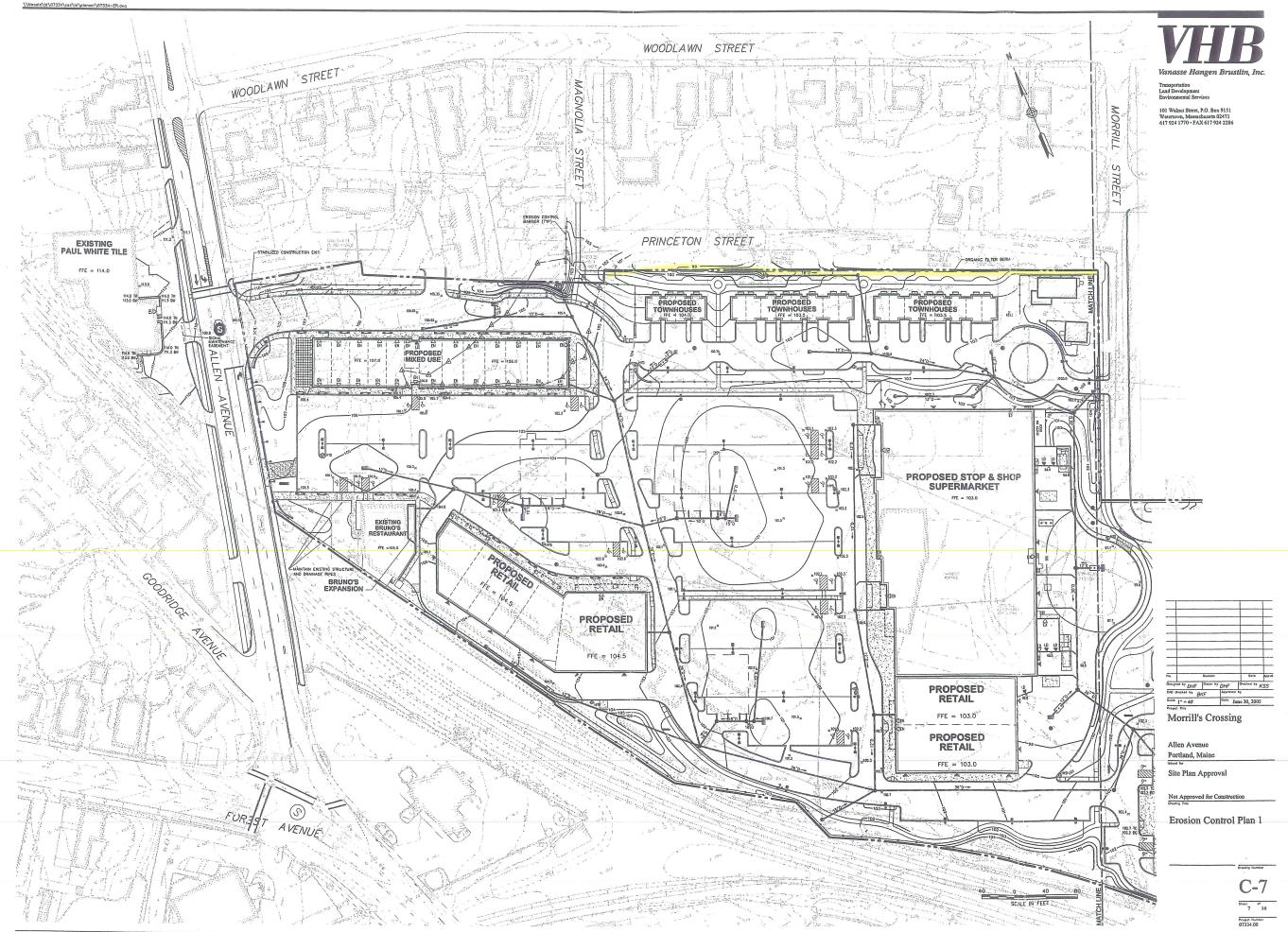
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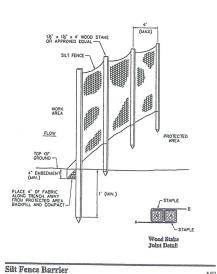
Grading and Drainage Plan 2

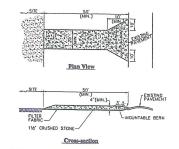
C-6

Sheet of 16





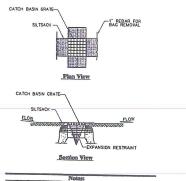




ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR FORESS OCCURS

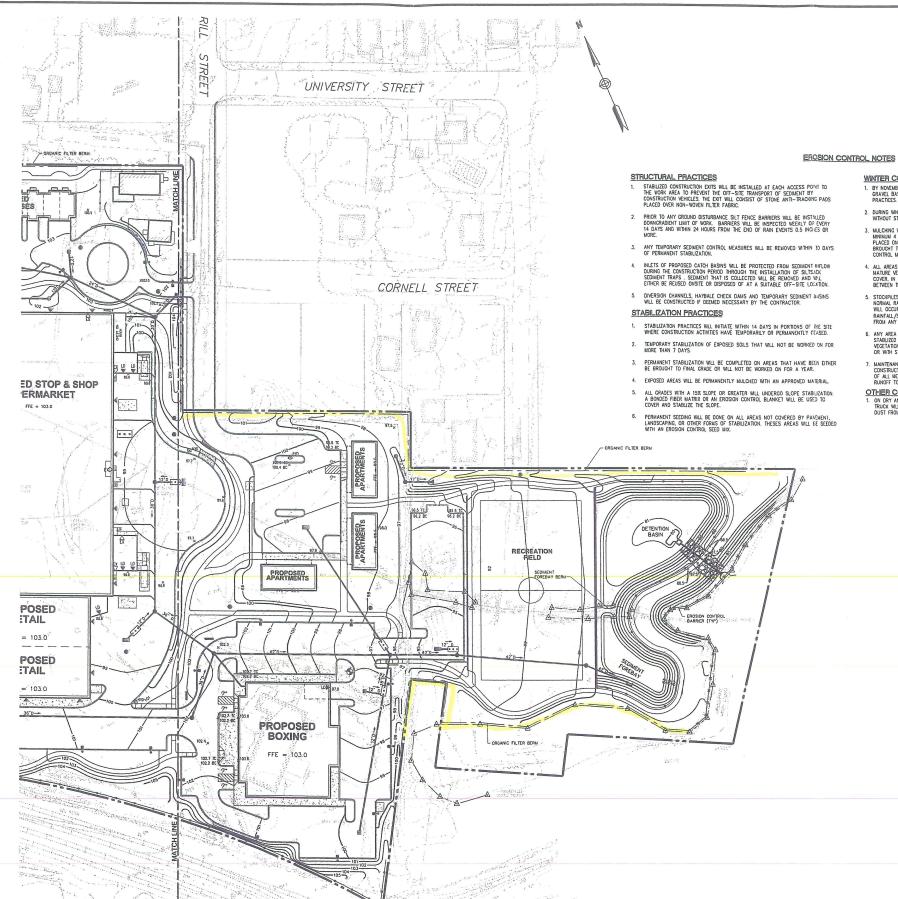
STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit



- GRATE TO BE PLACED OVER SILTSACK

Siltsack Sediment Trap



101 Walnut Street, P.O. Box 9151 Watertown, Massachusetts 02471 617 924 1770 • FAX 617 924 2286

WINTER CONSTRUCTION

- BY NOVEMBER 15 ALL AREAS OF THE SITE NOT STABUZED WITH PAVEMENT, ROAD GRAVEL BASE, 75% VEGETATION OR RIPRAP SHALL UNDERGO WINTER STABILIZATION PRACTICES.
- DURING WINTER CONSTRUCTION NO MORE THAN 1 ACRE OF THE SITE WILL BE WITHOUT STABILIZATION AT ANY GIVEN TIME.
- 3. MULCHING WILL CONSIST OF A COMBINATION OF HAY AND STRAW APPLIED AT A MINIMUM 4 WICH THICKNESS AT A RATE OF 150 LB. FER 1,000 SF. IT WILL BE PLACED ON 10P OF THE SYON, AT THE END OF EACH DAY ALL AREAS OF BROUGHT TO FINAL GRADE WILL BE STRABLIZED WITH HAY, STRAW. OR ENGSION CONTROL MATTING AND WILL DE FROPERLY ANCHORED.
- 4. ALL AREAS WITHIN 100 FT. OF NATURAL RESOURCES WILL BE STABILIZED BY 75% MATURE VECETATION OR BE MULCH WITH PROTECTION BY AN EROSION CONTROL COVER. IN ADDITION A DOUBLE ROW OF SEDMENT BARRIERS WILL BE PLACED BETWEEN THE NATURAL RESOURCE AND DISTURBED AREA.
- 5. STOCKPILES OF SOIL WILL BE MULCHED WITH HAY OR STRAW AT TWO TIMES THE NORMAL RATE OR WITH A FOURTH-INCH LAYER OF EROSON CONTROL MIX. MULCHING WILL DOCUR WITHIN 24 HOURS OF STOCKPILING OR BEFORE A MAJOR RASHFALL/SNOWFALL CYENT. ALL STOCKPILES WILL BE PLACE AT LEAST 100 FT. FROM AN'T MATURAL RESOURCE.
- ANY AREA HAVING A GRADE GREATER THAN 15% IS CONSIGERED A SLOPE. IF NOT STABLIZED BY SEPTEMBER 1ST THEM THE SOL WITH BE STABLIZED BY TEMPORARY VEGETATION AND EROSION CONTROL MATS OR SOD OR AM EROSION CONTROL MIX OR WITH STONE RIFFRAP.
- . MAINTENANCE ON EROSION CONTROL MEASURES WILL BE PREFORMED THROUGHOUT CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR A "MOJAL INSPECTION OF ALL MEASURES AFTER EACH RAWFALL, SNOWFALL OR PERIOD OF THANNING AND RUNGOF TIO ENSURE TUCTIONALTY.

OTHER CONTROLS

. ON DRY AND WINDY DAYS WHEN DUST GENERATION IS A CONCERN, A WATER TRUCK WILL TRAVERSE THE SITE AND SPRAY WATER AS NECESSARY TO PREVENT DUST FROM FORMING.



Morrill's Crossing

Allen Avenue Portland, Maine

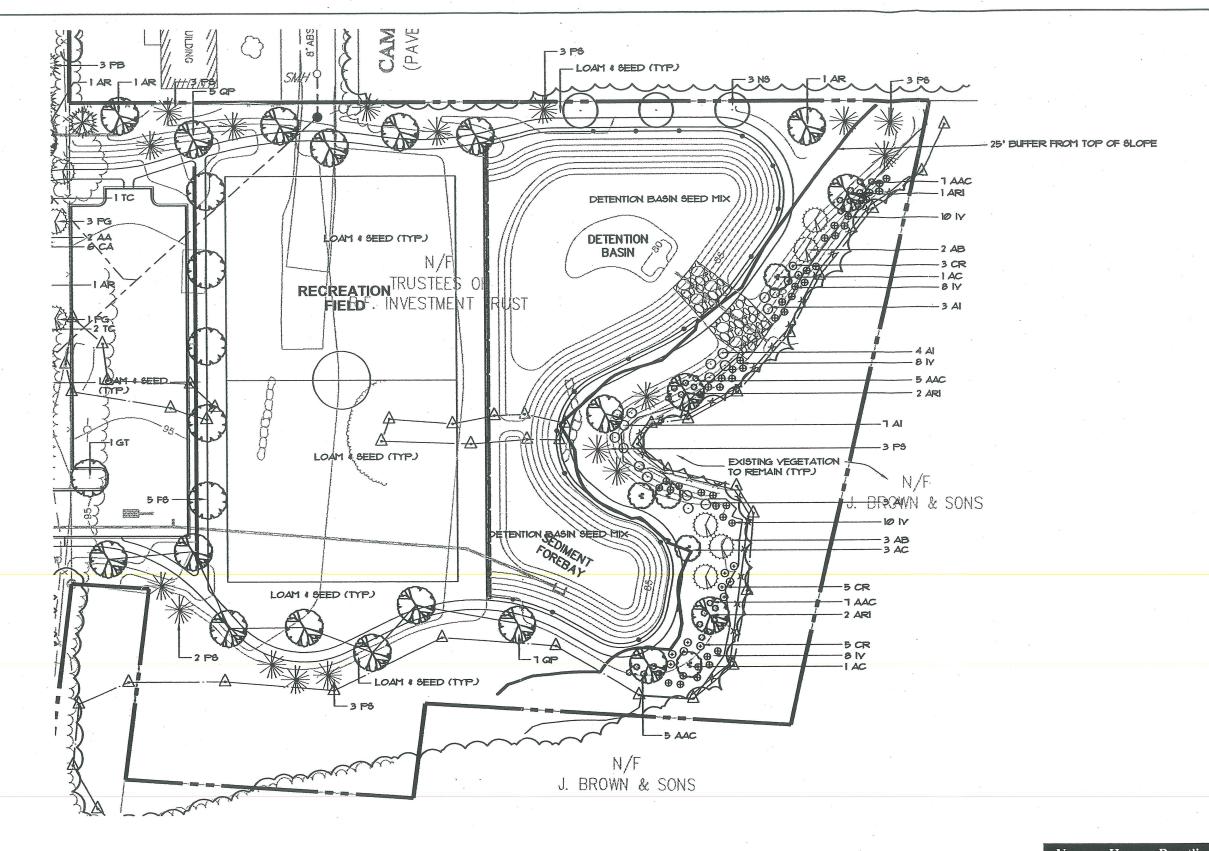
Site Plan Approval

Not Approved for Construction

Erosion Control Plan 2

Oreans Number C-8 Sheet of 16

Attachment O



Vanasse Hangen Brustlin, Inc.

MILLIKEN BROOK
LANDSCAPED BUFFER PLAN
MORRILL'S CROSSING
PORTLAND, ME

Fenstermacher, Dave

From:

Rico Spugnardi [RSpugnardi@pwd.org]

Sent:

Monday, December 12, 2005 11:44 AM

To:

Fenstermacher, Dave

Subject: RE: Portland, ME - Morrill's Crossing

Hi Dave.

We just looked at your proposed water main design and have the following comments:

- 1. A Fireline Meter with a meter pit located on private property will be required for this project at the connection to Allen Avenue. This will allow for metering of domestic water use for the site while still being able to handle the flows needed for fire protection for the site. There is a substantial cost increase for these meters from 12" to 8", so perhaps it makes sense for your mechanical engineer to investigate whether an 8" water main is sufficient for this site.
- 2. Because there will be a meter, the connection to the main in Morrill Street isn't desirable. With pressure/elevation not being an issue and adequate volume of water from the 20" main in Allen Avenue, we don't believe that looping into the 6" main in Morrill Street will add any significant benefit to the water main design. You should have your mechanical engineer confirm this as well.
- 3. All water mains, services, and hydrants located beyond the meter pit will be private and will be the responsibility of the owner of the project after construction.

Once you have incorporated these changes into your design, please submit a hard copy of the plans to us so that we can review the final design. If you have any questions or comments, please feel free to give me a call. We are also available to meet with you at any time to discuss the project at your convenience.

Thanks, Rico Spugnardi Design Engineer

Portland Water District 225 Douglass Street P.O. Box 3553 Portland, Maine 04104-3553 (207) 774-5961 x3199 (v) (207) 761-8307 (f) rspugnardi@pwd.org www.pwd.org

----Original Message-----

From: Fenstermacher, Dave [mailto:DHFenstermacher@VHB.com]

Sent: Monday, December 12, 2005 10:35 AM

To: Rico Spugnardi

Subject: Portland, ME - Morrill's Crossing

Rico,

Attached is a PDF of our proposed water line layout for the Morrill's Crossing project. I've highlighted the water line in blue. Below is the comment from our peer reviewer. Could you take a look at the layout to respond to the peer reviewer comment below, and also review the plan yourself and see if there are any additional comments that you would like to make?

1. The Portland Water District may require the installation of a Fire Line Supply meter and meter pit into the development since there will be multiple services for both domestic and Fire supply. Will a meter be required for the Morrill Street connection? The Final Plans should include these measures as required by the District.

Thanks, Dave

David Fenstermacher, PE VHB

Vanasse Hangen Brustlin, Inc.
101 Walnut Street
Post Office Box 9151
Watertown, MA 02472
T: (617) 924-1770 ext 1437
F: (617) 924-2286

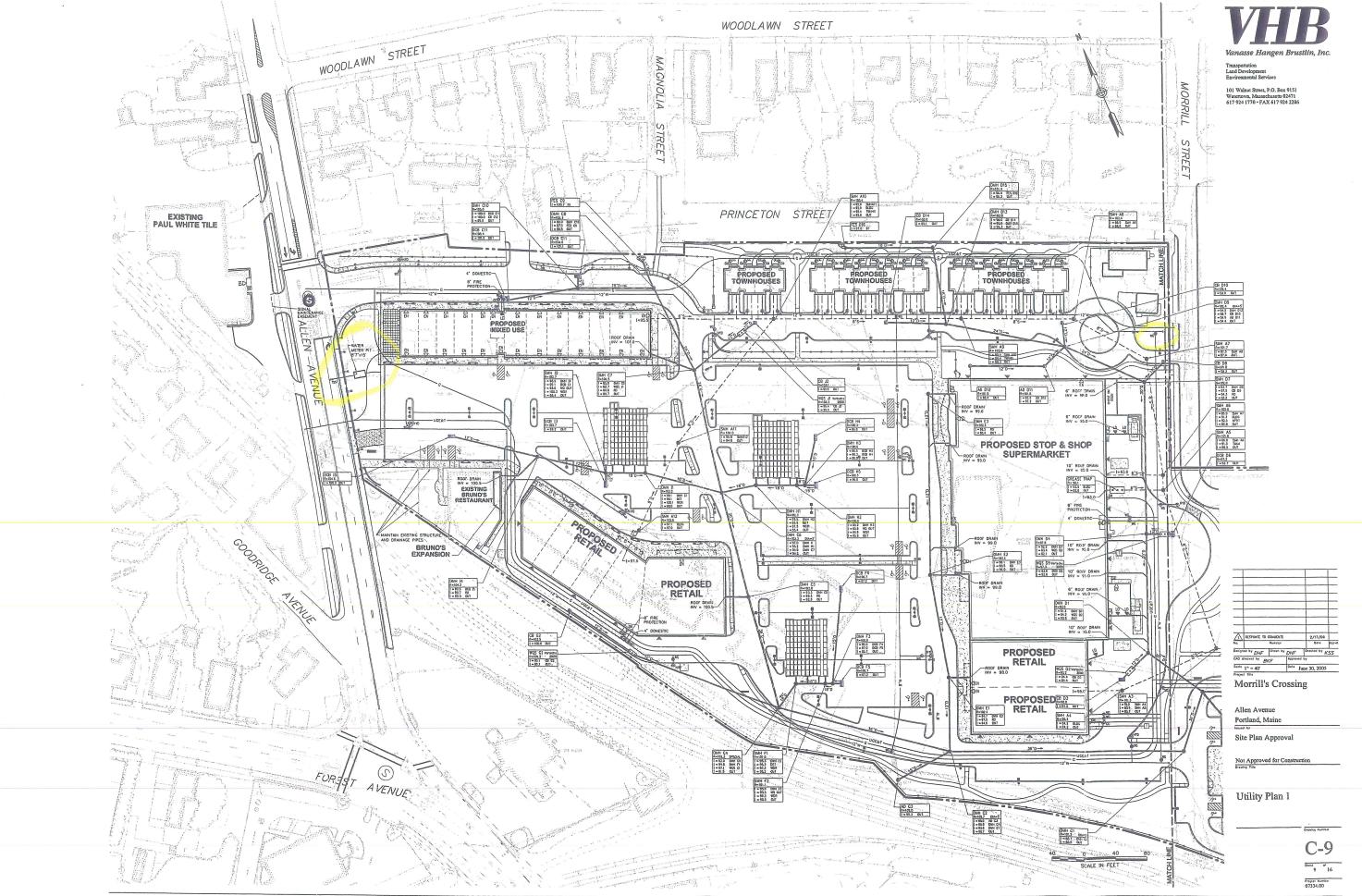
This communication is confidential and intended only for the recipient(s).

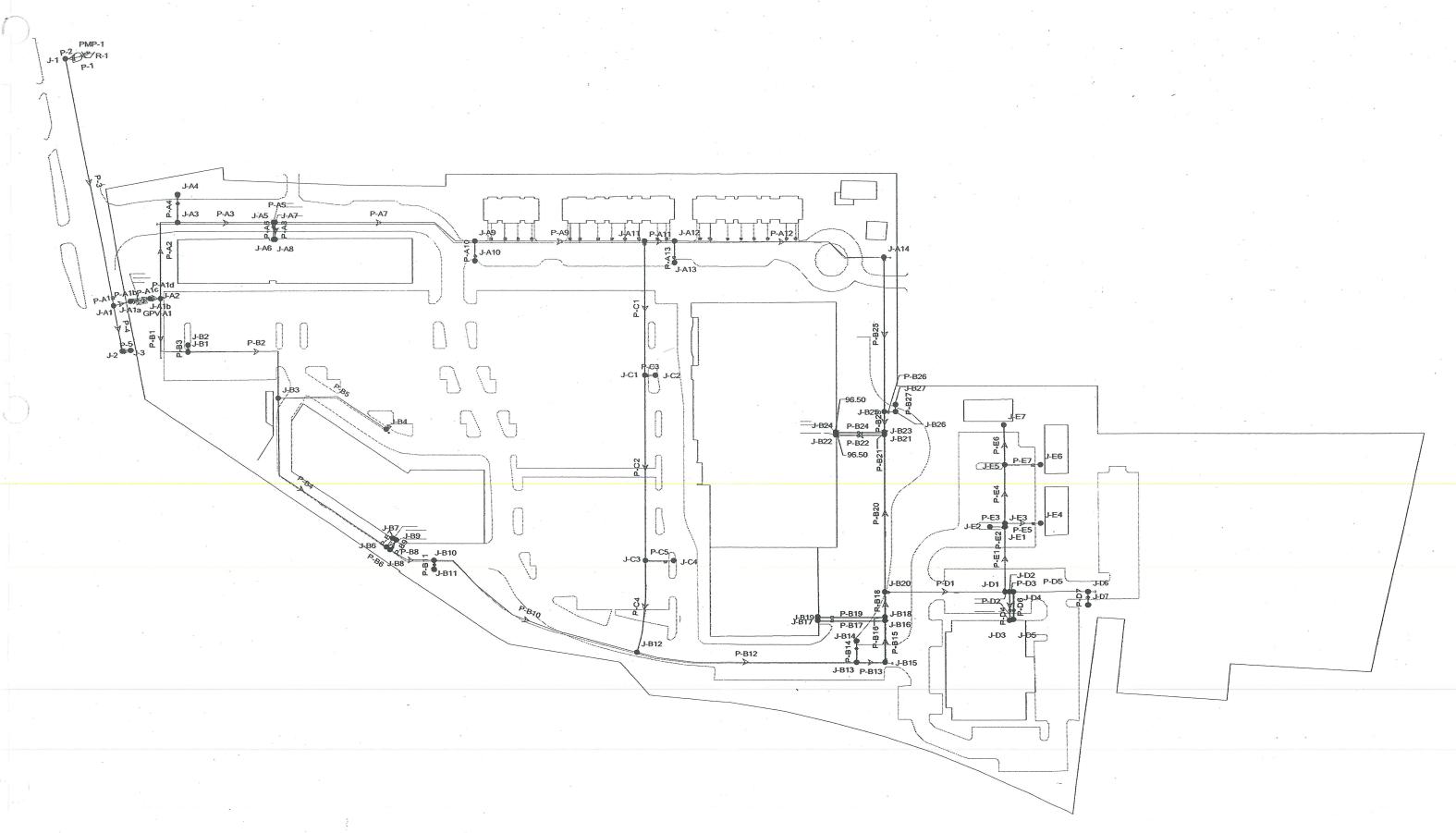
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Vanasse Hangen Brustlin, Inc. 101 Walnut St

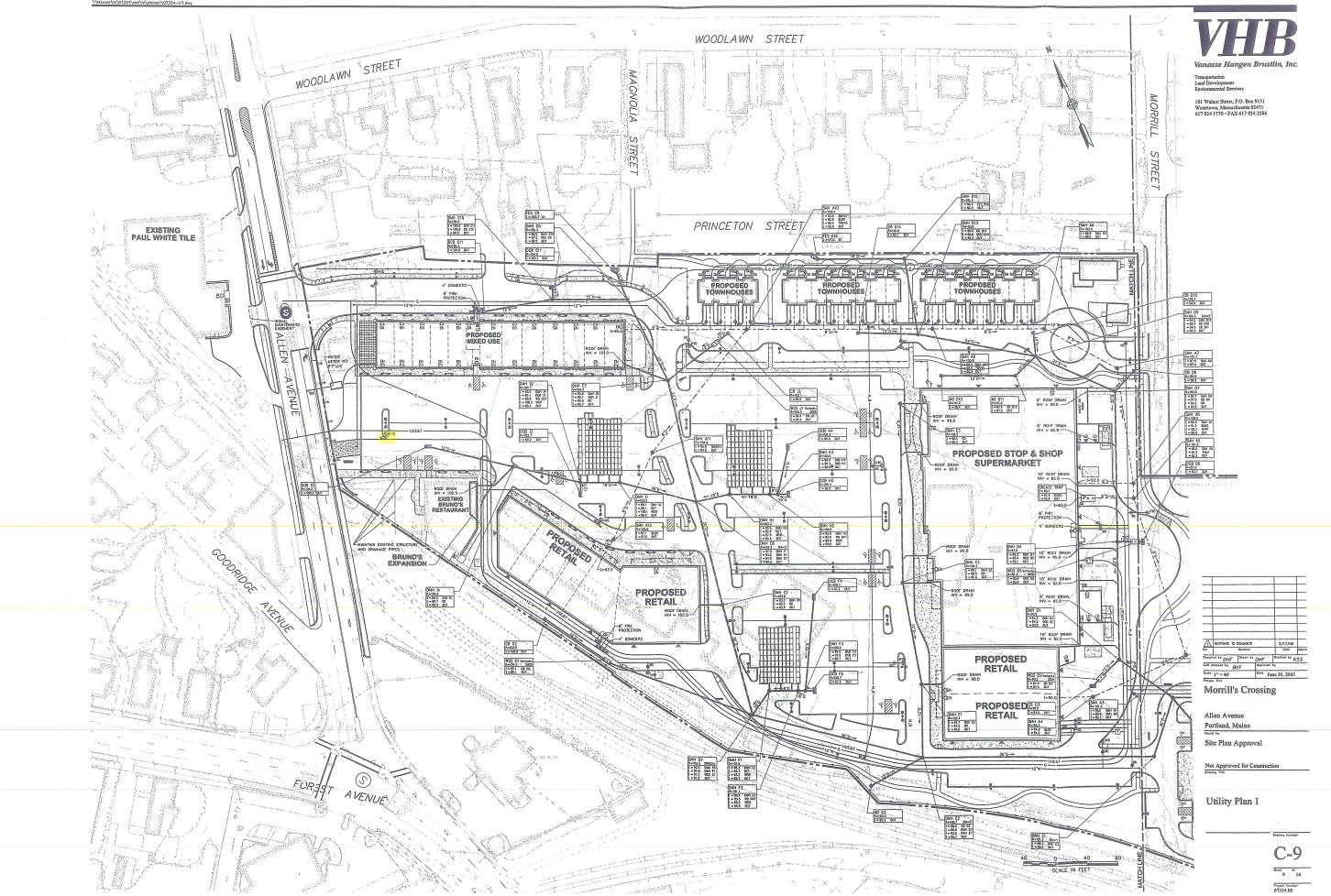
Watertown, MA 02472

617-924-1770





Minimum System Junction	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP PMP PMP	PMP-1	PMP-1	PMP-1	7 N N N N N N N N N N N N N N N N N N N	PMP-1	PMP-1	PMP-1	PMP-1	7 M M	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	T T T T	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	PMP-1	P	PMP-1	PMP-1	PMP-1	PMP-1-	PMP-1
Palculated Minimum System Pressure (psi)	-0.22	0.22	-0.22	-0.22	0.22	-0.22	-0.22	0.22	-0.22	-0.22	-0.22	0.22	-0.22	-0.22	0.22	-0.22	-0.22	-0.22	-0.22	-0.22	0.72	-0.22	-0.22	-0.22	0.22	-0.22	-0.22	-0.22	0.22	0.22	-0.22	0.22	0.72	-0.22	-0.22	0.22	-0.22	-0.22	-0.22	0.22	0.22	-0.22	-0.22	0.00	-0.22	-0.22	-0.22	0.22	-0.22
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Calculated Minimum Zone Pressure (psi)	57,99	66.29	66.29	57.91	66.50	60.23	57.21	66.29	66.29	57.42	56.37	56,33	57.09		59.13	56.88			59.33		66.29			141	55.80	54.87				57.14			58.65			56.47					58.07			61.79				66.29	
linimum Zone Pressure (psi)	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20,00	20,00	20.00	20,00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Calculated Residual Pressure (psi)	61.36	64.29	61.59	60.88	60.00	60.00	60.58	61.40	66.72	60.95	60,01	60.00	60.94	65.83	00.00	60.00	65.93	60.01	00.09	66,29	65.13	66.75	60.01	60.01	60.00	60.01	60.01	00.09	60.00	00.09	00.09	63.88	60.00	62.53	20.00		90.00	50.92			64.25			67.82				70.50	e e
Residual Pressure (psi)	60.00		00.00			60.00			60.00				00.00			60.00					60.00					90.00				90.00			00.00				00,00				60.00			60.00				80.00	
Total Flow Flow (gpm)	3,000.00		3,000.00	3,000.00		2,640.48	(7)	~ (3,000.00	- m			3.000.00		2,765.29	2,752.86		6.78	2,389.66	1,500.00	1,500.00	1,500.00	. 6 / 10			2,768.48	904.62	N	858.79	2,434.58	2,180.60	1,500.00	1,983,99	00.000,1	1,447.00		7,339,44		2,111.54	2,215.47	1,500.00			3,000.00		2,614.11	2,965.55	1,500.00	3,000.00
Total Flow Needed (gpm)	1,500.00		500.00	_		1,500.00		:	500.00				1,500.00		_	500.00	_	_			500,00		_	-		500.00				500.00				500.00			500.00			-	500.00		-	01,500.00		1,500.00	-	500.00	
Available Fire Flow (gpm)	3,000.00	1,500.00	3,000.00	3,000.00	1,411.37	2,640.48	3,000.00	1,500.00	3,000.00		2,860.08	2,819.15	3,000,00	1,500.00	2,765.29	2,752.86	1,500,00	2,760.20	2,389.66	1,500.00	1,500.00		2,867.24	2,858.32	2,981.24	2,768.48	820.62	\sim	858.79	2,434.59	2,180.60	1,500.00	1,983.99	00.000,1	1,427.00	2,170.21	2,339.44	1.500.00	2,111.54	2,215.47	1,500.00	1,500.00	3,000.00	3,000.00	3,046.30		2,965.55	01,500.00	3,000.00
Needed Fire Flow (gpm)	1,500.00	200.00	500.00	1,500.00	500.00	1,500.00	1,500.00	500.00	500.00	1,500.00	1,500.00	1,500.00	500.00	500.00	1,500.00	1,500.00	500.00	1,500.00	1,500.00	500.00	500.00	500.00	1,500.00	1,500.00	1,500.00	1,500.00	500.00	1,500.00	500,00	1,500.00	1,500,00	500.00	1,500.00	500.00	500.00	1,500.00	500.00	500.00	1,500.00	1,500.00	500.00	500.00	1,500.00	1,500.00	1,500,00	1,500.00	1,500.00	500.00	1,500.00
Satisfies Fire Flow Constraints?	true	true	true	true	true	true	true	true	true true	true	true	true .	true	true	true	true		true	true	true	true	true true	true	true	true	true	r c	true	true	true	true	true	true	true true	true	enut	troe	1 C C C	true	true	true	true true	true	true	fue fue	true	true	true	true
Fire Flow Fire Flow IterationsBalanced?	true		true			true true			true				true				, i					true true					true				true		W 76	17.0 17.0 17.0			true				true				true frie				true
Fire Flow Iterations	(n)						÷															n 0				*		4		20 4		m		4 0				4 W		4			, ,	i i	4 0	-			N W
al Zone	Zone Zone		1 Zone			Zone				2 Zone			11 Zone	10 Zone	5 Zone		2 20ne		26 Zone			2 20ne					23 Zone				1 Zone	-		Zone		_		2000				S Zone		Zone	Zone	4		27 Zone	1a Zone
Label	J-A2	J-A4	J-B1	J-83	J-84	J-86 J-87	J-88	J-B9	J-B-10	0 0	-C3	ပ် မ	-A-1		J-A5	J-A7	4 4 4 4 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	J-825	J-B26	J-C2	2	2-B-1	J-816	J-B18	J-B20		J-822	J-B24	J-81	ا 10 10 10	<u>, , , , , , , , , , , , , , , , , , , </u>	J-E2	J-E5		J-E4	J-E3	J-D2	4. C. L.	J-D5	J-D6	J-D7	- A A - D	, -,	2 5	ال الم الم	J-A-1	J-815	J-B27	J-A18





and Development

- 14" LIP MAX. SEE NOTE 9. AREA OF COLORED SURFACE

2.4.

1. THE MAXIMUM ALLOWACE SOEWALK AND CUBE RAMP CROSS SLOPES SHALL BE 1.5 (178 MM)

2. THE MAXIMUM ALLOWACE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CUBE RAMPS SHALL BE 5.1

3. THE MAXIMUM ALLOWACE SLOPE OF ACCESSIBLE ROUTE CUBE RAMPS SHALL BE 5.1

3. MINIMUM OF 3. FEET LORR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (E.E. HYDRAINS, UNILTY POLES, FEET WELLS, SONS, ETC.)

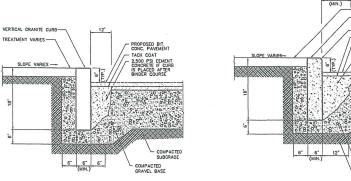
5. CURB THEATMENT VARIES, SEE PLANS FOR CURB TYPE.

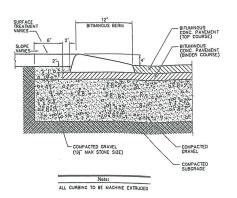
6. RAMP, CURB, AND ADJACENT PARKWITTS SHALL BE GRADED TO PERCENT PONDING.

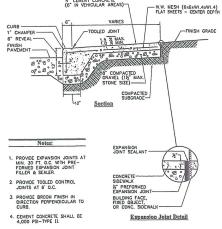
7. TYPICAL, SOCWALK SECTION FOR BAMP SECTION CONSTRUCTION.

(Plan View) (Profile)

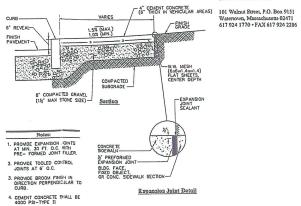
MENSIONS ARE CENTER TO CENTER







4" CEMENT CONCRETE (6" IN VEHICULAR AREAS)

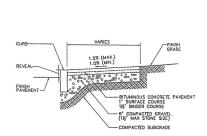


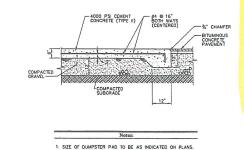
Vertical Granite Curb (VGC)

Precast Concrete Curb (PCC)

Bituminous Berm (BB) N.T.S.

Monolithic Concrete Curb (MCC) & Sidewalk Concrete Sidewalk





CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 40 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

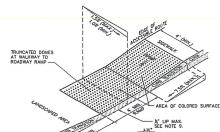
Dumpster Pad

NTS

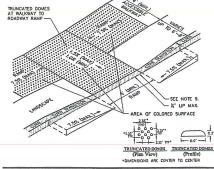


3. THE MARRION ALLWRINGS SUPE OF ACCESSING THOSE UND MANY SHAPE AT STATE AS A MANUAR OF JETET CLEAR SHALL BE MANTANCE AT ANY PERMANENT OBSTACE IN A MANUAR OF JETET CLEAR SHALL BE MANTEN OF JETET CLEAR THE MANTEN OF SHAPE OF JETET CLEAR THE MANTEN OF JETET CLEAR THE MARKET CLEAR THE MANTEN OF JETET CLEAR THE MANTEN OF JETET CLEAR THE MANTEN OF JETET CLEAR THE MARKET CLEAR THE MANTEN OF JETET CLEAR THE MANTEN OF JETET CLEAR THE MARKET SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
 WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN MOTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROMBED AT INTERVALS NOT TO EXCEED 200 FEET.

 ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH. INGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.



Bituminous Concrete Sidewalk



Accessible Curb Ramp (ACR) - Type 'B' Bituminous Concrete Pavement Sections N.T.S.

- X. LIP MAX

*DIMENSIONS ARE CENTER TO CENTER

TREA CAG TRUNCATED DOMES PRISCRO. TRUNCATED DOMES
(Plan View) TRUNCATED DOMES
(Profile)

. THE MAXIMUM ALLOWABLE SDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).

2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.

3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%. 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSBLE ROUTE CURB RAMPS SHALL BE 7:53.

4. A INIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTRACE IN ACCESSBLE ROUTE (C.E. WYDRATHS, UNLITY POLICE, TIEME WILLS, SORKS, ECC.).

5. CURB TREATMENT WARRES, SEE PLANS FOR CURB TYPE.

6. RAMP, CURB AND ADJACKENT TEACHERS THALL BE GRADED TO PREVENT PONDING.

7. TYPICAL SEQUENCE SCENED FOR RAMP SECTION CONSTRUCTION.

8. WHERE ACCESSIBLE ROUTES ARE LESS THAM, S'IN WORTH (SECTION CONSTRUCTION).

9. CHAINNET CORRISON FOR THAM VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABJUST AROUNG.

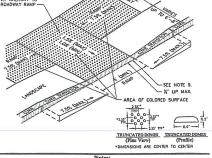
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.

Accessible Curb Ramp (ACR) Type 'M'

AREA OF COLORED SURFACE (Plan View) TRUNCATED DOMES (Profile) IONS ARE CENTER TO CENTER

- THE MAXIMUM ALLOWABLE SIDEWALK AND OURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
 THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING OURB RAMPS SHALL BE 5%
 THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%
- 3. THE MARIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURR RAMPS SHALL BE 7.5%.
 A NUMBLIAN OF STEET CLEAR SHALL BE AMMITTAINED AT ANY PERMANENT OSSTACLE IN
 ACCESSIBLE ROUTE (1.4., HIDDAM'S, UTILITY POLIS, THE WILL'S SIGNS, ETC.).
 CURB TREATMENT WHILE, SEE PLANEY FOR LUBB TYPE
 6. RAMP, CURB, AND ADJACENTY PAYBLINTS SHALL BE GRADED TO PREVENT PONDING.
 7. PYPICAL SIGNALLY SECTION FOR MARY SECTION CONSTRUCTION.
 6. WERER ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCELDING CURBING) A 5' is 5'
 6. WERER ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCELDING CURBING) A 5' is 5'
 FINISHED ADALL BE PROMOTION OF INTERVALS NOT TO EXCEED 200 FEET.
- 9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.

- 2	Accessible Curt	Ramp (ACR)	Type 'G'	6/
ì	N.T.S.	Source	VHB	LO_5



1. THE MAXIMUM ALLOWABLE SOCIMALY AND CURB RAMP CROSS BLOPES SHALL BE 1.5 (178 MH.).

2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EIGLIGHNIC CURB RAMPS SHALL BE 5.73.

3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURP RAMPS SHALL BE 5.73.

3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURP RAMPS SHALL BE 5.73.

4. A MINIMUM OF 3 FEET CLEAR SHALL BE MANITANIED AT ANY FERMALENT OBSTACLE IN ACCESSIBLE ROUTE (LL, HYDMATH, DUTLY POLES, THE WEBLS, SORIES, ETC.).

5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.

6. RAMP, CURB, AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.

7. TYPICAL SIDEWALK SECTION FOR RAMP SECTION CONSTRUCTION.

- 1. THE MAXIMUM ALLOWABLE SDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).

 2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.

 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSBLE ROUTE CURB RAMPS SHALL BE 5%.

 3. THE MAXIMUM OF 3 FEET CLEAR SHALL BE MAXIMINED AT ANY PERIMANENT OBSTRACE IN ACCESSBLE ROUTE (LE, HORDATIS, UILLY) POLSE. TIERE WELLS, SIGNS, ETC.).

 5. CURB TEATHER'S VARIES, SEE PLANS FOR DURB TYPE.

 6. RAMP, CURB, AND ADJACCHIF PARKENITS SHALL BE GRADED TO REVENIT PORDING.

 7. TYPICAL SUEWALK SECTION FOR RAMP SECTION CONSTRUCTION. 8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN MIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET. B. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' n 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
- 9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWNGS TO BE INSTALLED AND SET FLUSH.

Accessible Curb Ramp (ACR) Type 'I'

PASSING AREA SHALL BE PROVIDED AT INTERVALE TO COMME. EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLIFAT.

10. DETECTABLE WARRINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. Accessible Curb Ramp (ACR) Type 'J'

IONS ARE CENTER TO CENTER

). WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' a 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET. 9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS HOICATED ON THE DRAWINGS TO BE SET FLUSH. NINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES Accessible Curb Ramp (ACR) Type 'D' TRUNCATED DOMES AT WALKWAY TO AREA OF COLORED SURFACE TRUNCATED DOMES TRUNCATED DOMES | Site Plan Approval (Plan View) (Profile)
**OBJECTIONS ARE CENTER TO CENTER

THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (13 MIN.).
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3. THE MADMANN ALLOWAGE SLOPE OF ACCESSIBLE ROUTE CARRIER SAMES SHALL BE 7.5%.

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PROJECT ANALL BE PROVIDED AT INTERVALS NOT TO EXCED 200 FEET.

9. ELIMINATE CURBING AT RAMP OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHICHE IT AGUITS ROADWAY.

10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.

Accessible Curb Ramp (ACR) Type 'A'

C-13 5heat of 13 16 Project Number 07334.00

Drawn by

Morrill's Crossing

Not Approved for Construction

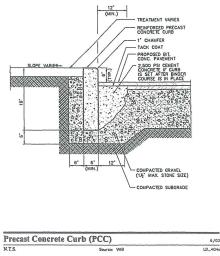
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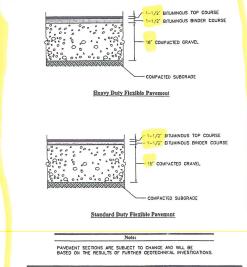
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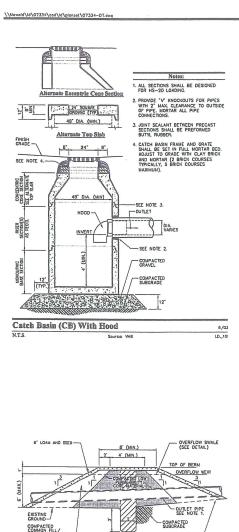
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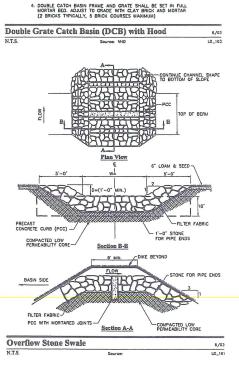
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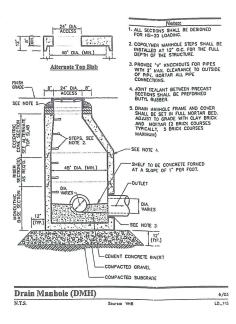


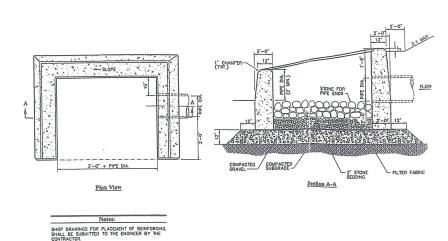
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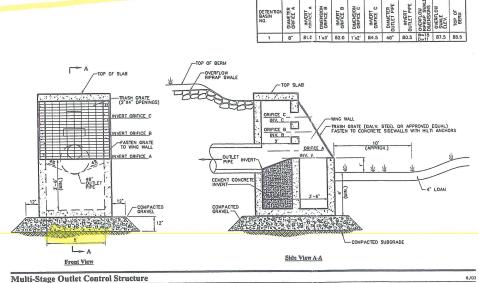
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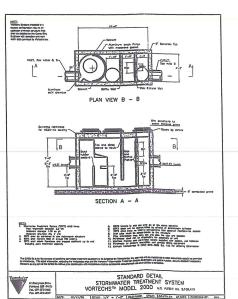






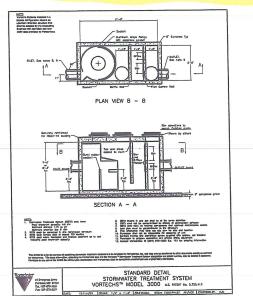
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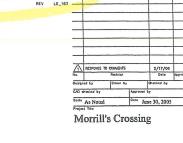




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Allen Avenue

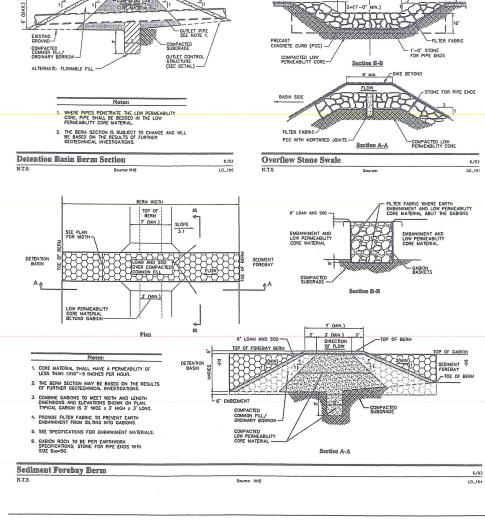
Portland, Maine Site Plan Approval

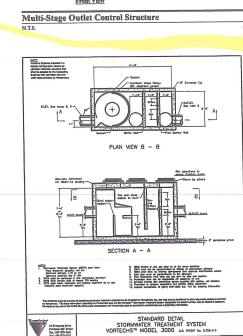
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Site Details 3

C-15 Drest e' 15 16 Project Number 07334.00

Oraning Humber





Directional Headwall

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Project Humber 07334.00

07334-GD DWG

Hession, John

From: Thomas Errico [terrico@wilbursmith.com]

Sent: Monday, January 23, 2006 5:09 PM

To: SH@portlandmaine.gov

Cc: KAS@portlandmaine.gov; Nagi, Robert; Hession, John

Subject: Morrill's Crossing -- Site Plan Comments

Sarah-

The following outlines my comments on the site plan for the above referenced project.

- 1. It seems that two different crosswalk treatments are being proposed for the project. An explanation on the selection of treatment should be provided. I would also ask that the City Engineer review and approve the specification for th "stamped" pavement proposal. I would also note that the City should provide guidance on whether the "stamped" treatment should be applied to the crossings on Allen Avenue.
- 2. I would suggest that the applicant provide a sidewalk on the easterly side of the main entrance roadway from the bus pullout to Allen Avenue.
- 3. The location of the crosswalk on the main entrance roadway at Allen Avenue seems to be set back too far.
- 4. I would suggest that the applicant provide crosswalks on all approaches at the Allen Avenue/Main Entrance Roadwa intersection.
- 5. The Main entrance roadway has a cross-section dimension of two 12' exit lanes and one 20' entry lane. I would suggest that the dimensions be adjusted to allow for some shoulder area exiting the site for bicyclists.
- 6. The main circulatory roadway through the site is proposed to be 30' wide. The applicant should document how this roadway will be marked. It is my opinion that the roadway be designed with such treatment that it appears to be the primary or highest classification roadway.
- 7. Two crosswalks are illustrated from the parking aisle to the Stop N' Shop store frontage. I would rather not have a crosswalk terminate in a travel lane. Elimination or alternatives to this treatment are recommended.
- 8. The applicant should document the winter maintenance program, particularly for all sidewalks and trails on their site.
- 9. All regulatory signage and pavement markings should be illustrated on a plan.
- 10. A waiver for the parking stall dimension standard will be required. The parking stalls are proposed to be 18' long. The standard is 19'.
- 11. Traffic control at key on-site intersections need to be illustrated. An example of this is at the intersection in front of the Boxing Facility.
- 12. Based upon the different land uses and size of the site, I would suggest that the applicant implement a wayfinding signage program that provides destination information.
- 13. The pavement arrows exiting the site should be revised to account for movements to Paul White Tile.
- 14. The applicant should confirm that the bus stop pullout dimensions have been approved by METRO.
- 15. I would suggest providing a crosswalk on the truck delivery driveway entrance and appropriate sidewalk connections to the store front. A good pedestrian connection should be provided between the proposed apartments and the retain portion of the site.

Please contact me if you have any questions or comments.

Thomas A. Errico, P.E. Senior Transportation Engineer Wilbur Smith Associates 59 Middle Street

Transportation Land Development Environmental •

Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 17, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Sarah Hopkins
Development Review Services Manager
Department of Planning & Development
City of Portland
389 Congress Street
Portland, Maine 04101

Re: Morrill's Crossing - Response to Tom Errico Site Plan Comments

Dear Sarah:

The following are VHB's responses to the site plan comments raised by Mr. Thomas Errico of Wilbur Smith Associates in his e-mail addressed to you dated, January 23, 2006 regarding Morrill's Crossing. Mr. Errico has raised several constructive comments that we believe improve the overall site design. Where these comments result in changes to the site plan, our proposed revisions are shown on attachments to this letter.

Comment 1:

It seems that two different crosswalk treatments are being proposed for the project. An explanation on the selection of treatment should be provided. I would also ask that the City Engineer review and approve the specification for the "stamped" pavement proposal. I would also note that the city should provide guidance on whether the stamped treatment should be applied to the crossings on Allen Avenue.

Response:

The proposed plan does specify two different crosswalk treatments for the project. The "stamped" pavement crosswalks serve as an urban streetscape treatment along the main entrance and along the primary pedestrian routes. They are intended to provide a visual interest and to clearly delineate the pedestrian corridors through the commercial and townhome portions of the development. Standard striped crosswalks are proposed in all other locations.

VHB discussed the use of the "stamped: pavement treatment with Mr. Errico and Mr. Eric Labelle from the Public Works Department. It is our understanding that Mr. Labelle approves of its use given that it is part of a private development.

www.vhb.com

Sarah Hopkins Project No.: 07334.00 February 17, 2006

Page 2

Comment 2:

I would suggest that the applicant provide a sidewalk on the easterly side of the main entrance roadway from the bus pullout to Allen Avenue.

Response:

As discussed with Mr. Errico, Mr. Patrick Carroll of Carroll Associates, and Planning staff, a sidewalk from Allen Avenue to the bus stop on the easterly side of the main entrance has been added to the plan. The change is highlighted on Attachment A.

Comment 3:

The location of the crosswalk on the main entrance roadway at Allen Avenue seems to be set back to far.

Response:

The crosswalk has been modified to be set closer to Allen Avenue. The new location is based on the turning movements requirements of entering vehicles. The new layout is highlighted on Attachment B.

Comment 4:

I would suggest that the applicant provide crosswalks on all approaches at the Allen Avenue/Main entrance roadway intersection.

Response:

VHB believes that the crosswalk, as originally proposed (crossing the northerly leg of Allen Avenue) provides adequate crossing opportunities, especially in light of the additional sidewalk provided along the site drive (see response to Comment 2). The addition of a crosswalk, crossing the southerly leg of Allen Avenue, would result in a reduction of the available queue storage between the railroad crossing and the site drive. VHB recommends that a single crossing of Allen Avenue remain in the location originally proposed.

Comment 5:

The Main entrance roadway has a cross section dimension of 12' exit lanes and one 20' entry lane I would suggest that the dimensions be adjusted to allow for some shoulder area exiting the site for bicyclists.

Sarah Hopkins Project No.: 07334.00 February 17, 2006

Page 3

Response:

The main entrance drive has been modified to allow for shoulder area exiting the site. The new lane configuration consists of one 18 foot wide entry lane, one 12 foot wide exit lane, and one 14 foot wide exit lane. The new configuration is highlighted in Attachment C.

Comment 6:

The main circulatory roadway through the site is proposed to be 30' wide. The applicant should document how this roadway shall be marked. It is my opinion that the roadway be designed with such treatment that it appears to be the primary or highest classification roadway.

Response:

VHB has added a single yellow centerline along the main site roadway. The change is highlighted in Attachment D.

Comment 7:

Two crosswalks are illustrated from the parking aisle to the Stop and Shop store frontage. I would rather not have a crosswalk terminate in a travel lane. Elimination or alternatives are recommended.

Response:

The crosswalks as shown are a Stop & Shop design requirement to delineate the accessible route from the store entrance/exit to the accessible parking spaces. According to Chapter 5: General Site and Building Elements of the <u>Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines:</u> "Accessible routes must connect parking spaces to accessible entrances. In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids."

Comment 8:

The applicant should document the winter maintenance program, particularly for all sidewalks and trails on their site.

Response:

As part of the general maintenance program, all sidewalks and trails will be cleared during snow storm events.



Sarah Hopkins

Project No.: 07334.00 February 17, 2006

Page 4

Comment 9:

All regulatory signage and pavement markings should be illustrated on a plan.

Response:

A regulatory signage chart, as well as the pavement markings, was illustrated on the Layout and Material Plans originally submitted. Those plans have been updated to reflect revision requested. Please refer to Attachment E.

Comment 10:

A waiver for the parking stall dimension standard will be required. The parking stalls are proposed to be 18' long. The standard is 19'.

Response:

The applicant has submitted a waiver request for the parking stall dimension to under a separate cover. Please note that the parking stall dimension was supported by Mr. Steve Bushey of Deluca-Hoffman in his review of the Site Plans.

Comment 11:

Traffic control at key on site intersections needs to be illustrated. An example of this is at the intersection in front of the Boxing Facility.

Response:

Stop signs have been added to the parking aisle approaches to the main drive aisle in appropriate locations as per Mr. Bushey's comments. Additional signage has been provided in the area of the Boxing Club intersection. The changes are highlighted in Attachment F.

Comment 12:

Based upon the different land uses and size of the site, I would suggest that the applicant implement a wayfinding signage program that provides destination information.

Response:

Directional signage has been added to the plans. The changes are highlighted in Attachment G.



Sarah Hopkins

Project No.: 07334.00

February 17, 2006

Page 5

Comment 13:

The pavement arrows exiting the site should be revised to account for movements to Paul White Tile.

Response:

The pavement arrow in the left exiting lane has been modified to show a through-left movement to account for movements to Paul White Tile. The change is highlighted in Attachment H.

Comment 14:

The applicant should confirm that the bus stop pullout dimensions have been approved by METRO.

Response:

The townhome drive cul-de-sac radii have been revised to provide for adequate turning movements for both busses and Fire Department vehicles. Updated plans have been sent to Metro for review. The revised cul-de-sac design is provided in Attachment I.

Comment 15:

I would suggest providing a crosswalk on the truck delivery driveway entrance and appropriate sidewalk connections to the store front. A good pedestrian connection should be provided between the proposed apartments and the retail portion of the site.

Response:

A sidewalk has been added to the side of the retail and a crosswalk connection has been provided on the truck delivery driveway connecting the store to the apartment walkway. The changes are highlighted in Attachment J.

Please give me a call if you have any questions or need additional information.

Very truly yours,

VAMASSE HANGEN BRUSTLIN, INC.

ohn Hession

Project Manager

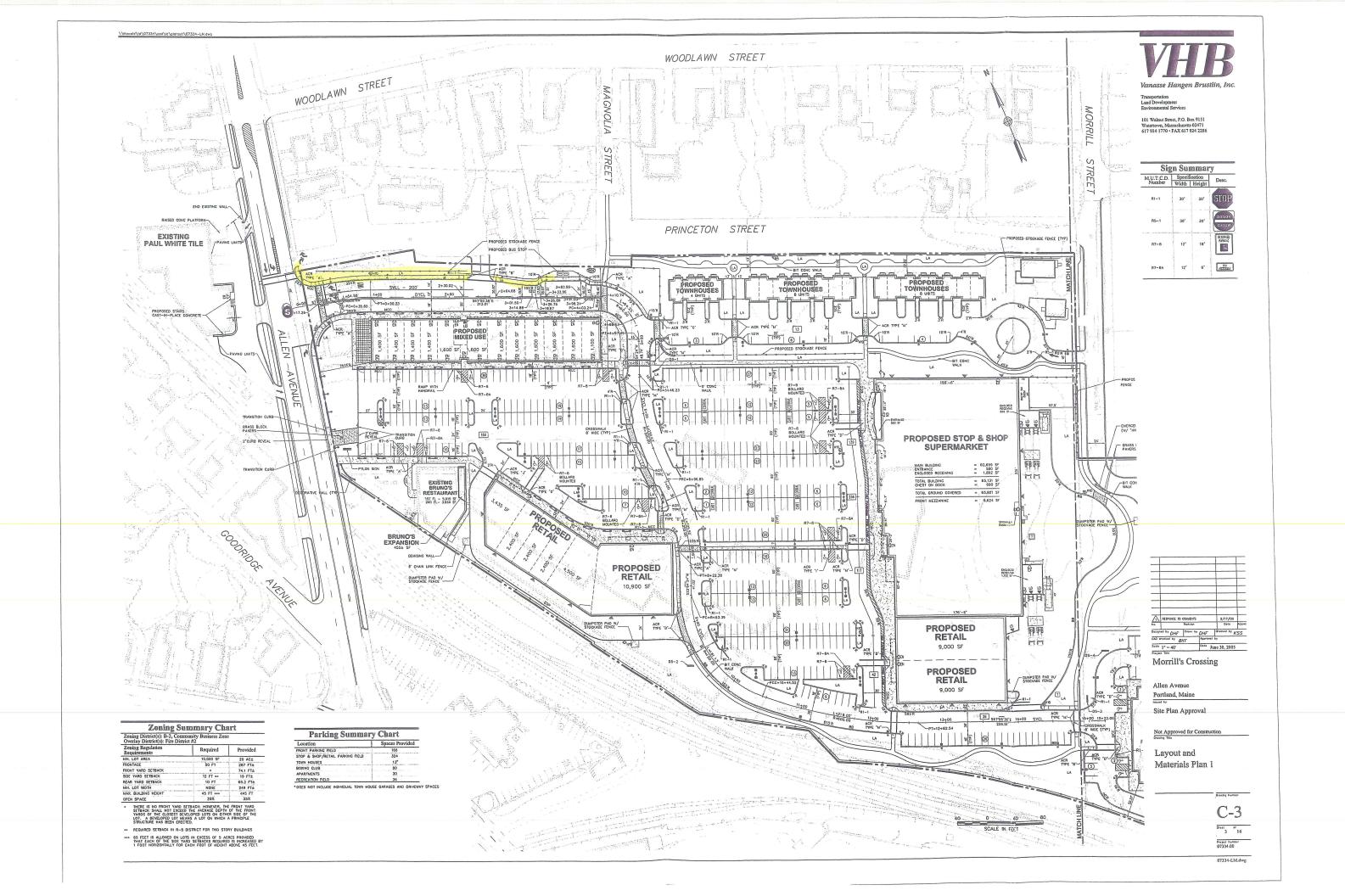
David Fenstermacher Project Engineer

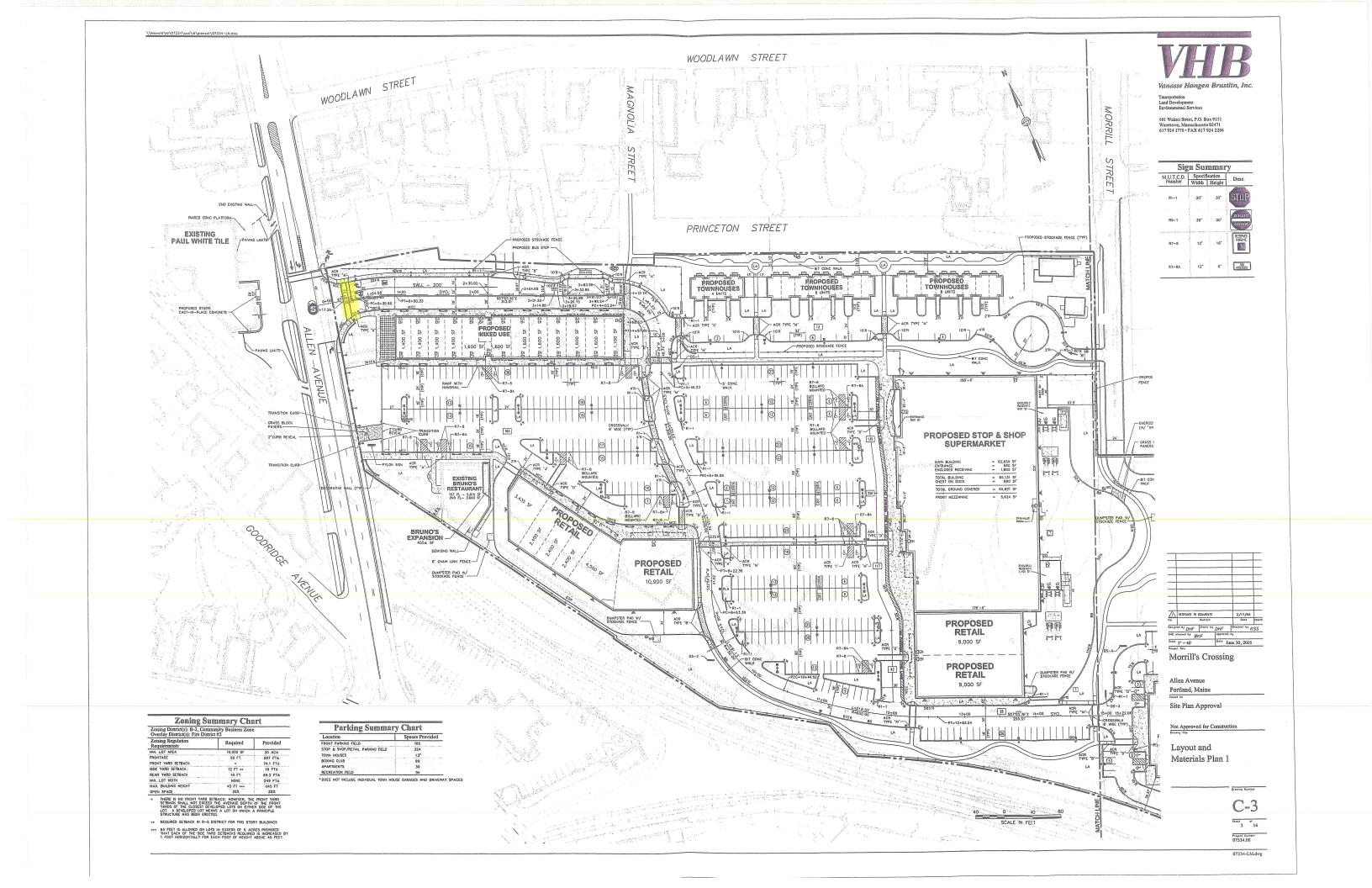
With attachments

cc: Thomas Errico - Wilbur Smith Associates

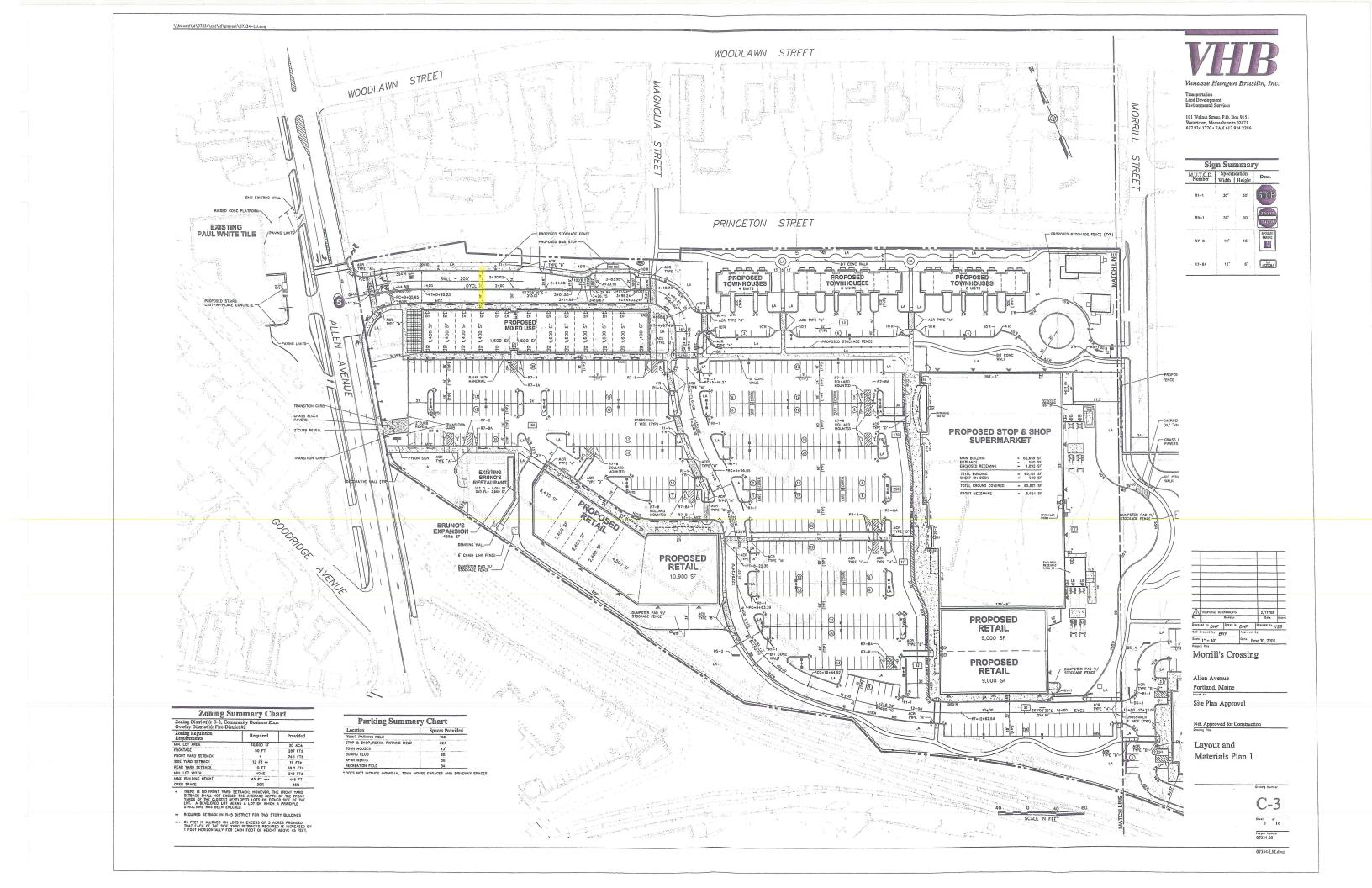


Attachment A



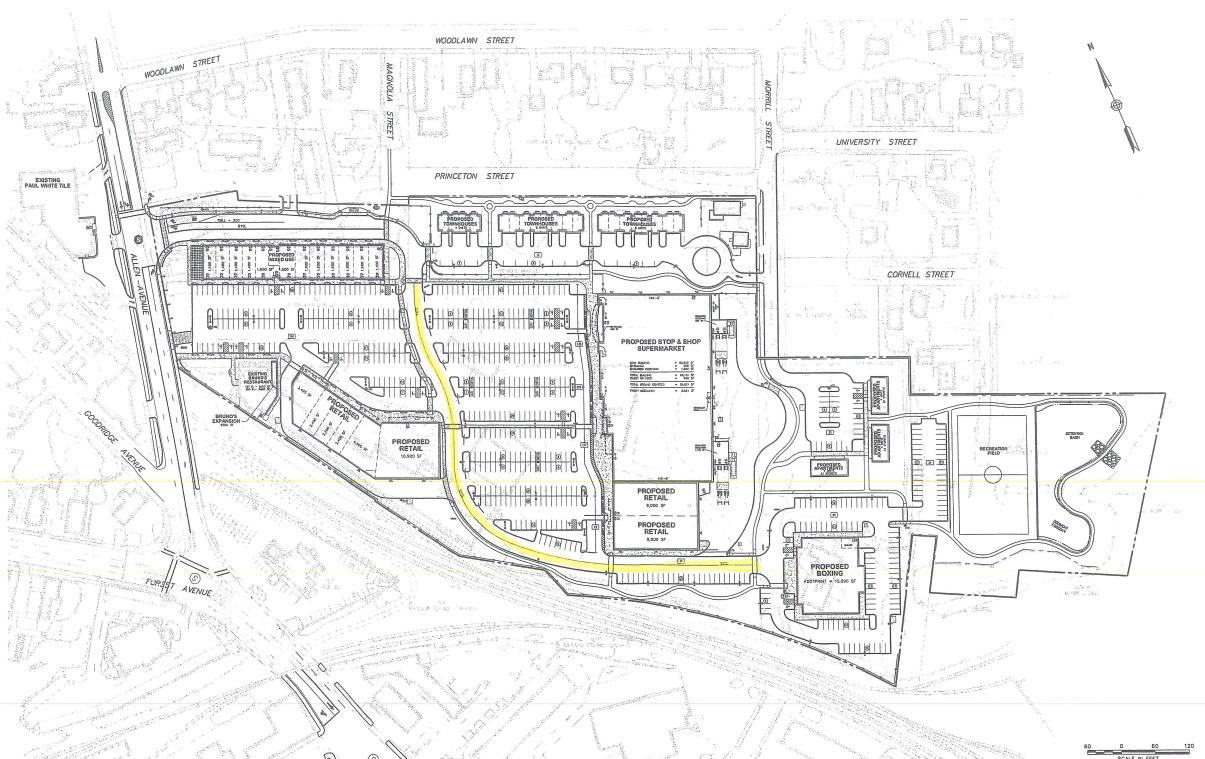


Attachment C





101 Walnut Street, P.O. Box 9151 Watertown, Massachusetts 02471 617 924 1770 • FAX 617 924 2286



Morrill's Crossing

Allen Avenue Portland, Maine Site Plan Approval

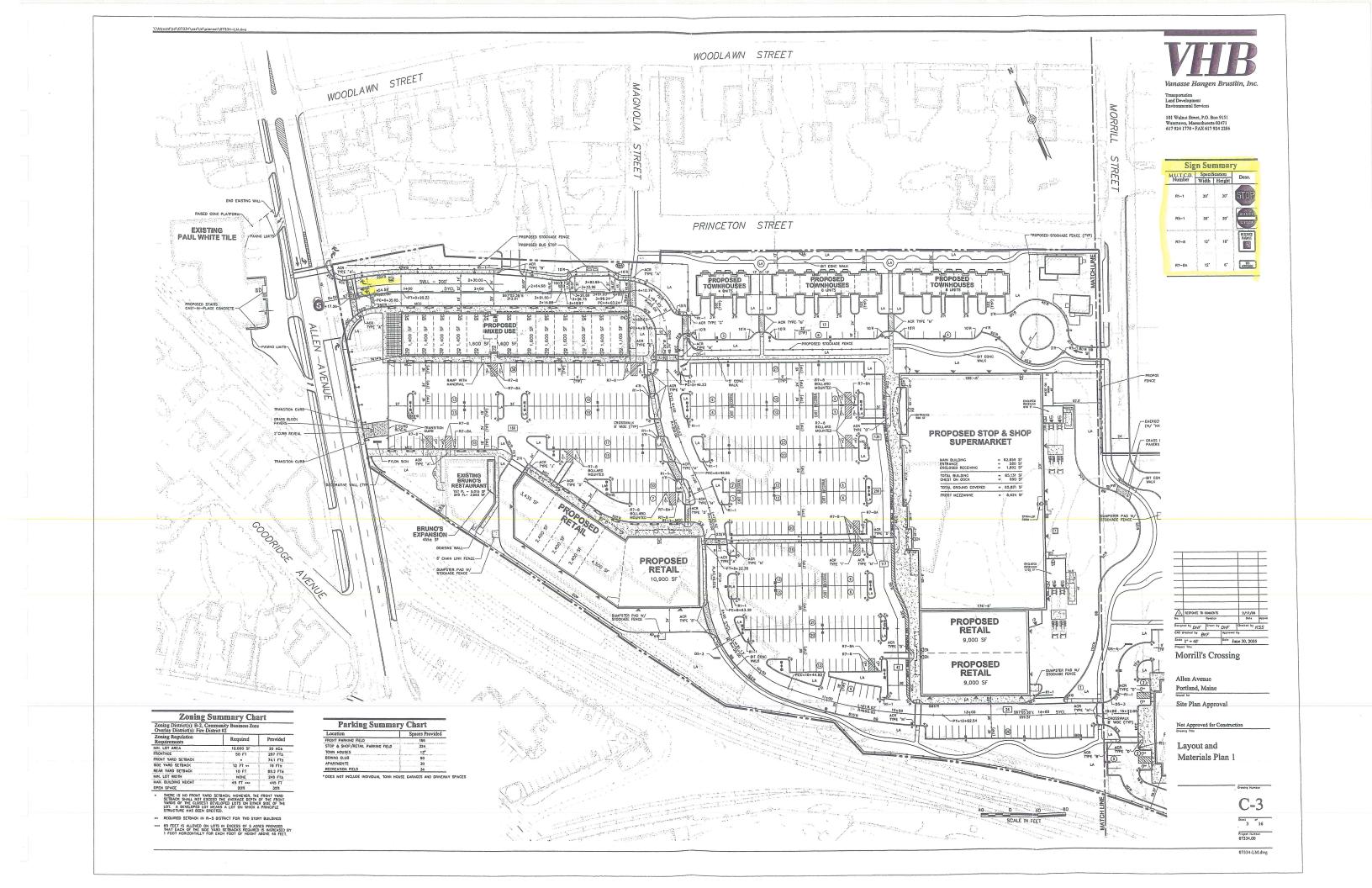
Not Approved for Construction

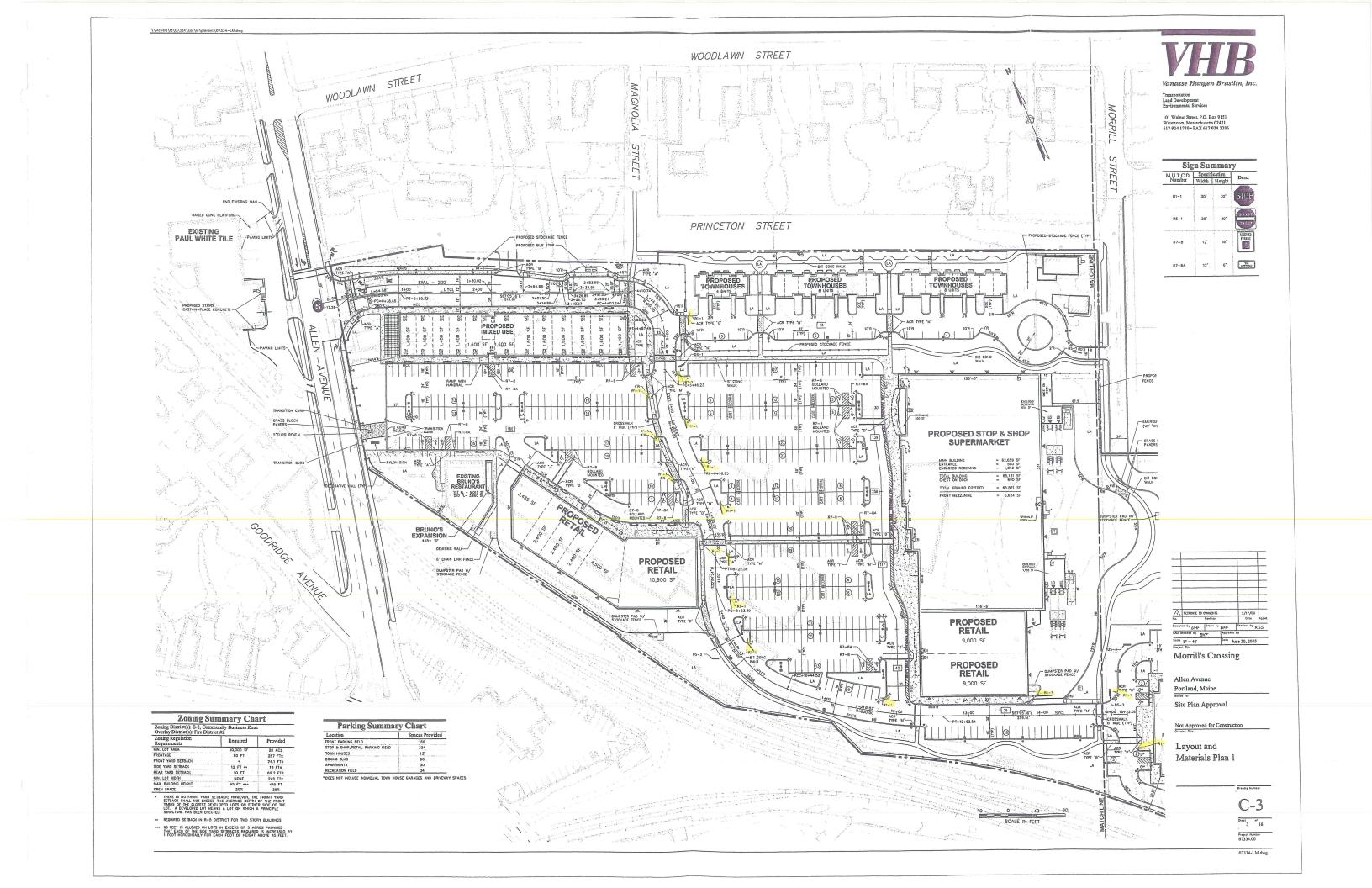
Overall Site Plan

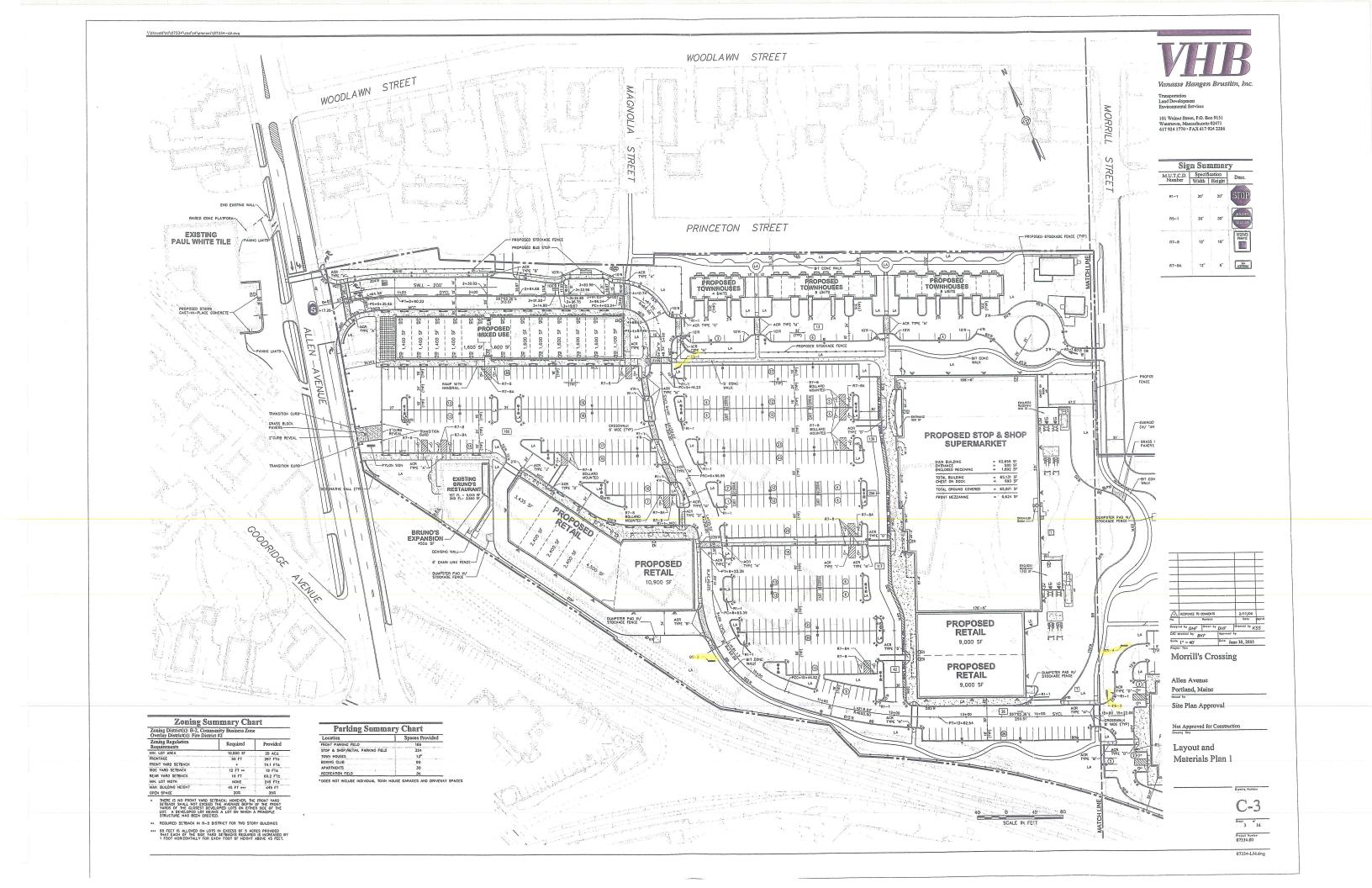
C-2 Sheet of 16

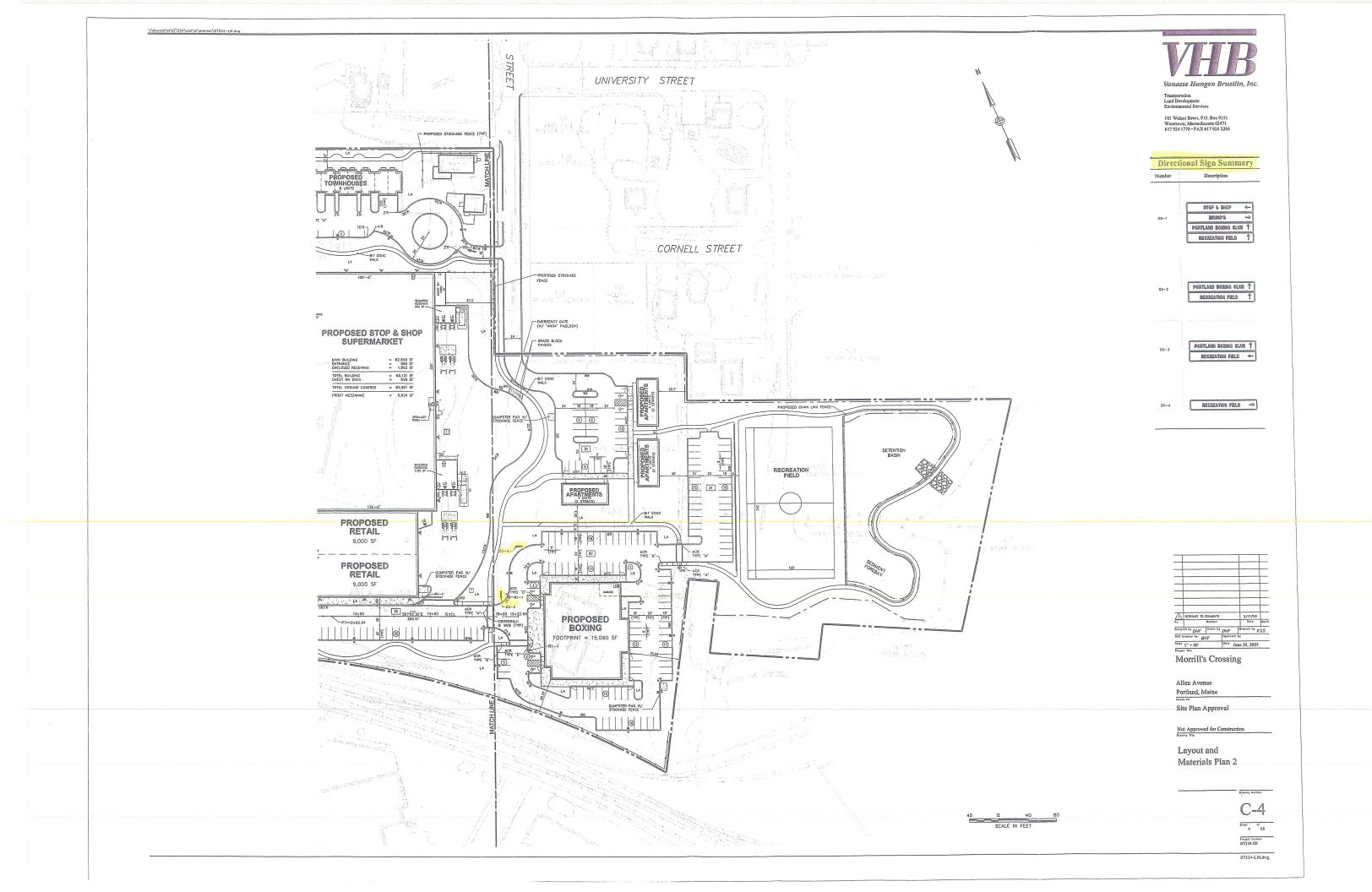
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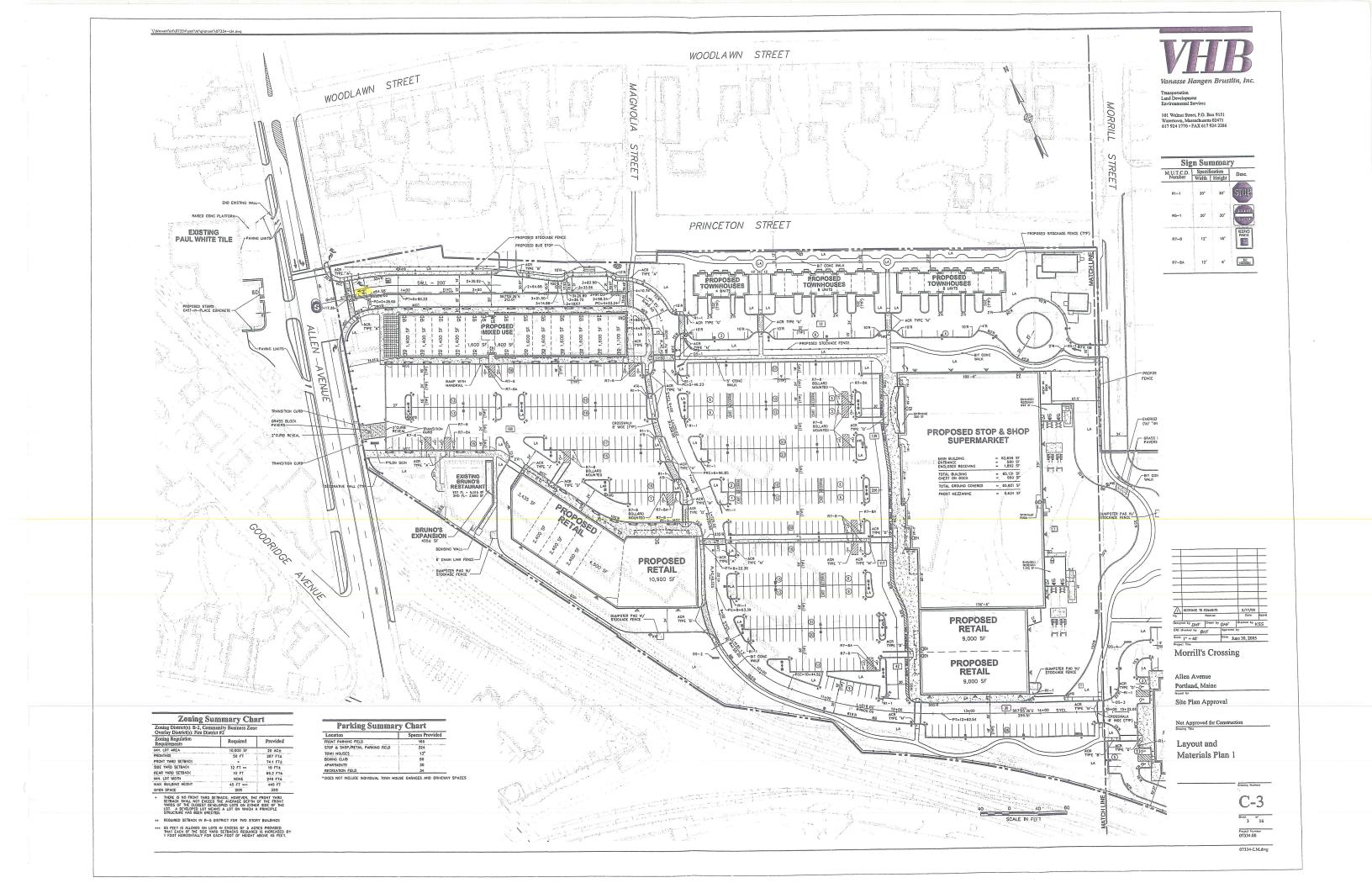
Attachment E

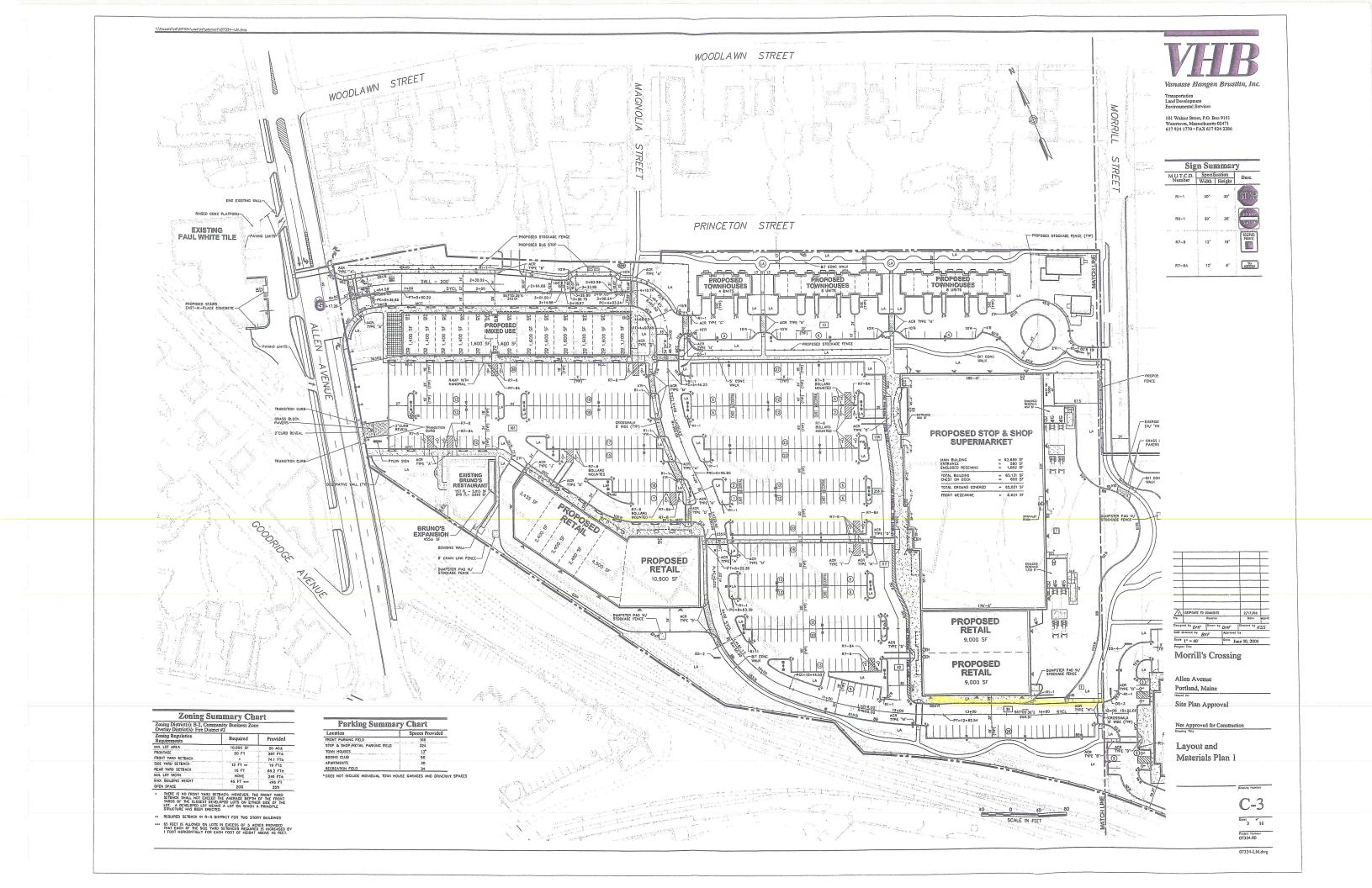














PROJECT MEMO: Morrill's Crossing

TO:

Sarah Hopkins

FROM:

Pat Carroll

DATE:

January 25, 2006

RE:

Landscape Peer Review

At your request, Carroll Associates has reviewed the proposed Morrill's Crossing project with respect to landscaping, buffering, screening, pedestrian circulation, and integration within the existing neighborhood. Reference materials included site visits, previous submission materials from the Applicant; discussions with the City Arborist and others in the horticultural industry, and specific review of the landscape plans for Morrill's Crossing (drawings C-9 and C-10 dated 6/30/05). The plans were reviewed for conformance with the City of Portland Land Use Standards (Chapter 14), B-2 and Contract Zone Requirements as well as Section VI- Arboricultural Specifications and Standards of Practice in the City of Portland Technical and Design Standards. Based on this analysis the following observations are made:

OVERALL SITE PLAN CONCEPT

The project consists of a mixed use development containing approximately 150,000 SF of non-residential space, 45 residential units on a parcel of land containing 20.2 acres of land. The site is located on the eastern side of Morrill's Corner in Portland abutting the Portland terminal rail lines along the south, Allen Avenue to the west, and an established residential neighborhood to the north. Primary access to the site will be from Allen Avenue across from Paul White Tile. The site is currently a mixture of vacant land and existing retail, warehouse, and office space which will for the most part be demolished for the proposed development.

An extensive landscape plan has been submitted which includes over 500 trees and 2774 shrub/groundcover plants, as well as preservation of a small amount of existing vegetation at the rear of the property

PERIMETER BUFFER PLANTINGS

The project directly abuts an established residential neighborhood to the north and proposes to buffer the project through a combination of landscape plantings and fencing. A 6-foot stockade fence is proposed to run along the north property line from Allen Avenue approximately 240 feet to the driveway connection with the Allen Avenue Apartments. It is unclear whether the fencing extends beyond this driveway but it is recommended that it be extended to the proposed Townhouses on the east side of Magnolia Street. A mixture of deciduous and evergreen plantings has been located on both sides of the fencing adjacent to the Allen Street Apartments in conformance with the technical guidelines. Along the middle portion of the site adjacent to Princeton Street a landscaped pedestrian esplanade is proposed. This landscaping, along with the placement of the townhouse buildings, seems to provide adequate buffering between the retail/ commercial uses and the residential neighborhood between Magnolia and Morrill Streets. A second section of stockade fencing is located on the northeast corner of the project adjacent to the residences on Morrill Street, extending approximately 280 feet along the west side of the Merrill Street right-of- way. Further east along the north property line minimal fencing is proposed. Supplemental buffer plantings here are rather sparse and not adequate to properly buffer the residential uses from the service area of the grocery, especially the residences that exist at Cornell and Cambridge Streets where lights from the recreation field parking lot will shine directly into the adjacent residence.

Morrill's Crossing Landscape Peer review January 26, 2006 Page 2 of 4

The site is highly visible from Forest and Allen Avenues, especially where the railroad crossings occur. At these locations views are predominantly at the rear of the proposed retail buildings adjacent to Bruno's and northeastward across the parking lot towards the Stop and Shop. A 6-foot chain link fence and minimal plantings are proposed continuously along the railroad line. In several locations some earth berming is proposed to help screen the parking lots. It is recommended that additional evergreen plantings be located along the south property line in the areas between Bruno's and the supermarket to more effectively screen the rear service and parking lots from view. The addition of stockade fencing and/or berming where feasible in this area will also aid in minimizing the impact of these areas from Forest and Allen Avenues.

Entrance plantings and landscaping along Allen Avenue seems attractive and will provide a welcoming arrival for visitors. Berming this landscape area between Allen Avenue and the development is recommended to significantly screen the parking lot and vehicles from view and allow the landscaping to become the foreground element in the streetscape.

INTERIOR BUFFER PLANTINGS

Buffer plantings have been proposed within the project to buffer between the residential uses and the retail/ office uses. This planting consists primarily of evergreen trees located along the north and east sides of the supermarket, attempting to soften and screen the building mass and service areas. Landscape strips are also located between the townhouses/ retail parking lot and apartments/ Boxing Club uses on the east end of the project. This planting appears adequate as a buffer between differing uses with the exception of the supermarket service area, where additional evergreen trees, lower shrub masses, and fencing could be used to provide significantly more screening of this activity than proposed. It is also recommended that the applicant consider providing shrub understory massings where Austrian Pines are indicated, as these trees tend to lose lower branches and their effectiveness in screening will be greatly diminished as they mature.

Dumpster locations are indicated on the site plan and are proposed to be screened with a wood fence. The addition of some plant material around these structures would help soften their visual impact. More importantly, however, there is concern regarding the number and location of the dumpster pads. There are none indicated adjacent to the Mixed-Use building or for the townhouses, and the two located behind the proposed retail building seem awkward for a refuse truck to service. Trash haulers typically will place the dumpster where it can be easily lifted, and if the enclosures do not work properly the fear is that the dumpsters will be left outside the enclosure.

Parking lot islands are well landscaped with a mixture of shade trees, shrubs, and perennials/ground covers and should provide an attractive element to the project. Technical Guidelines recommend that 10% of the parking area be landscaped and it is unclear whether this standard has been met with the proposed parking layout. Additional islands and plantings would help break up the mass of parking and provide shade, perhaps could be accommodated where light pole bases are located throughout, adding protection to the lights as well.

There is some concern regarding the extensive use of Inkberry (Ilex glabra) within the parking lot islands and throughout the site. The landscape plan specifies a total of 361 of this species to be used on the site. While the plant has a good form and is salt tolerant, it may not be suited for the harsh environment of a parking lot, where heat, dry soil, snow loading and wind burn could damage plants and lead to unsightly and dead plants. The applicant should consider using this plant where relatively protected and select anther species for the parking lot islands or where exposed to extreme growing conditions.

Morrill's Crossing Landscape Peer review January 26, 2006 Page 3 of 4

OTHER LANDSCAPE CONCERNS

Tree plantings indicated within cutouts in the sidewalks at the mixed-use building and other retail buildings appear to be located within very small openings (3'x3') in the pavement. Based on our experience and discussions with the City Arborist, the minimum opening size should be 24 SF, or and area approximately 6'x4'. It is also recommended that the cutouts be raised to reduce the amount of road salt and other toxins from the parking lots from being deposited in the treewell. Given the width of sidewalk indicated on the plan, there is concern whether the cutouts will allow adequate pedestrian movement along the walkway. There is also concern regarding the proximity of the trees to the buildings, but the species indicated (Armstrong Maple) is narrow and upright and should be able to survive in such a planting condition.

There is no street tree planting or other landscaping proposed in front of the supermarket and it appears that there are locations where some level of planting could be installed. This would greatly soften the front façade of the building, provide shade and interest for the pedestrian, and break up the scale of the building and pavement.

It does not appear that curbing is proposed in the island areas between driveways at the townhouses. Plantings here will not be protected from plows, vehicle wheels, etc and will have a difficult time growing. It is recommended that curbing be provided in all locations where planting or lawn areas could be subject to vehicular traffic and abuse.

Snow storage areas identified on the plan are minimal. Given the extensive landscaping proposed for the project, it appears that a plan for snow storage/removal is critical. There is little room on islands or lawn areas to plow snow, and those plant materials adjacent to roadways, parking areas, and sidewalks need to be able to withstand plowing conditions.

Preservation of existing vegetation is not well defined on the drawings. Notes indicate that tree protection will occur at the edge of grading limits, but this does not seem to be indicated on the plan. Technical Standards as well as standard practice recommends that protection extend to the dripline of the trees to be protected. Drawings and notes should be revised to better indicate the areas and means of protection.

It appears that the detention basins will function as dry basins except for periods of inundation during storm events. It may be desirable to provide some plantings on the sideslopes to soften its appearance and blend into the natural environment which it abuts. A taller fence along the field side might also be considered to minimize balls from ending up in the pond area, and a gate somewhere would aid in retrieving those that do.

Irrigation of the landscape areas is not proposed. It is recommended that the applicant consider such a system, as there is a major investment in plant material. it is relatively inexpensive to install/maintain, and is proven to greatly benefit landscape plants, especially in such a harsh setting.

With the extensive landscaping proposed it is critical that a maintenance program be established that protects the Owner, City, and neighbors and insures that all landscaping is properly maintained, replaced, and protected throughout the life of the project.

Morrill's Crossing Landscape Peer review January 26, 2006 Page 4 of 4

OTHER SITE PLAN CONCERNS

Pedestrian circulation is indicated throughout the project and in general seems to move pedestrians effectively. Several thoughts that would improve pedestrian circulation include:

- 1. Connect the sidewalk along the north side of the entrance roadway between Magnolia and Allen Avenue. This seems to be a natural connection and desired circulation route for pedestrians moving from the townhouses to Allen Avenue as well as neighborhood residents.
- 2. Connect the pedestrian sidewalk running east-west on the north side of the supermarket parking lot to Morrill's Street. This would allow neighborhood residents a more direct route to the supermarket as well as provide a connection to the apartments and recreation field in the rear.
- 3. Move the sidewalk along the supermarket service area to the east side of the landscape area, providing a greater buffer between the service area and pedestrian as well as making it more accessible for the apartment residents.
- 4. Provide additional berming and landscaping along the sidewalk between the driveway and railroad along the south side. This will be a pretty hostile environment for pedestrians and berming/landscaping can add interest and better separation between the two.
- 5. Provide a sidewalk connection between the two apartment buildings in the rear and the recreation field/ parking lot. This route will definitely be used by residents and it makes sense to provide such a pathway.
- 6. Provide a pedestrian connection between the pathway that extends around the field/ detention pond and Cambridge Street.

Site Lighting is proposed to be a combination of 15' high pole lights in the large parking lot, 12' high pole lights adjacent to the residential and pedestrian oriented uses, and building mounted wall packs on the rear and sides of the retail and supermarket buildings. It appears that lighting fixtures will be sharp cut-off type and that minimal spill of light will be present at the property lines. Building mounted lights on the north side of the supermarket seem to provide excessive levels of light and do not seem warranted at the levels proposed. Lighting of the service area is high directly adjacent to the building but falls off quickly as one moves away from the loading area. It is unclear from the application whether lighting will remain on all night or only when operating, and the Board may wish to request clarification on this item.

It appears that the project will be constructed in phases. While the townhouses and apartments do provide buffer and screening of the retail center from the neighborhood, if their construction is delayed it will be critical that adequate buffer planting and/or screening be installed to protect the neighborhood residences. It is unclear how much of the buffer planting would be installed in the initial phase of the project.

Noise levels from vehicular traffic, service loading/ unloading, and HVAC equipment could be substantial at certain periods of the day depending on size, frequency and timing. It should be noted that plant materials by themselves are not adequate to block or suppress typical noise. To be effective, noise baffles need to be solid such that sound is reflected back or over the barrier, not dissimilar to what is found along the Interstate highways. It is unclear what methods, if any, the applicant is proposing to reduce or control noise levels on the project.

Overall the landscape plan seems appropriate and will greatly soften the impacts of such a large development, buffer the existing neighborhood, and provide an attractive retail shopping and living environment. With consideration of the recommendations in this memorandum this project we look forward to its successful completion.

Transportation Land Development Environmental •

Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 17, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Sarah Hopkins
Development Review Services Manager
Department of Planning & Development
City of Portland
389 Congress Street
Portland, Maine 04101

Re: Morrill's Crossing - Response to Landscape Peer Review

Dear Sarah:

The following are VHB's responses to the landscape peer review recommendations offered by Mr. Patrick Carroll of Carroll Associates in his memo addressed to you dated, January 25, 2006 regarding Morrill's Crossing. Mr. Carroll concludes that "the landscape plan seems appropriate and will greatly soften the impacts of such a large development, buffer the existing neighborhood, and provide an attractive retail shopping and living environment". In his review, Mr. Carroll has offered recommendations that we discussed in a meeting with him where you were present. Several of Mr. Carroll's recommendations have been considered and are addressed below. Draft copies of the landscape drawings reflecting the changes discussed below are included as an attachment to this letter.

PERIMETER BUFFER PLANTINGS:

Comment (page 2 of 4):

The site is highly visible from Forest and Allen Avenues, especially where the railroad crossings occur. At these locations views are predominantly at the rear of the proposed retail buildings adjacent to Bruno's.

Response:

Large evergreens have been added to infill between the proposed Maple Trees creating additional screening to the back of the buildings throughout the year.

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Sarah Hopkins Project No.: 07334.00 February 17, 2006 Page 2

INTERIOR BUFFER PLANTINGS:

Comment (page 2 of 4):

...with the exception of the supermarket service area, where additional evergreen trees, lower shrub masses, and fencing could be used to provide significantly more screening of this activity than proposed. It is also recommended that the applicant consider providing shrub understory massings where Austrian Pines are indicated.....

Response:

Additional large evergreens and understory shrubs adjacent to the service area have been added including: Dense upright evergreen shrubs and perennials to create screening, year round interest and continuity for visual appeal from the apartments.

Comment (page 2 of 4):

There is some concern regarding the extensive use of Inkberry (Ilex glabra) within the parking lot islands and throughout the site.

Response:

The use of Inkberry has been reduced and replaced with Dwarf Mugo Pine in areas of high salt/plowing exposure, which have proven to withstand this type of abuse.

OTHER LANDSCAPE CONCERNS

Comment (page 3 of 4):

Tree plantings indicated within cutouts in the sidewalks at the mixed-use building and other retail buildings appear to be located within very small openings (3'x3') in the pavement. Based on our experience and discussions with the City Arborist, the minimum opening size should be 24 SF, or and area approximately 6'x 4'.

Response:

The 3'x3' cutouts have been increased to 3'x12' and include perennials and concrete pavers. Additionally, structural soil will be provided to sustain long term growth and greater potential for more root growth area. Concrete pavers will be dry laid providing a larger area of pervious paving for water infiltration.



Sarah Hopkins Project No.: 07334.00 February 17, 2006 Page 3

Comment (page 3 of 4):

There is no street tree planting or other landscaping proposed in front of the supermarket and it appears that there are locations where some level of planting could be installed. This would greatly soften the front façade of the building...

Response:

Freestanding planters have been added to the plan in front of the two Proposed Retail buildings south of the Proposed Stop & Shop. Planters will be a minimum of 5'x5' containing one large ornamental plant encompassed by proposed annuals. Stop & Shop has found that plantings in the walkway along the front of the store actually create conflicts due to the volume of customers with shopping carriages.

Comment (page 3 of 4):

It does not appear that the curbing is proposed in the island areas between driveways at the townhouses.

Response:

Curbing has been added to these areas on the plans to protect the proposed plantings.

Comment (page 3 of 4):

Drawings and notes should be revised to better indicate the areas and means of tree protection.

Response:

Tree protection has been added to the plans in several locations the notes have been revised to reflect the suggestions. The landscape notes have also been revised and now refer to the Tree Protection Fence Detail.

Comment:

With the extensive landscaping proposed it is critical that a maintenance program be established that protects the Owner, City, and neighbors...

Response:

The Plan Maintenance Notes have been revised in order for the contractor to provide a complete maintenance program to the owner for plant and lawn care.



Sarah Hopkins Project No.: 07334.00 February 17, 2006

Page 4

Other items that are identified in Mr. Carroll's memo include dumpsters (page 2 of 4), 10% interior parking lot landscaping (page 2 of 4), and pedestrian circulation (page 4 of 4). These are all items that were discussed at our meeting and the following summarizes our understanding of the discussion.

With respect to the dumpsters, it was clarified that they are located within the mixed-use building, the townhomes will have curb-side pick-up, and the dumpsters behind the proposed retail (adjacent to the railroad tracks) are roll-out units. It is our understanding that this discussion adequately addressed Mr. Carroll's comments regarding dumpsters.

Within the main parking lot (retail and supermarket parking), approximately 8% interior parking lot landscaping is provided. This is consistent with the landscaping proposed as a part of the conditional rezoning for the property. It is important to note that the overall open space/landscaping for the development exceeds 6.5 acres providing nearly 35% open space. In the design of the parking lot landscaping, a portion of the interior landscaping has been allocated to the perimeter landscape/buffer to address concerns raised during the conditional rezoning process. We believe that the landscape design is consistent with the conditional rezone and the City's Standards of Practice and Landscape Guidelines.

Mr. Carroll also provided six comments regarding pedestrian circulation. These comments were all discussed with planning staff and Mr. Errico. Sidewalks have been added in all locations where recommended by Mr. Carroll. With respect to the recommendation to provide additional berming along the railroad, we will work to incorporate additional berming as we prepare a fully revised set of permit drawings. Lastly, a pedestrian connection to Cambridge Street as not been provided due to the concern that Cambridge Street would be used for parking by the users of the recreation area. We are open to discuss this further with staff.

Please give me a call if you have any questions or need additional information.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

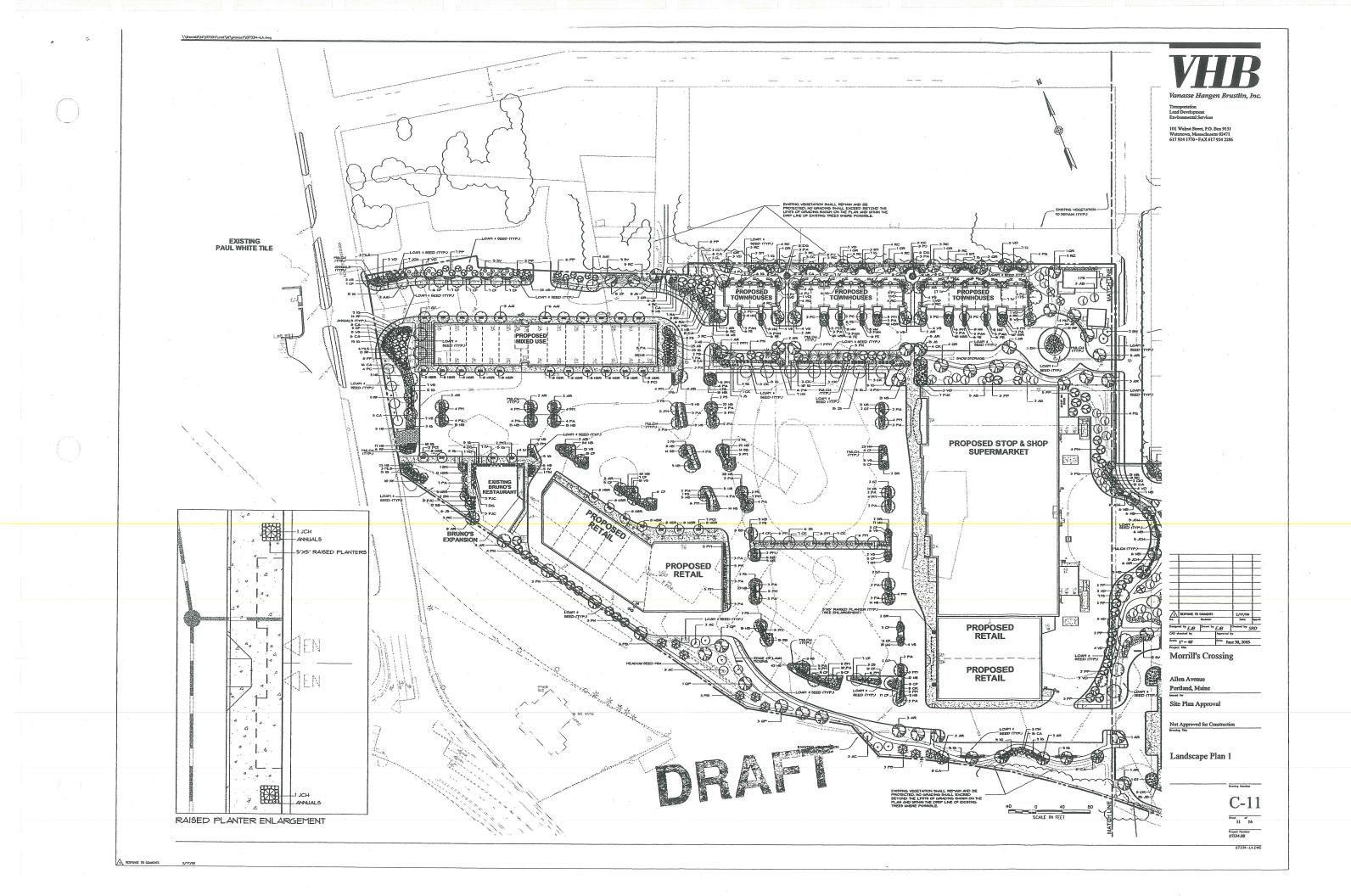
ohn Hession roject Manager

David Fenstermacher Project Engineer

Enclosure

Pat Carroll - Carroll Associates.





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3	a	CLADRASTIS LUTEA	YELL OBBOOD	24-3" CAL
30	PS	FRAUGNUS PENNSYLVANICA SUPPITT	SUMMIT GREEN ASH	213-3" CAL
23	Q.T	GLEDITRIA TRIACANTHOS SHADE MASTER	SHADE MASTER HONEY LOCUST	243-3" CAL
3	NB	NYSSA BYLYATICA	RIFELO	213-3" CAL
B	PC	PYRUS CALLERYANA 'CHANTICLEER'	CHANTICLEER PEAR (HIGH BRANCHED)	24-3° CAL
29	PCI	PYRIS CALLERY AND CHANTICLEER	CHANTICLEER FEAR (HIGH BRANCHED)	3-31/2" CAL
21	COR.	GIERCIS PALISTRES GIERCIS RUBRA	PN OAK	213-3" CAL
6	16	TILIA CORDATA YSREDISPIRE	GREENSPIRE LINDEN	213-3" CAL 213-3" CAL
24	28	ZELKOVA SERRATA GREEN VASE"	GREEN VASE ZELKOVA	312-3° CAL
_	-	ORNAMENTAL TREES	GIELI FAGE ZEDOVA	27-9 000
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6	SIR	SYRINGA RETICULATA TYORY BUK	NORY SILK TREE LILAC	2-24 CAL
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13	AB	ARRES THE SAME A		11 10000000
III	FD	ABIED BALBATEA PICEA ABIPO	BALBAT FIR	6-T HT
31	PG	PICEA GLAUCA	NORMAY SPRICE	6-T HT
BT	PP	PICEA PUNGENS	COLORADO SPRUCE (HIDED GREEN/BLUE)	6-THT TH T-0
9		PICEA PINGENS THOOPSERT	MOORAEM COLORADO SPRUCE	TH T-B
14	PB	PINAS STROBUS	NAME PONE	A-T HT
23	PN	PNIS NIGRA	AUSTRIAN PINE	6-T' HT.
	_	SHRUBS AND GROUND COVER		
	-	WALL AND COLOR		
LIP.	CA	CLETHRA ALNIFOLIA	HUTTINGBIRD SUPPERSUEET	2-212" HT.
274	0	RUDBECKIA RILGIDA SOLDSTRUT	BLACK EYED BUSAN	7 POT
54	DG.	CALAMAGROSTIS ACUTIFOLIA KARL POERDTER	FEATHER REED GRASS	2 POT
30	PP	DEITZIA GRACILIS NICKO BLUE PESTUCA TLUA BLUE	NIPKO SLENDER DEUTZIA	15-10° HT.
-	HA	HYDRANGEA ARBORESCENS 'ANNABELLE'	ELUAH BLIE PESCIE. ANABELLE HTDRANGEA	9 POT
388	143	HETEROCALLIS BOZO	BOZO DAYLET WED'	9 POT
no	104	HETEROCALLIS HAPPY RETURNS	HAPTY RETURNS DAYLEY	9 POT
BAD	145	HETEROCALLIS STELL D' ORD	STELLA D ORO DAYLEY	R POT
237	HOR	HE EROCALLIS SUNSET RETURNS	SUNSET RETURNS DAYLILY	9 POT
221	10	ILEX GLABRA THAPROCK	BHAPPROCK INCHERRIT	2-213" HT. (1349)
56-	IV.	ITEA VIRGINICA HENRY'S GARNET'	HENRY'S GARNET VIRGINIA SUBETISPIRE	2"-2"5" HT.
46	JCH	ANIFERUS CHINENSIS HETZI COLUMNARIS"	HETZ COLUPNAR ANIFER	4-B' HT.
72	JB	ANIPERUS HORIZONTALIS BAR HARBOR	BAR HARBOR JINIPER	15°-24" 8PD.
76 B	.15	ANTERUS CHINESEES SARGENTII'	SARGENT JUNIFER	18*-24" SPD.
148	MĐ PA	MISCANTHS SNENSIS TAIGSHITA	DUARF MAIDEN GRASS	2 POT
10	PAN	PENNISETIM ALOPECIROIDES HAVELNY PICEA ABIES HIDPORTIS'	DUIARF FOUNTAIN GRASS BURD'S NEST STRUCE	POT ATT
40	PJ	PIERIS JAPONICA BROVER'S BEAUTY	BROWER'S BEAUTY ANDROHEDA	24-30" 5PD. 2-25' HT.
28	PJC	PIERIS JAPONICA COMPACTA	COTPACT ANDROTEDA	2-24' NT.
10-0	FM	PNUS MUGO PUMILIO	DUARF MIGO PINE	18-24" SPD. (B.C).
23	RA	RHODODENDRON 'AGLO'	AGLO RHODODENDRON	2-215" HT.
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20	ND ND	VIBURNUM P.T. 'SUMMER SNOUPLAKE'	ARROWIOOD VEURNIT SUFFERENCIEL AKE VIBURNITI	3-4" HT. (B4B)
-	-	DEP BUTTER PLANTINGS		
Þ	ABI	ADIED DLADATEA	DAI DAM SIR	3-4° HT.
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п	Al	ALNUS INCANA	SPECILED ALDER	2-3' HT.
D	ARI	ACER RIBRIM 'OCTOBER GLORY'	OCTOBER GLORT RED MAPLE	LIS CAL
В	CR	CORNUS RACETIOSA	GRAY DOGUDOD	3-4" HT.
44	DJ.	ILEX VERTICILLATA	UNTERBERRY HOLLY	2-3' HT.
3	1991	PINUS STROBUS	UNITE PINE (NON-SHEERED)	4-6" HT.
ສ	BD	CORNUS AMORUM	BLICY DOGWOOD	2-3' HT.

Landscape Notes

- L PROPOSED PLANTING LOCATIONS SHALL BE STAKED CAREFULLY AS SHOUN ON THE PLANS FOR FIELD REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
- NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- 4. A 3-NCH DEEP SHREDDED PINE BARK SHALL BE NSTALLED UNDER ALL TREES AND SHRIBS, AND IN ALL PLANTING BEDS, AS SHOUN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
- TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- 6. FINAL QUANTITY FOR EACH FLANT TYPE SHALL BE AS SHOUN ON THE FLAN THIS INTIBER SHALL TAKE FRECEDING EN COF ANY DISCREPANCY DETUEEN QUANTITIES SHOUN ON THE PLANT LIST AND ON THE FLAN THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE MYDER OF PLANTS SHOUN ON THE PLAN AND FLANT LABELS PRIOR TO BIDDING TO THE PLAN AND FLANT LABELS PRIOR TO BIDDING.
- PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN
 WRITING BY THE OWNER'S REPRESENTATIVE.
- PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED
 THE SPECIFICATIONS OF THE "AHERICAN STANDARDS FOR
 NIRSERY STOCK" BY THE AHERICAN ASSOCIATION OF
 NIRSERYTIEN.
- 9. PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- 10. AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE 6" LOAM AND SPECIFIED SEED MIX LAWNS OVER 21 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
- IL LOAM AND SEED ALL AREAS NOT OTHERWISE TREATED.

 IZ. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES
- II. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

Athletic Field Irrigation Notes

- CMINENTE LEGG HILLINGS

 CONTRACTOR SHALL PROVIDE COFFELTE IRRIGATION
 SYSTEM DESIGNS ON STALLATION FOR THE ATHLETIC FIELD
 ONLY. DESIGNS SHALL BE CERTIFIED BY A PROTESSIONAL
 LANDSCAPE ARCHITECT, BYSINEER OR CERTIFIED
 IRRIGATION DESIGNER DESIGN PLANS SHALL BE
 SUBMITTED TO CUNER FOR APPROVAL
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, L'ABOR AND EQUIPTIENT FOR THE COMPLETE INSTALLATION OF THE IRRIGATION SYSTEM.
- MAY BE REQUIRED, FOR ALL CONDUIT, CONTROLS, THER YALVES, SPRINGLER HEADS, CONNECTORS, WIRNING, RAIN GUAGE, ETC. TO THE OUNER'S CONSTRUCTION MANAGER FOR AFFROYAL PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR PLUMBING, AND ELECTRICAL CONTRACTORS.
- 5. BACKFLOW PREVENTER AND METER IS REQUIRED. IT SHALL BE IN CORPORTANCE WITH STATE AND MUNICIPAL REQUIREMENTS, LOCATE THIS EQUIPMENT IN A LOCABLE WOT BOOK.
- IRRIGATION CONTROL PANEL SHALL BE LOCATED IN A LOCKABLE CABINET DESIGNED TO HOUSE THE CONTROL PANEL
- SITE CONTRACTOR SHALL PROVIDE 4" SCHEDULE 40 PVC SLEEVES UNDER PAYETENT TO PROVIDE ACCESS FOR IRRIGATION LINES WHERE NECESSARY.

Tree Protection

- L EXISTING TREES TO REPLAIN SHALL BE PROTECTED WITH TETPOCRAFT EROSION CONTROL FISICE AND HAY BALE BARRIER FRECT BARRIER AT EDIZE OF THE EARTHLOPK CUT LINE PRIOR TO TREE CLEARING. LAT OUT THIS LINE BY FIELD SHAPE. LINES POSSIBLE, THE EARTHLOPK CUT LINE SHALL BE PRECIED AT THE DRIP! LINE OF THE ENGINEEN FREES. SEE THEE PROTECTION FRANCE DETAIL.
- CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY MASTE MATERIALS, WITHIN THE TREE PROTECTION AREA
- DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REVIEWED AND REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.

Plant Maintenance Notes

- CONTRACTOR SHALL PROVIDE COTPLETE HANTEVANCE
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 PLANTINGS DURING THE ONE YEAR PLANT GLIARANTEE
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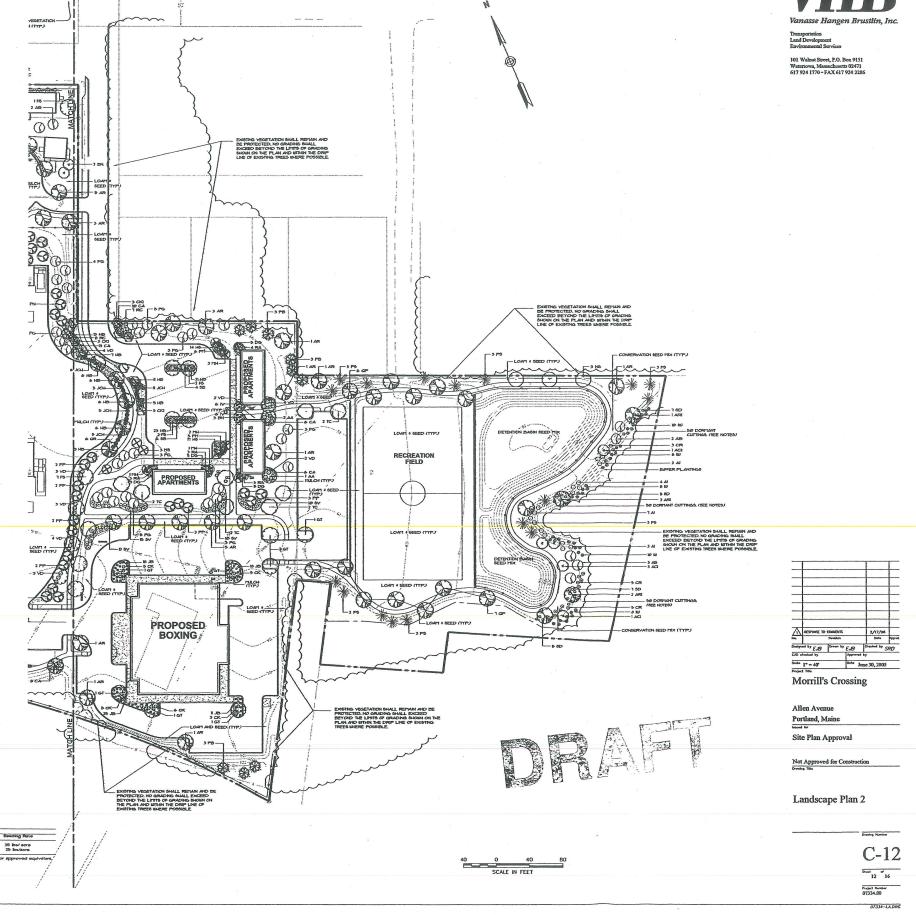
 **THE CASE YEAR PLANT GLIARANTEE
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- THE CONTRACTOR SHALL REVIEW AND SUPPLY THE OWNER WITH A CONTRETE HANTENANCE PROCERATION THE FOR PROPER CARE OF THE PLANTS NULLDIMG PROCEATE FOR WATERING, BERTILIZATION, LAWN (IPTO INTEGRATED PEST HANGEDTEN) AND PRINNIS TECHNICALES.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR
 AND EQUIPTIST FOR THE COMPLETE LANDSCAPE
 MANTENANCE WORK. WATER SHALL BE PROVIDED BY THE
 CUNER.
- 3. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE NOH PER HEFEY
- 4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
- CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE DID OF THE ONE YEAR GLARANTEE PERIOD, CONTRACTOR SHALL TURN OVER HAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.

Donmant Cuttings:

- DORMANT CUTTINGS, TO BE INSTALLED 18" ON CENTER AND DISPERSED AMONGST THE PROPOSED WETLAND BUFFER PLANTS.
- CUTTINGS TO BE GATHERED FROM ON SITE AND INSTALLED BY A PLANT WETLAND SPECIALIST.
- FOR SPRING PROJECTS: CUTTINGS SHALL BE GATHERED FROM ON SITE PRIOR TO MARCH 31 FOR FALL PROJECTS: CUTTINGS SHALL BE GATHERED IN THE EARLY FALL WHEN HALF DORMANT AND PLANTED THE SAME YEAR.
- CUTTINGS SHALL BE A MINIMUM OF 1/2" THICK AND 3" FEET LONG.

Detention Basin Seed Mix

New England Roadelde Harrix Blas Head New England Conservation/Midirle His



VHB

Hession, John

rom: Thomas Errico [terrico@wilbursmith.com]

_ent: Monday, January 23, 2006 5:09 PM

To: SH@portlandmaine.gov

Cc: KAS@portlandmaine.gov; Nagi, Robert; Hession, John

Subject: Morrill's Crossing - Site Plan Comments

Sarah-

The following outlines my comments on the site plan for the above referenced project.

- 1. It seems that two different crosswalk treatments are being proposed for the project. An explanation on the selection of treatment should be provided. I would also ask that the City Engineer review and approve the specification for the "stamped" pavement proposal. I would also note that the City should provide guidance on whether the "stamped" treatment should be applied to the crossings on Allen Avenue.
- 2. I would suggest that the applicant provide a sidewalk on the easterly side of the main entrance roadway from the bus pullout to Allen Avenue.
- 3. The location of the crosswalk on the main entrance roadway at Allen Avenue seems to be set back too far.
- 4. I would suggest that the applicant provide crosswalks on all approaches at the Allen Avenue/Main Entrance Roadway intersection.
- 5. The Main entrance roadway has a cross-section dimension of two 12' exit lanes and one 20' entry lane. I would suggest that the dimensions be adjusted to allow for some shoulder area exiting the site for bicyclists.
- 6. The main circulatory roadway through the site is proposed to be 30' wide. The applicant should document how this roadway will be marked. It is my opinion that the roadway be designed with such treatment that it appears to be the primary or highest classification roadway.
- 7. Two crosswalks are illustrated from the parking aisle to the Stop N' Shop store frontage. I would rather not have a crosswalk terminate in a travel lane. Elimination or alternatives to this treatment are recommended.
- 8. The applicant should document the winter maintenance program, particularly for all sidewalks and trails on their site.
- 9. All regulatory signage and pavement markings should be illustrated on a plan.
- 10. A waiver for the parking stall dimension standard will be required. The parking stalls are proposed to be 18' long. The standard is 19'.
- 11. Traffic control at key on-site intersections need to be illustrated. An example of this is at the intersection in front of the Boxing Facility.
- 12. Based upon the different land uses and size of the site, I would suggest that the applicant implement a wayfinding signage program that provides destination information.
- 13. The pavement arrows exiting the site should be revised to account for movements to Paul White Tile.
- 14. The applicant should confirm that the bus stop pullout dimensions have been approved by METRO.
- 15. I would suggest providing a crosswalk on the truck delivery driveway entrance and appropriate sidewalk connections to the store front. A good pedestrian connection should be provided between the proposed apartments and the retail portion of the site.

Please contact me if you have any questions or comments.

Thomas A. Errico, P.E.

Senior Transportation Engineer

- Y Jur Smith Associates
- Middle Street

Transportation Land Development Environmental Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 27, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Ms. Sarah Hopkins Development Review Services Manager Department of Planning & Development City of Portland 389 Congress Street Portland, Maine 04101

Re:

Response to Comments

Morrill's Crossing Traffic Study

Portland, Maine

Dear Sarah:

On Friday February 17, 2006, Vanasse Hangen Brustlin, Inc. (VHB) met with Tom Errico, acting City Traffic Engineer, and Randy Dutton from the Maine Department of Transportation (MaineDOT) to review the off site roadway plans being proposed in support of the Morrill's Crossing project. The meeting went very well and MaineDOT offered general support for the off-site roadway improvements.

During the meeting, there were several additional new comments raised by both the City and MaineDOT that required additional responses. Given that these issues were just brought to our attention, we have worked diligently to provide responses at least one week prior to the Planning Board workshop.

Generally, the comments focused on minor design elements for the project. This letter serves to summarize the general nature of the comments as we understood them to be and offers additional information in response to the new comments raised.

Bicycle and Pedestrian Committee Comments

At the meeting, Tom noted that he had recently met with representatives of the City's Bicycle and Pedestrian Committee to seek input on the proposed off-site roadway improvement plans. At that meeting, which Packard was not present at, the following comments were raised:

1. Can the width of the travel lanes along Forest Avenue be reduced to 10 foot lanes or 10.5 foot lanes so as to increase the width of the bicycle lanes to 5 feet or 4 feet, respectively?

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Ms. Sarah Hopkins Project No.: 07334.00 February 27, 2006 Page 2

The <u>minimum</u> lane width that would be supported by MaineDOT on an arterial roadway such as Forest Avenue is 11 feet. Therefore, there does not appear to be any reasonable alternative to the 3 foot shoulder/bicycle lane option being proposed.

2. Are the bicycle accommodations being extended to the Allen Avenue portion of the roadway improvements?

Yes, the recommended cross-section for Allen Avenue includes 14-foot outside lanes (which include 11-foot travel lanes and 3-foot shoulder/bicycle lanes) between Forest Avenue and the site driveway.

3. Are the curb radii along the site driveway too large? Can they be reduced?

The curb radii at the intersection of Allen Avenue and the site driveway have been designed to accommodate the turning radius of both METRO buses and the delivery vehicles anticipated to be arriving and departing from the site. While we recognize the inherent conflict in trying to provide a minimum distance for pedestrians versus the need to provide for suitable motorized vehicle movement at the intersection, the proposed plan balances these needs to the best of our ability. In order to highlight these needs, VHB has provided truck and bus turning templates at the driveway indicating the path of the vehicles through the intersection (Attachment #1) to this letter.

4. There is a desire to provide a more traditional pedestrian crossing at the intersection of Forest Avenue and Allen Avenue/McDonalds. Can the design at this location be modified to provide for more traditional crossings and eliminate the need for pedestrians to travel from island to island?

The layout of the intersection was initially designed and constructed by the Maine Department of Transportation in concert with the City of Portland. In reviewing the layout of the intersection, VHB considered several modifications to the layout of the pedestrian crossings to make it more convenient and safe. These options considered:

• A direct crossing between the "Wok Inn" corner directly to the "McDonalds" side of Allen Avenue. While this appears to be a reasonable request, the roadway design has been a balance between the need for pedestrian amenities with the need for adequate vehicle queuing within the Morrill's Corner area. The provision of a direct crosswalk between Wok Inn and McDonalds would essentially reduce the available vehicle queuing area along outbound Forest Avenue (between Allen and Stevens) by approximately 20 feet – or one vehicle length.



Ms. Sarah Hopkins Project No.: 07334.00 February 27, 2006 Page 3

Furthermore, this pedestrian connection would not be able to operate under true protected concurrent pedestrian phasing as there would be the potential for some vehicles to be crossing the pedestrian pathway when the pedestrians are provided the opportunity to cross.

Given that there is already a connection between the Wok Inn corner and the McDonalds corner via separate crossings, the limited pedestrian volume seeking to make this connection, and the potential for vehicle-pedestrian conflicts, we do not recommend any changes to the existing pedestrian facilities.

- Modifying the Allen Avenue crossing to provide a direct sidewalk to sidewalk connection and, therefore, avoiding the need for pedestrians to have to cross from island-to-island. Providing this direct connection would create potential vehicle-pedestrian conflict points as they pedestrians would not be able to cross under protected concurrent phasing operations. Again, given the limited pedestrian activity in this area and the safe pedestrian environment that currently exists at this intersection, VHB does not support any potential modification that would create new vehicle-pedestrian conflicts.
- Modify the existing pedestrian crossings to provide more state of the art crossing equipment. Recognizing that pedestrian activity may increase with the addition of new residential units as part of the proposed development, the applicant did consider the need to upgrade the pedestrian environment in some meaningful way. With this in mind, the applicant has already committed to upgrading many of the sidewalks and pedestrian ramps leading to and from existing pedestrian cross-walks throughout the Morrill's Corner area. Furthermore, the applicant has stated that all the current Morrill's Corner intersections will be upgraded to include 'countdown pedestrian timers' to provide pedestrians with a better understanding of the crossing time allocated to them.

A recent major study of these treatments has indicted that they can reduce the number of pedestrian-related incidents at signalized intersections by up to 50 percent (see attachment #2 – ITE Journal Article).

I trust that this information is helpful and responsive to those comments and suggestions raised by the Bicycle and Pedestrian Committee. VHB and Packard are



Ms. Sarah Hopkins Project No.: 07334.00 February 27, 2006 Page 4

very sensitive to the issues raised and we believe that we are providing an appropriate balance between motorized traffic along a major arterial route (Forest Avenue) and the need to provide pedestrian and bicycle amenities.

Other Maine Department of Transportation Comments

In addition to the new comments raised by the Bicycle and Pedestrian Committee, Randy Dutton offered that MDOT was generally supportive of the proposed modifications. That being said, he did have a few comments on the proposed plans which he noted would be documented in the future for the City's consideration including:

- 1. MDOT is concerned about the proximity of the Allen Avenue Apartment driveway with the proposed site driveway. Based on our interpretation of this concern, the applicant has been working with the owners of the Apartment complex to identify a suitable relocated driveway location which would provide greater separation between the site driveway and the apartment driveway. Furthermore, this driveway will be designated as a right-turn in/out operation only with the scored concrete median to restrict left-turns into/out of the apartment site. See Attachment # 3 for a layout of the revised Allen Avenue Apartments driveway alignment.
- 2. MDOT recognized the importance of evaluating vehicle queuing within the area. While they appeared to be comfortable with the general findings, they suggested that the traditional traffic analysis using the Synchro analysis software should be supplemented with a separate form of analysis using the SimTraffic software. MDOT's concern was that while Synchro does a good job estimating average vehicle queues, it tends to be overly conservative in how it calculates and presents the 95th percentile queues. VHB concurs with this view of the Synchro output and also concurs that the SimTraffic analysis provides a much more reasonable and accurate maximum queue projection as it is not a statistical calculation, but is observed based on the simulation. Attached to this letter is the requested separate analysis showing the SimTraffic output¹ which indicates that there are far fewer queuing issues than the Synchro analysis software was highlighting (Attachment #4). A separate table highlighting the specific is provided in Attachment #5.

Forest Avenue at Read Street/Adelaide Street

In a previous submission, VHB provided the City with a potential modification to the Read Street/Adelaide Street/Forest Avenue area aimed at improving both the safety and operational conditions that exist today at these locations and will exist in the future in the absence of any new traffic patterns. In essence, this modification designated Read Street as a one-way roadway away from

As suggested, the SimTraffic analysis results are the average of 5 separate simulations.



Ms. Sarah Hopkins Project No.: 07334.00 February 27, 2006

Page 5

Forest Avenue. In addition to this, several other minor modifications accompanying this altered travel patterns were also presented.

On Friday, Mr. Errico noted that the City was generally supportive of this modification but also requested that VHB investigate the possibility of making Read Street one-way towards Forest Avenue. VHB has evaluated this modification and it is presented as Attachment #6 to this letter. At this point in time, VHB is supportive of each option as they both offer upgrades to the pre-existing safety and operational issues inherent in the existing conditions. VHB continues to recommend that the first option (Read Street one-way away from Forest Avenue) be pursued as it provides much greater flexibility to the City in the long-term with respect to traffic flow and upgrades and seems to minimize the impacts to the Adelaide Street neighborhood.

Should you have any questions related to these responses, please feel free to contact me directly. We are eager to address all of your questions and concerns prior to the next scheduled Planning Board traffic workshop on March 7, 2006.

Regards,

VANASSE HANGEN BRUSTLIN, INC.

Robert L. Nagi, PE

Principal

Copies:

Tom Errico, Wilbur Smith Associates

Tom Gorrill-Palmer Consulting Engineers, Inc.

Randy Dutton, MaineDOT

Attachments

- ➤ #1 Truck Turning Exhibits at Site Driveway
- ➤ #2 ITE Journal Article
- ➤ #3 Allen Avenue Apartments Conceptual Driveway Layout
- ➤ #4 Revised SimTraffic Analysis
- ➤ #5 Queue Summary of Revised SimTraffic Analysis
- ➤ #6 Read/Adelaide/Bell Revised Circulation Concept Plan

#1 – Truck Turning Exhibits at Site Driveway

The truck turning graphics are attached to show how the design of the curb radii at the site driveway will serve the expected turning movements for the various vehicles anticipated to arrive and depart from the site. It should be noted that the turning radius of some larger trucks does encroach upon adjacent lanes and would need to travel over the scored median being proposed along Allen Avenue.

#2 – ITE Journal Article on the safety benefits of the countdown pedestrian timers

The attached article provides additional information on the apparent safety benefits of the pedestrian count-down timers at signalized intersections.

Pedestrian Countdown Signals: Experience with an Extensive Pilot Installation

SAN FRANCISCO, CA, **USA'S PILOT PEDESTRIAN COUNTDOWN SIGNALS WERE ASSOCIATED WITH** A DECREASE IN PEDESTRIAN INJURIES AND FEWER PEDESTRIANS FINISHING CROSSING ON RED. THIS FEATURE DISCUSSES THE IMPACTS OF THE POPULAR DEVICES ON COLLISIONS, PEDESTRIAN BEHAVIOR AND ATTITUDES, **MOTORIST BEHAVIOR** AND SIGNAL **MAINTENANCE NEEDS.**

INTRODUCTION

At a street corner in San Francisco, CA, USA, one senior citizen said to another, "I'm a '15.' What are you?" They were discussing how long it takes them to cross the street, no longer a mystery with pedestrian countdown signals installed at about 700 of San Francisco's 1,100 signalized intersections.

More than a conversation piece, however, San Francisco's countdown signals have been associated with a 52-percent reduction in pedestrian injury collisions at pilot locations. Figure 1 shows the numeric display. Pedestrian countdown signals attempt to improve safety by displaying the time left to cross. The San Francisco Department of Parking and Traffic equipped 14 intersections in a pilot program beginning in March 2001.

Pedestrian noncompliance with signs and signals is a significant factor in pedestrian injury collisions nationally and in San Francisco, partly reflecting the frequent misunderstanding of conventional pedestrian signals. Countdown signals attempt to improve this situation by providing information on how much time is left to cross safely.

These devices have been used nation-wide with generally favorable results. Levaluations in Minneapolis—St. Paul, MN, USA and Montgomery County, MD, USA, each assessed five pilot locations. The Minnesota study found a reduction in pedestrians finishing crossing after conflicting traffic received the green indication and 79 percent of inter-

viewees preferring the countdown to the conventional signal. The Montgomery

County study found a reduction in pedestrian/vehicle conflicts.

In San Jose, CA, the percentage of pedestrians finishing crossing on red also was lower with countdown signals, although the study authors noted that

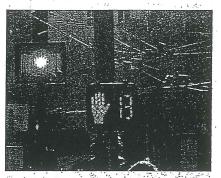


Figure 1. Pedestrian countdown signal.

pedestrians more often interpreted the countdown signal as allowing the start of crossing during the pedestrian clearance interval. This early experience led to the adoption of countdown signals in 2002 as a standard device in the *Manual on Uniform Traffic Control Devices* (MUTCD) *Millennium Edition*, Revision 2.

Beginning in March 2001, San Francisco equipped 14 intersections in one of the early pilot testing programs in California. The period covered was sufficient that any "novelty" impacts ("the Hawthorne effect") were minimized.

(The Hawthorne effect refers to the phenomenon identified by researchers at the Western Electric Hawthorne plant, who found that virtually any reasonable change in the workplace environment had a positive impact on productivity, which they hypothesized was due to improved morale attributable to the attention paid to workers by researchers, rather than the changes themselves.)²

The pilot intersections were selected based on a range of factors, including pedestrian injury collision record; pedestrian volumes; crossing distance; public complaints about perceived safety; and diversity of physical and social environments. Although a press conference was held with San Francisco's mayor to introduce the new signals and the California State Automobile Association developed a flyer, the basic meaning of the countdown was intuitive to virtually all pedestrians.

BY FRANK MARKOWITZ, STANLEY SCIORTINO, PH.D., JACK LUCERO FLECK, P.E. AND BOND M. YEE, P.E.

- Whether respondents thought they were crossing differently due to the countdowns; and
- Whether respondents knew that to start crossing on the flashing red hand (flashing DON'T WALK) is a violation of the vehicle code.

Installation and Maintenance Experience

The Department of Parking and Traffic's Signal Shop maintains records of maintenance calls. These were available for assessing the reliability of countdown signals.

STUDY RESULTS

Crash Analysis

The number of pedestrian injury crashes declined by 52 percent after the introduction of the countdown signals (see Table 1 and Figure 2), a statistically significant reduction (confidence interval = 24.8 percent, 93.3 percent, p-value <= 0.03). There was a slight decline for the primary comparison intersection types during the time periods in question. These comparison intersection declines were not statistically significant, although the number of intersections and the injury counts were large.

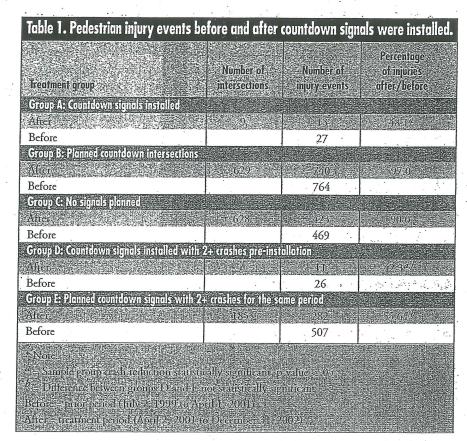
The reduction in injury crashes in a higher injury non-countdown comparison sub-group was almost as great as the decline in the countdown treatment group, and the difference was not statistically significant. This suggests that regression to the mean may have played a major role in the decline.

However, the countdown injury decline was consistently greater than the non-countdown decline, in several different comparisons matching countdown and non-countdown intersections with similar pre-installation injury levels. Therefore, although the 52-percent reduction in collisions overstates the impact of the countdown, a real reduction did occur.

Pedestrian Behavior

The most important findings of the preliminary behavioral observations (as illustrated in Figure 3) were as follows:

• The percentage of pedestrians still in the crosswalk when the signal turned red showed a statistically sig-



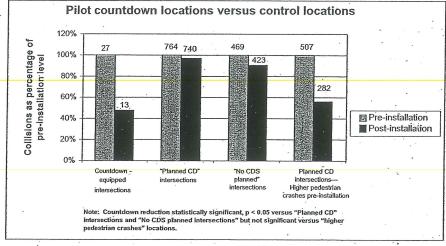


Figure 2. Pedestrian injury collision impacts of countdown signals.

nificant decrease after the installation of countdown signals.

- The percentage of pedestrians leaving during the flashing red hand or solid red hand increased slightly (but not to a statistically significant degree).
- The percentage of pedestrians running or aborting their crossings showed a statistically significant decrease.
- The percentage of observed vehicle/ pedestrian conflicts decreased (but

not to a statistically significant degree).

Pedestrians who finished crossing on red dropped from 14 to 9 percent at eight intersections that were observed (during one pre-installation data collection period and two post-installation sets). This decrease is statistically significant (probability less than 1 percent of a difference due to random sample variation, pre-installation N = 591, post-installa-

from San Francisco's pilot locations provide a number of useful conclusions:

- Countdown signals appeared to reduce pedestrian injuries. Although the test group's reduction by roughly half likely was affected by regression to the mean, because the countdown reductions were consistently greater than those experienced at higher injury non-countdown locations, an improvement in safety is clearly indicated by the study. Although the trial involves a limited number of intersections, the trial period was long enough to reduce the novelty factor.
- The countdowns reduced the proportion of pedestrians finishing crossing on the red. There has not been a significant increase in the number of pedestrians starting to cross during the pedestrian clearance phase.
- The countdowns did not result in an increase in drivers running red lights.
- The devices are viewed very favorably by pedestrians for providing additional information. They are better understood than conventional pedestrian signals.
- The devices appear to imply to a substantial proportion of pedestrians that it is proper to start crossing on the flashing red hand (flashing DON'T WALK). However, the disadvantages of this effect are less important than the advantages listed above.
- The countdown signals are relatively easy to install for signal electricians. The maintenance record from two different manufacturers has been positive.
- Starting the countdown on the pedestrian clearance does not appear to reduce effectiveness substantially or trigger public complaints. Although there initially was concern among pedestrian advocates and some Department of Parking and Traffic staff that the shorter countdown would lead to complaints about allegedly insufficient time to cross and lack of usefulness, that has not been the case.
- The LED signals save energy compared to the incandescent version they replaced. The countdown uses

roughly 9–10 watts and the hand/walking man uses 6–9 watts, versus about 67 watts for conventional incandescent pedestrian signals. The energy savings are a key component of San Francisco's conversion to countdown signals—the cost of installing the new countdowns was financed entirely through a loan with the state of California to be repaid out of reduced energy costs.

NEXT STEPS

Although the results are encouraging, additional analysis will be carried out when citywide results over an extended period are available. Also, within the next several years, national tests will be conducted with pedestrian countdown signals that add "animated eyes." The shifting eyes during the WALK phase remind pedestrians to check both ways. This would be funded by FHWA as part of an evaluation of several innovative technologies.

ACKNOWLEDGMENTS

The authors wish to thank the following for their support and assistance:

- California State Automobile Association, Merry Banks, traffic safety manager, as the primary funder of the pilot installations.
- DKS Associates, Shirley Chan and Deborah Dagang, for assistance with the initial tabulation and reporting of results.
- Other San Francisco Municipal Transportation Agency/Department of Parking and Traffic staff for work on the implementation and evaluation of the countdown project (including Livable Streets section manager Bridget Smith, assistant transportation engineers Maurice Growney and Philip Louie and senior engineer Harvey Quan). ■

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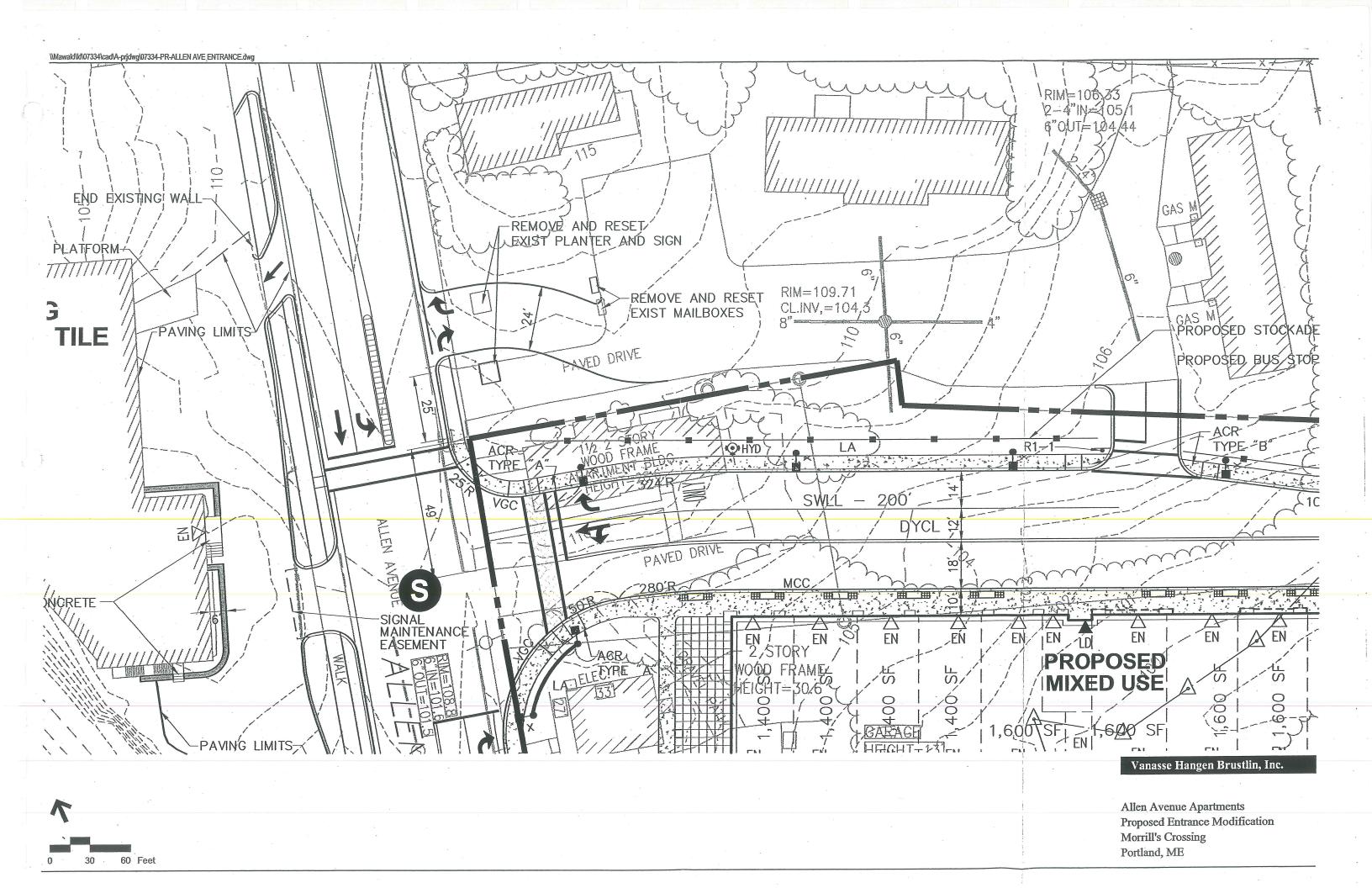
Other studies not available online include:

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- FHWA, Human-Centered Systems Research Program, "Pedestrian Signal Comprehension." Handout at the ITE Annual Meeting and Exhibit, Chicago, IL, USA, August 2001.

#3 – Allen Avenue Apartments Conceptual Driveway Layout

The applicant is currently working with the owner of the Allen Avenue Apartments complex to determine the optimal driveway access and egress options for their site while also integrating it within the proposed site plan. Given MaineDOTs concern about the location of the driveway in proximity to the project's main site driveway, VHB has prepared an exhibit showing the driveway relocated to the north, providing additional separation from the signalized driveway.

This proposal calls for the restriction of left-turns into and out of the Allen Avenue Apartments driveway along Allen Avenue and shifts the driveway approximately 25 feet further to the north.



#4 – Revised SimTraffic Analysis

Attached and provided under separate cover are updated SimTraffic analysis results as suggested by MaineDOT and the City's traffic engineer. This evaluation provides a modified evaluation of the traffic operations and vehicle queuing along area roadways and, specifically, at signalized intersections within the study area.

SimTraffic models traffic flow at a microscopic scale (as opposed to Synchro, which models traffic at a macroscopic scale). Generally, the SimTraffic model is a more accurate model for evaluating traffic operations and queuing among closely spaced traffic signals. Synchro is based on theoretical evaluations and provides a broad evaluation of various traffic operations and queuing.



Intersection: 1: School Driveway & Forest Avenue

Movement	EB:		e NB	B55	B55	SB	
Directions Served	LTR	LR	LTR	T		LTR	
Maximum Queue (ft)	143	96	422	531	-522	470	
Average Queue (ft)	44	32	. 72	245	219	78	
95th Queue (ft)	150	101	278	798	789	398	
Link Distance (ft)	803	856	730	844	844	772	TO STANSON
Upstream Blk Time (%)				21	21	5	
Queuing Penalty (veh)				127	127	0	The state of the s
Storage Bay Dist (ft)							
Storage Blk Time (%)							(A)
Queuing Penalty (veh)							

Intersection: 2: Warren Ave & Forest Avenue

Movement	EB	X EB	B38	WB	NB	NB	NB	SB	SB	B55	B27	B26	
Directions Served	LT	R	T	LTR	L	T	TR	LT	TR	T	T	T	
Maximum Queue (ft)	512	230	236	58	349	436	410	777	745	479	672	148	
Average Queue (ft)	276	137	98	11	167	197	206	468	406	144	197	48	AND AND ASSESSMENT SHOPPING
95th Queue (ft)	609	273	309	40	353	609	602	921	876	630	1087	343	
Link Distance (ft)	445		265	217		675	675	844	844	739	1850	730	
Upstream Blk Time (%)	28		22			19	19	16	13	12	7	6	
Queuing Penalty (veh)	214		169			151	151	62	49	90	51	45	
Storage Bay Dist (ft)		200		100	325								
Storage Blk Time (%)	19	14			1	20							
Queuing Penalty (veh).	120	17			7	100							

Intersection: 3: McDonald's driveway & Forest Avenue

Movement	∉ EB	EB	EB	WB -	WB :	WB	NB	NB.	NB.	NB	SB	. SB⊕	SB	
Directions Served	L	T	R	L	LT	R	L	T	T	R	L	T	TR	-
Maximum Queue (ft)	47	70	45.	553	583	192	82	468	512	108	351	747	726	
Average Queue (ft)	17	26	16	410	442	94	9	347	379	70	282	483	394	7-40
95th Queue (ft)	61	99	40	725	733	236	47	464	529	150	416	868	865	
Link Distance (ft)		138		528	528			329	329			675	675	-
Upstream Blk Time (%)		115		29	38			21	28			17	19	
Queuing Penalty (veh)		0		119	153			202	275			116	130	200
Storage Bay Dist (ft)	75		75			160	75			80	325			iii.
Storage Blk Time (%)	13	0			6	20		49	43	2	15	18		
Queuing Penalty (veh):	. 7	0			23	47		12	272	11	76	71	的特別的	3

Intersection: 4: Bishop Street & Forest Avenue

Movement	EB.	NB	NB	SB	, \$B√	NE	E NE	B13	
Directions Served	LR	T	T	T	R>	L	LR	T	
Maximum Queue (ft)	1018	374	368	420	426	382	378	788	
Average Queue (ft)	612	330	322	298	146	349	286	633	A CONTROL OF THE PROPERTY OF T
95th Queue (ft)	1144	383	389	525	331	444	394	1100	
Link Distance (ft)	1067	303	303	329	329	315	315	774	· ·
Upstream Blk Time (%)	13	58	46	19	1	75	17	62	
Queuing Penalty (veh)	. 0	389	310	139	6	0	0	0	
Storage Bay Dist (ft)									
Storage Blk Time (%)									, , , , , , , , , , , , , , , , , , ,
Queuing Penalty (veh)									

Intersection: 9: Plymouth Street & Allen Avenue

Movement	118	WB.	NB	SB	B33 ×	B32	
Directions Served	LR	LR	LTR	LTR	Т.	T	
Maximum Queue (ft)	56	68	404	429	615	431	
Average Queue (ft)	24	21	77	215	238	208	A CONTRACTOR OF THE PROPERTY O
95th Queue (ft)	84	.⊹88÷	262	542	823	799	
Link Distance (ft)	986	578	844	407	740	839	The second secon
Upstream Blk Time (%)				27	22	16	
Queuing Penalty (veh)				206	169	127	man was managara and produced and of the control of
Storage Bay Dist (ft)							
Storage Blk Time (%)		and the same of th					and an antimized to the second and an antimized to the second and
Queuing Penalty (veh)							

Intersection: 10: Allen Avenue & Washington Avenue

Movement	EB	EB	EB	B32	WB	WB-	NB	ALNB.	NB.	SB	SB=>	≥ SB,	SB⊉	震
Directions Served	L	L	TR	T	L	TR	L	T	TR	L.	T	. T	R	_
Maximum Queue (ft)	207	254	555	40	129	544	330	907	903	165	269	281	260	
Average Queue (ft)	93	119	194	1	75	301	163	473	468	53	144	181	103	x44x
95th Queue (ft)	188	243	451⊨	- 28	145	582	329	1726	1701	121	264	296	266	
Link Distance (ft)			839	740		638		2887	2887		286	286	and a constitution of District	to-Mile.
Upstream Blk Time (%)			0		4000	14		7	7	0	0	13	14	
Queuing Penalty (veh)			2			0		0	0	0	0	0	0	6.0m
Storage Bay Dist (ft)	250	250	177,78		100		340			250 -			250	
Storage Blk Time (%)	0	0	5		7	46	11	1			1	1	14	sador
Queuing Penalty (veh)	0	1	23	(A) (-) (C-1)	22	55	- 44	1			1	2	41	

Intersection: 11: Warren Ave & Hicks St

Movement,	EB	WB	NB	SB. Sp. Carlotte and the state of the state	
Directions Served	LTR	LTR	LR	LTR	0
Maximum Queue (ft)	292	24	36		
Average Queue (ft)	124	1	- 7	75	
95th Queue (ft)	325 -	14	28	EXCENSION SERVICE OF COMPANY OF C	
Link Distance (ft)	277	265	227	342	
Upstream Blk Time (%)	21			10	
Queuing Penalty (veh)	0.			0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: Site Drive & Allen Avenue

Movement	WB	NB	SB	SB	
Directions Served	LR	TR	LT	T	
Maximum Queue (ft)	210	183	269	330	
Average Queue (ft)	68	79	151	170	And the second of the second o
95th Queue (ft)	198	385	330	417	
Link Distance (ft)	968	528	258	258	
Upstream Blk Time (%)	1.5	13	7	35	
Queuing Penalty (veh)		137	28	144	
Storage Bay Dist (ft)					
Storage Blk Time (%)					The state of the s
Queuing Penalty (veh)					

Nework Summary

Network wide Queuing Penalty: 5744

	*	\rightarrow	*	1	4	*	4	†	1	-	1	1	
Movement 52 %	EBE	EBT	EBR	WBL	WBT	WBR	NBE	NBT	NBR	SBL	SBT	SBR :	
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Ideal Flow (vphpl)	1900	The state of the s	1900	1900		1900	1900	1863	1900	1900	2083	1900	
Lane Width	12	14	16	12	12	12	12	12	12	12	12	12	
Total Lost time (s)		3.0	3.0		3.0		3.0	3.0			3.0		
Lane Util. Factor Frt		1.00	1.00 0.85	55 F 5 C 1875	1.00 0.99 ×	Caranas	1.00	0.95 1.00			0.95 0.99		
Fit Protected		0.95	1.00		0.98		0.95	1.00	W. Called St.	(TEMPTER	1.00		
Satd. Flow (prot)		1915	1812		1682	At The File	1787	3500			3870		
Flt Permitted	Serie Greek Longre	0.72	1.00	4.33.55.31.53.58.	0.86		0.95	1.00	erana de revez en el	eleggies.	0.94	athair a thairm though	
Satd. Flöw (perm)		1445	1812		1482		1787	3500	Object Self. In		3623		
Volume (vph)	120	5	640	5	5	1	505	1090	10	10	755	65	
Peak-hour factor, PHF	0.86	0.86	0.86	0.55	0.55	0.55	0.98	0.98	0.98	0.86	0.86	0.86 🕞	
Adj. Flow (vph)	140	6	744	9	9	2	515	1112	10	12	878	76	
RTOR Reduction (vph)	0	0	- CONTRACTOR SECTION	C. C	2	0	. 0	0,		0	6	. 0	
Lane Group Flow (vph)	0	146	727	0	18	0	515	1122	0	0	960	0	
Heavy Vehicles (%)	1%-	CACCOMPTICATION PORTS OF S	1%	9% ;	- 9%	9%	1%	1%	1%	ELLEN THE PROPERTY OF THE	1%	1%	
Turn Type Protected Phases	Perm	8	pm+ov 5	Perm	4	Section 19 and 1	Prot 5	2		Perm	6		
Permitted Phases	8	8	8	4	4		: (, , 9 ₂).	2		6	6		No. 2 Contract Contra
Actuated Green, G (s)		10.0		-	10.0		30.0	63.5			28.5		
Effective Green, g (s)		12.0	44.0		12.0		32.0	65.5			30.5		
Actuated g/C Ratio		.0.14	0.53		0.14		0.38	0.78			0.37		
Clearance Time (s)	-State and State State Authority State World	5.0	5.0	had again a contract	5.0	H MUNICIPALITY CO.	5.0	5.0	Charles Act Alexander Consultation of Charles	***************************************	5.0	A Del Colonial Control of State and	The Albert A (Albert 17 A PETTER AND THE PETTER AND
Vehicle Extension (s)		2.5	2.5		2.5		2.5	3.0	46.2		3.0		
Lane Grp Cap (vph)		208	1020		213		685	2746			1323		
v/s Ratio Prot			c0.27				0.29	0.32					
v/s Ratio Perm	ration of the same	0.10	0.13		0.01	erenta di Sherenes					c0.27		有限的"电影·Solicia"。建立和6世
v/c Ratio Uniform Delay, d1		0.70 34.0	0.71 15.0	919 1141	0.09 31.0		0.75 22.3	0.41 2.9			0.73 22.9		
Progression Factor		1.00	1.00		1.00			1.00			1.00		
Incremental Delay, d2		9.5	2.2		0.1		4.4	0.1	2017 15/3/423	BCALLEY S	2.0	X4-5,55 460	
Delay (s)	11.0	43.6	17.2		31.1		26.8	3.0			24.9		
Level of Service	SASATON LANGUAGONIAN	D	В	CONTRACTOR SAND	C	: 200 h 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	С	A	ukona unukiantinte	COLUMN SERVICE	С	No. To do a selectrición o Caldeda	
Approach Delay (s)		21.5			31.1		100 A.1	10.4			24.9		
Approach LOS		C			С			В			C		
Intersection Summary													
HCM Average Control Del		an artifecture of the transport of the con-	17.3	HC	M Level	of Servi	ice		В	CANALISM STATE OF THE PARTY OF THE PARTY.	TORN AND HAND TO THE AND	PROPERTY OF THE PROPERTY.	AND AN ARREST TO THE PARTY.
HCM Volume to Capacity			0.72	_									
Actuated Cycle Length (s)			83.5		m of lost			CONTROL (100 NG)	6.0	Herrica March	TT ASKSTOLETA		Cristian de la Participa
Intersection Capacity Utili. Analysis Period (min)	zation		75.2% 15	ici	J Level o	or Servic	e .		U				
c. Critical Lane Group		14 11 11	10		7.07	\$35.000A							
S Control Edite Group	aga a steinig	BIARRY E.	uspersalise de			e de la comitación de la c	esto espera	SCHEWENE !	ad Delico VIII.	research (ers and a second	PROTECTION OF THE PARTY OF THE	HATELAND COMPANY

)	\rightarrow	*	1	4	*	1	†		-	1	1	•
Movement -	Z EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	^	Ĭ ^r	ሻ	र्स	Ĭ ^r	Ť	ተተ	7	ነ	† \$		
Ideal Flow (vphpl)	1900	1900	1900	2023	2011	2261	1900	2496	1900	1897	1900	1900	
Lane Width	12	12	12	12	12	12	12	12	12	11	11	11	
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-3.0	3.0		
Lane Util. Factor	1.00	1.00	1.00	*0.99	*0.99	1.00	1.00	*0.79	1.00	1.00	*0.65		21, 100
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1,00	1.00	0.85	1.00	1.00		
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	POR CONTROL FOR THE TAX	en mora de marca contra a como en combreso.
Satd. Flow (prot)	1805	1900	1615	1884	1884	1884	1805	3944	1599	1725	2358		
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	PARTETE PARTS AND S	
Satd. Flow (perm)	1805	1900	1615	1884	1884	A STATE OF THE PROPERTY AND LESS OF	1805	3944	1599	1725	2358		
Volume (vph)	15	15	40	430	15	365	25	1225	625	390	990	20	N. Warts interference and construction and con-
Peak-hour factor, PHF	0.83	0.83	0.83	0.92	0.92	0.92	0.97	0.97	0.97	0.86	0.86	0.86	
Adj. Flow (vph)	18	18	48	467	16	397	26	1263	644	453	1151	23	
RTOR Reduction (vph)	0	0	46	0	0	30	0.	0	0	0	1	0	
Lane Group Flow (vph)	18	18	2	235	248	367	26	1263	644	453	1173	0	XXXX market and an arrange
Heavy Vehicles (%)	0%	0%	0%	1%	0%	CALABANA LANGE CAMPAGA TALL	0%	CARLEST METALLINE	1%	1% .	1%	0%	
Tum Type	Split		Prot	Split		pm+ov	Prot		pm+ov	Prot			OCHEROS PHIRASER STATISTICS
Protected Phases Permitted Phases	- 3	3	- 3	4	4	1.1	5	2	4	1	6		
Actuated Green, G (s)	2.3	3 2.3	200	15.6	160	4 44.5	1.7	2 .41.9	2 57.5	28.9	6 69.1		
Effective Green, g (s)	. 2.3 3.8	- ∠.ა 3.8	2.3 3.8	17.1	15.6 17.1	44.5 47.5	3.2	43.9	61.0	20.9 30.4	71.1		
Actuated g/C Ratio	0.04	0.04	0.04	0.16	0.16	0.44	0.03	0.41	0.57	0.28	0.66		
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.5	4.5	5.0		Store Store
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0	2.0	3.0		
Lane Grp Cap (vph)	64	67	57	301	301	888	54	1615	910	489	1564		
v/s Ratio Prot	c0.01	0.01	0.00	0.12		0.12		0.32		c0.26	c0.50	\$1500 (44)	
v/s Ratio Perm				J., L		0.08	0.0.		0.29	.00.20	00.00		
v/c Ratio	0.28	0.27	0.03	0.78	0.82	0.41	0.48	0.78	0.71	0.93	0.75		
Uniform Delay, d1	50.4	50.3	49.9	43.3	43.6	20.3	51.2	27.5	16.7	37.3	12.1		
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	2.4	2.2	0.2	12.3	16.5	0.1	2.5	3.8	2.5	23.3	2.1	5-00: PERSONAL BAS 124	
Delay (s)	52.8	52.5	50.1	55.6	60.1	20.5	53.6	-31.3	19.2	60.6	14.2		
Level of Service	D	D	D	E	Ē	C	D	С	В	E	В	American American Communication of the Communicatio	LANCE TO SERVICE AND ASSESSED ASSESSED.
Approach Delay (s)		51.2			41.0			27.6			27.1		
Approach LOS		D			D			С			С		
Intersection Summary													
HCM Average Control De		F-1275 F 1 1 1 1 1 1 1 1	30.5	HC	CM Leve	el of Serv	ice		C		A street was to see the same		
HCM Volume to Capacity			0.80										
Actuated Cycle Length (s)			107.2			st time (s			9.0	GGGGGGGGGGGGG	STREET S. S. SARSKO 2	65554751450-4500-4	0.5365.2/10.5310.00000000000000000000000000000000
Intersection Capacity Utili	zation	$\sim s \times I$	5.7%	, IC	U Level	of Service	e		D.				
Analysis Period (min)	denegas Traces	PASSES TO LOUIS	15	NETS OF SECOND	894, 125 GTT		Transmin .	60tm 22852120 F245		Carlotte Commerce	eriorista esta de esta de esta de esta de esta de la composició de la comp	HERRIC VIENNESS	SHIRADA GERMANA
c Critical Lane Group				Aller and									

	≯ .	*	1	†	1	J.	1	*	4	
Movement	EBL	EBR	-NBL	NBT:	SBT	SBR	SBR2	NEL	NER	
Lane Configurations	W			ተ ተ	A	7		N. N.		
Ideal Flow (vphpl)	1900	1900	1900	1917	1693	1900	1900	1900	/1900≈	
Lane Width	12	12	11	11	11	11	11	12	12	
Total Lost time (s)	3.0			3.0	3.0	3.0		3.0		
Lane Util. Factor	1.00			0.95	1.00	1.00		0.97		
Fit	0.98			1.00	1.00	0.85		1.00		
Flt Protected	0.96		٧.	1.00	1.00	1.00		0.95		
Satd. Flow (prot)	+ 1751			3486	1620	1546		3502		
Flt Permitted	0.96		٠.	1.00	1.00	1.00		0.95		
Satd. Flow (perm)	1751			3486	1620	1546	-0.5	3502		
Volume (vph)	85	15	0	1350	985	465	10	515	0	
Peak-hour factor, PHE	0.75	0.75	0.95	0.95	0.92	0.92	0.92	0.89	0.89	
Adj. Flow (vph)	113	20	0	1421	1071	505	11	579	0	
RTOR Reduction (vph)	. 0	0/-	0	0		1	0	0	0	
Lane Group Flow (vph)	133	0	0	1421	1071	515	0	579	0	
Heavy Vehicles (%)	2%	2%	1%	1%	1%	. 1%	1%	0%	0%	
Tum Type						Perm				
Protected Phases	3			2	6			4		
Permitted Phases					6	6				AND THE PROPERTY OF THE PROPER
Actuated Green, G (s)	7.0			71.0	71.0	71.0		17.0		
Effective Green, g (s)	9.0	and the state of t	AC	73.0	73.0	73.0		19.0		
Actuated g/C Ratio	0.08			0.66	0.66	0.66		0.17		
Clearance Time (s)	5.0			5.0	5.0	5.0		5.0		
Vehicle Extension (s)	2.5			3.0	3.0	3.0		2.5		
Lane Grp Cap (vph)	143			2313	1075	1026		605		
v/s Ratio Prot	c0.08			0.41	c0.66			c0:17		
v/s Ratio Perm						0.33				
v/c Ratio	0.93			0.61	1.00	0.50		0.96		
Uniform Delay, d1	50.2			10.5	18.4	9.3		45.1		
Progression Factor	1.00			1.00	1.00	1.00		1.00		
Incremental Delay, d2	54.4			0.5	26.4	0.4		26.0		
Dělay (s)	104.6			11.0	44.7	9.7		71.1		
Level of Service	F			В	D	Α		Е		
Approach Delay (s)	104.6			11.0	33.3			71.1		August 1
Approach LOS	F			В	C			E		
Intersection Sur mary					有事实验					
HCM Average Control De	lay		33.2	H	CM Leve	of Service	ce		C	
HCM Volume to Capacity			0.98							
Actuated Cycle Length (s)	1	110.0	Sı	ım of los	t time (s)			9.0	A STANDARD CONTRACTOR
Intersection Capacity Utili	ization	- 8	8.5%			of Service)		Ε	
Analysis Period (min)			15							
c Critical Lane Group										

	≯	\rightarrow	*	1	4	*	1	†	1	-	1	1	
Movement 35	EBL	EBT	EBR	WBE	WBT	WBR	NBL	NBT	ANBB-	SBL	SBT	SBR	
Lane Configurations		€}>			€\$			€\$			€\$	and the second second	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		3.0			3.0	367.20(3540)(36.2464		3.0	NO PARELLENGUES	ALTERNATION OF SELECTION	3.0	WEST OF STORM WALLS	NET CONTROL OF THE STATE OF THE
Lane Util. Factor		1.00		4.44	1.00			1.00			1.00		
Frt		0.91			0.91			1.00			1.00		The state of the s
Fit Protected		0.98			0.98			1.00			1.00		1
Satd. Flow (prot)		1701			1703			1893			1876		
Fit Permitted		0.88			0.91			0.97			0.98		
Satd. Flow (perm)		1523			1577			1835			1839		
Volume (vph)	- 5	0	10	. 5	0	10	25	875	15	15%	800	10	
Peak-hour factor, PHF	0.61	0.61	0.61	0.75	0.75	0.75	0.93	0.93	0.93	0.95	0.95	0.95	. *
Adj. Flow (vph)	- 8	0	16	7	0	13	27	941	16	16	842	11	
RTOR Reduction (vph)	0	15	0	0	12	0	0	0	0	0	. 0	0	
Lane Group Flow (vph)	0 .	9	0	0	. 8	0	0	984	0	0	869		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	
Tum Type	Perm			Perm			Perm -			Perm			
Protected Phases	ive a compression of colors	2	December 1 and 1 a	al-out-residence	2	a propriet man have by the state of	- Select was to despite the work	1	COMPANY OF MARK CHARGES	THE COURSE TO A PERSON THAN A	1	The Principal Substitute of Principal Substitute of Substi	
Permitted Phases	2			2			1.1			1			
Actuated Green, G (s)	to water to a contract or	3.8	AREASTE VARIAN		3.8	an mar december	LINE IA CHAVET RECES	84.1	The Bridge Street Company		84.1	Committee of the party of the committee of the	PARTY WAS A STATE OF THE PARTY
Effective Green, g (s)		4.8			4.8			85.1			85.1		
Actuated g/C Ratio	en managament och des	0.05	verdomichovas		0.05	100a0 mentil at 1800 140 140 140 1	CHANCEL BY COM	0.89	A MATERIAL PROPERTY OF THE PARTY OF THE PART		0.89		
Clearance Time (s)		4.0			4.0			4.0			4.0		and the
Vehicle Extension (s)	WITH THE DATE OF THE PARTY.	3.0	CHICAGO HOLL		3.0			3.0	CHARLES AND	MANUFACTURE STATE OF THE STATE	3.0	TOTAL TOTAL STREET	partition of the state of the s
Lane Grp Cap (vph)		76			79			1628			1632		
v/s Ratio Prot		SATERIZARIA CONSTRU	anianaretarene	NANTAGEODINETS C						Zurnerskyalbanyar	Kangalan (properties)	enteralization de la company de la compa	PRODUCTORING CONTROL OF THE ACTION AND ACTION ACTION AND ACTION ACTIO
v/s Patio Perm		c0.01			0.00			c0.54			0.47		
v/c Ratio		0.12		MORROWSKI A	0.10	Carlo Marchael		0.60	BANKER'S CORN	\$74500,7536.2	0.53		
Uniform Delay, d1		43.5			43.5			1.3			1.2		
Progression Factor		1.00	Dispersional	aan oo ee aan a	1.00	There is a second	varansonen erre	1.00			1.00		
Incremental Delay, d2 Delay (s)		44.2			0.5 44.0			1.7 3.0			1.2 2.4		
Level of Service:		44.2 D			44.0 D			3.U A			2.4 A		
Approach Delay (s)		44.2		ZSANSAL	44.0		12000	3.0			2.4		
Approach LOS		44.2 D			44.0 D			3.0	746 6 1 7 4		2.4 Λ		
AND THE PROPERTY OF THE PROPER					. P.		tom same						Miles and the second second
Intersection Summary													
HCM Average Control Dela			3.7	. HO	CM Level	of Servi	ce		A				
HCM Volume to Capacity r		and account to the last and	0.58	Object of the Control	CONTRACTOR OF THE STAND STANDS	Marine Scarle Communication Communication Communication Communication Communication Communication Communication	NAME OF THE OWNER, AND ADDRESS OF	www.companies.com	on and transplaced when a	t to the state of	manus es manus es à la company	Lev and with the second	
Actuated Cycle Length (s)		High	95.9		im of losi				6.0				
Intersection Capacity Utiliz	ation	7	1.8%	IC	U Level o	ot Servic	e	1785767676476476	C	Solder delications		SP CHAC STEPHENOCHY BANK	
Analysis Period (min)			15										
c Critical Lane Group													

	•	→	*	1	←	*	1	†	1	1	1	1	
Movement	a EBL	EBT	EBR	WBL	WBT.	WBR	NBE,	The second second second second	NBR	SBI	SBT	SBR	
Lane Configurations	ሻሻ	ß		ሻ	ß		7	仲		1	^	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	THE TECHNICATION OF THE	
Lane Width	11	12	12	11	12	12	11	11	10	10	10	12	
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	The second section of the section of th	
Lane Util. Factor Frt	0.97 1.00	1.00 0.96		1.00	1.00 0.97		1.00	0.95 0.99	200.000	1.00	0.95	1.00	
Fit Protected	0.95	1.00	Wales I E	0.95	1.00		0.95	1.00		0.95	1.00	0.85 1.00	
Satd: Flow (prot)	3351	1798		1711	1805	7. 7.779	1728	3406		1668	3336	1599	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00	
Satd Flow (perm)	3351	1798		1711	1805		1728	3406		1668			
Volume (vph)	425	310	130	120	270	70	190	770	80	90	590	315	
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.92	0.92	0.92	0.95	0.95	0.95	
Adj. Flow (vph)	457	333	140	135	303	79	207	837	87	95	621	332	
RTOR Reduction (vph)	0	12	0	0	7	0	0	6	0	0	0	143	
Lane Group Flow (vph)	457	461	0	135	375	0	207	918	0	95	621	189	
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	. 1% .	1%_	1%	1%	
Turn Type	Prot			Prot			Prot	0.5		Prot		pm+ov	
Protected Phases	7	4		- 3	8		5	2		11.	6	7	
Permitted Phases	PALESCONING CALABORE	THE PERSON NAMED IN			g var varant vage vereg er e	CENTRAL DOMESTIC	A SEAS OF THE PARTY OF THE PART		CNEW BUILDING	petrologismes was in a	A NOT THE RESIDENCE OF THE PARTY OF THE PART	6	POTROZEN SENET BORNES - TANA AND AND AND A
Actuated Green, G (s)	18.1	36.1	3.5	9.6	27.6		16.4	36.8		7.2	27.6	45.7	
Effective Green, g (s)	20.1	38.1	re da deser	11.6	29.6		18.4	38.8	NAMES AFFINE STEWNS OF STREET	9.2	29.6	49.7	
Actuated g/C Ratio Clearance Time (s)	0.18	0.35		0.11	0.27		0.17	0.35		0.08	0.27	0.45	
Vehicle Extension (s)	5.0 3.0	5.0 3.0		5.0 3.0	5.0 3.0		5.0 3.0	5.0 3.0		5.0 3.0	5.0 3.0	5.0 3.0	64 Table 1 158 To 2016 The
Lane Grp Cap (vph)	614	624		181	487		290	1205		MARKET CONTRACTOR CONTRACTOR	w zakat wanan da y	CONTRACTOR DECIDED TO TAXABLE	
v/s Ratio Prot		c0.26		0.08	0.21		c0.12		Section 1	140 - 0.06	900	768 0.05	
v/s Ratio Perm	CO. 14	60.20		_ U.UU	U.Z.I		UU. IZ	UU.Z1:		0.00	0.15	0.03	
v/c Ratio	0.74	0.74		0.75	0.77		0.71	0.76		0.68	0.69	0.07	
Uniform Delay, d1	42.4	31.4	820 B) \$ 22	47.6	36.9	317-1213-14	43.2	31.4		48.8	35.9	18.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	4.9	4.6		15.3	7.2		8.1	2.9		12.3	2.2	0.2	
Delay (s)	47.2	36.0		63.0	44.1		51.2	34.3		61.1	38.2	18.6	
Level of Service	D	D		E	D		D	С		E	D	В	100 PM - 100
Approach Delay (s)	4	41.5			49.0			- 37,4			34.1		
Approach LOS		D			D			D			C		
Intersection Summary			fir tel			40.0							
HCM Average Control Del			39.1	HC	M Level	of Servi	ce		D				
HCM Volume to Capacity			0.74										
Actuated Cycle Length (s)			09.7		m of lost			avends unknows	6.0	A 1 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4	THE STATE OF THE S		Och Carlo Ca
Intersection Capacity Utiliz	ration	7.	3.0%	- ICU	J Level c	of Servic	e		- D				
Analysis Period (min)	SAME ROBERT FOR		15	SELONFOUND		ALTER SERVICE AND A STATE OF THE SERVICE AND A S		MATERIAL CONTINUES	1571-2014 ORF	NAMES AND A STREET			
c - Critical Lane Group	GAZZYS)		0.50										

Intersection: 5: Morrill Street & Forest Avenue

Movement	WB	NB :	NB	SB	SB	
Directions Served	LR	T	TR	LT	Ţ	
Maximum Queue (ft)	190	545	608	227	225	
Average Queue (ft)	67	496	515	59	38	
95th Queue (ft)	165	680	736	185	158	
Link Distance (ft)	656	538	538	285	285	The second secon
Upstream Blk Time (%)		13	18	0	0	
Queuing Penalty (veh)		83	113	0	0	The state of the s
Storage Bay Dist (ft)						
Storage Blk Time (%)						A STATE OF THE PROPERTY OF THE
Queuing Penalty (veh)						

Intersection: 6: Good Will driveway & Forest Avenue

Movement	EB	/ NB	SB.	SB	
Directions Served	LTR	LTR	L	TR	,
Maximum Queue (ft)	141	505	467	437	
Average Queue (ft)	35	331	128	33	
95th Queue (ft)	107	651	325	242 -	
Link Distance (ft)	326	459	538	538	
Upstream Blk Time (%)		10	. 0	. 0	
Queuing Penalty (veh)		132	2	3	
Ground Day Divi (ii)					
Storage Blk Time (%)	PATRICUSTRATIONS STEEMS IN A MANAGE	TERMETER CONTRACTOR TO TO THE	enter and organization	er an water and an area	
Queuing Penalty (veh)					

Intersection: 7: Bell Street & Forest Avenue

Movement 4	WB	- WB	B35	NB.	B15	SB	SB	
Directions Served	L	R	T	TR	T	L	T	
Maximum Queue (ff)	218	430	1017	444	142	- 58	41	
Average Queue (ft)	36	369	594	132	14	13	2	
95th Queue (ft)	136	541	1327	402	115	44	38	
Link Distance (ft)	357	357	987	428	784		459	
Upstream Blk Time (%)		71	44	1.1				
Queuing Penalty (veh)		0	0	0				
Storage Bay Dist (ft)						75		
Storage Blk Time (%)						0		,1
Queuing Penalty (veh)						3		

Intersection: 8: Woodlawn Avenue & Allen Avenue

Movement	WB.	NB.	NB	SB	B13				
Directions Served	LR	T	TR	LT	· T				
Maximum Queue (ft)	231	208	82	473	351				
Average Queue (ft)	85	15	4	. 272	103				•
95th Queue (ft)	217	92	35	586	₹363√	2015年1			
Link Distance (ft)	972	236	236	402	374				
Upstream Blk Time (%)		0.7		14	6				
Queuing Penalty (veh)		0		130	60				
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

	_	1	4	1	T	1	
Lane Group	HEBI.	EBR	WBT	NBL	NBT	SBT-	
Lane Group Flow (vph)	151	785	20	546	1234	974	
v/c Ratio	0.74	0.67	-0.09	0.67	0.44	0.93	
Control Delay	59.3	12.7	31.5	12.6	1.0	49.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.3	12.7	31.5	12.6	1.0	49.9	
Queue Length 50th (ft)	82	209 .	9	93	- 8	~331	
Queue Length 95th (ft)	#153	289	17	m112	m32	#454	
Internal Link Dist (ft)	440		188		683	822	
Turn Bay Length (ft)		200		200			
Base Capacity (vph)	225	1230	237	870	2776	1045	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	. 0	0	0	0	- 0:	0 .	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.67	0.64	0.08	0.63	0.44	0.93,	
Intersection Summary			14.				
 Volume exceeds capa 	icity, queu	ie is the	oreticall	y infinite.			
Queue shown is maxin			manage income manage				
# 95th percentile volume	Alexander Same Constitution	and the same of the same	A ANTONIO TO CAROLINA TO THE	e may be	e longer.		
Queue shown is maxin	num after	two cyc	les.				

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

	≯	\rightarrow	*	1	4	*	4	1	1	-	Į.		
Lane Group	EBL:	EBJ#	EBR	WBL	WBT	WBR.	NBL	NBT	NBR	SBL	SBT.		
Lane Group Flow (vph)	18	18	48	313	329	553	26	1242	835	568	1042	i	ė
v/c Ratio	0.46	0.44	0.12	0.86	0.90	0.52	0.08	0.96	0.95	0.99	0.61		
Control Delay	80.4	76.1	11.4	50.1	55.1	13.7	35.2	45.0	32.7	54.6	14.4		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.1		
Total Delay	80.4	76.1	11.4	50.1	55.1	13.7	35.2	51.5	32.7	54.6	14.5		a second
Queue Length 50th (ft)	10	10	0	187	200	231	12	Carte page and catholic	The state of the s	221	184		
Queue Length 95th (ft)	#38	#37	28	m#298	m#326	m104	m19	CHANGE THE PARTY AND ADDRESS OF THE PARTY.	m#473	m#435	m108		electroset.
Internal Link Dist (ft)		152			537			395			683		
Turn Bay Length (ft)	75		75			160	75	Commission Control State (Control	85	450	ACTIFICIAL MANAGEMENT ACTIVIDADA (ACTIVIDADA (ACTIVIDA		SMETTARES.
Base Capacity (vph)	39	41	399	366	366	1067	320	からなりなべははなべた	876	576	2149		
Starvation Cap Reductn	0	0	0	0	0	0	0	49	0	0	0	ACCIONI DI UNIO EN MONTO DE CANTO PROGRAMA ACCIONA	NAMES OF COMPANY
Spillback Cap Reductn	0	0	2	0	0	0	0.	0	0	0	180		
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0		ramones.
Reduced v/c Ratio	0.46	0.44	0.12	0.86	0.90	0.52	0.08	1.00	0.95	0.99	0.53		
Intersection Summary						Espera							
#. 95th percentile volume	exceeds	capacit	y, queu	e may b	e longer			979					
Queue shown is maxim	Personal Property Commencer Services	the water water and the same of	The same of the same of the	encumunisti il dini della	ment controlling	Service and the second Street	earnasis may 624979, Circ.A	00 W 2 2 2 PD WITTE		THE SECTION OF THE SE	rene a manual transmission i	en en european van et de manne en european bleve (1996) en 1996 (1996) en 1996 (1996) en 1996 (1996) en 1996 (-	
m. Volume for 95th perce	ntile que	ue is me	etered b	y upstre	eam sign	al.							

	▶	†	1	<i>*</i>	
Lane Group	EBL	NBT	SBT	NELS	
Lane Group Flow (vph)	133	1526	1690	652	
v/c Ratio	0.72	0.75	0.88	0.90	
Control Delay	60.8	16.8	11.8	51.5	
Queue Delay	0.0	0.1	0.7	12.5	
Total Delay	60.8	17.0	12.4	64.0	
Queue Length 50th (ft)	74	317	6	186	
Queue Length 95th (ft)	110	406 ı	n#435	#275	
Internal Link Dist (ft)	1038	371	395	420	
Turn Bay Length (ft)	JOSEPH TO THE STATE OF				
Base Capacity (vph)	195	2043	1924	739	
Starvation Cap Reductn	0	0	60	0	
Spillback Cap Reductn	0	59	0	82	
Storage Cap Reductn	0	0	0	0	
Reduced v/c Ratio	0.68	0.77	0.91	- 0.99	
Intersection Summary					
# 95th percentile volume	exceeds	capaci	ry, queu	e may be	e longer
Queue shown is maxim	and the same of the same of	WHAT STAND TO MISSES WE IS	The second of the second	and the second s	

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

	-	—	†	1	
Lane Group	/EBI 72	WBT	NBT	SBT	
Lane Group Flow (vph)	49	20	1134	1011	
v/c Ratio	0.27	0.12	0.72	0.63	
Control Delay	14.5	14.4	7.8	5.0	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	14.5	14.4	7.8	5.0	
Queue Length 50th (ft)	8	3	151	110	
Queue Length 95th (ft)	16	14	#578	272	
Internal Link Dist (ft)	938	531	355	388 -	
Turn Bay Length (ft)				•	
Base Capacity (vph)	262	247	1565	1607	
Starvation Cap Reductn	0	0	0	0	
Spillback Cap Reducth	. 0	0	0	0	
Storage Cap Reductn	0	0	0	0	
Reduced v/c Ratio	0.19	0.08	0.72	0.63	
Intersection Summary					

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

Queue shown is maximum after two cycles.

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Lane Group	- EBL	EBT	WBL	WBT	NBL	NBT :	SBL	SBT	SBR		
Lane Group Flow (vph)	511	565	140	433	255	940	100	637	379		
v/c Ratio	0.87	0.94	0.73	0.89	- 0.84	0.81	0.61	0.81	0.46		
Control Delay	49.0	50.6	57.3	50.6	57.4	31.6	51.9	38.7	9.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	49.0	50.6	57.3	50.6	57.4	31.6	51.9	38.7	9.8		
Queue Length 50th (ft)	129	258	69	202	125	228	49	158	60		
Queue Length 95th (ft)	#212	#459	#153	#364	#250	#338	#112	#237	130		
Internal Link Dist (ft)		854		1670		2871		1549			
Turn Bay Length (ft)	250		100		340		250		250		
Base Capacity (vph)	590	606	193	488	304	1161	164	793	816		
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	Annual Administrative and the second	
Spillback Cap Reductn	0	0	- 0 -	0	0	0	0.	0	. 0		
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	0.87	0.93	0.73	0.89	0.84	0.81	0.61	0.80.	0.46		
		DVS TO SECULO		4-00/2005							

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

Queue shown is maximum after two cycles.

	-	4	*	†	-	1	
Lane Group	EBT	WBTst	WBR	NBT	SBL	SBT	
Lane Group Flow (vph)	4	414	200	1410	226	786	
v/c Ratio	0.01	0.86	0.23	1.00	0.68	0.72	
Control Delay	12.8	44.2	10.4	41.6	26.8	20.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	12.8	44.2	10.4	41.6	26.8	20.1	
Queue Length 50th (ft)	1	216	50	~450	58	292	
Queue Length 95th (ft)	7	284	75	m#544	#197	#623	
Internal Link Dist (ft)	278	1920		537		238	
Turn Bay Length (ft)			200		250		* 1
Base Capacity (vph)	727	637	881	1413	334	1094	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	. 0	0-	
Storage Cap Reductn	0	0	0	. 0	0 .	0	
Reduced v/c Ratio	0.01	0.65	0.23	1.00	0.68	0.72	
Intersection Summary							
 Volume exceeds capac 	ity, quet	ue is the	oreticall	y infinite			
Queue shown is maxim					THE TON THE POST OF THE PARTY OF THE	ACCOUNTED TO STATE OF THE	\$
# 95th percentile volume				e may be	longer.		
Queue shown is maxim	um after	two cycl	es.				

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

#5 – Queue Summary of Revised SimTraffic Analysis

The attached table provides an easy-to-read summary of the queuing results provided by the SimTraffic model. This assessment is based on a 60 minute evaluation period, using the average of 5 runs (using random seeds 1-5).

The following provides brief commentary on each signalized intersection:

Forest Avenue at Warren Avenue

There are two (2) movements whose maximum queue exceeds the provided storage lengths under both the existing and build with mitigation conditions. In each case, these queues are significantly reduced under the build with mitigation scenario.

Forest Avenue at Allen Avenue/McDonalds Driveway

Under the existing conditions, there are 2 movements whose average queue exceeds the available storage length. In each of these cases, the queue exceeds the available storage because of a 'rolling' queue spillback – this is where the outbound Forest Street traffic that is released from the downstream signal (Stevens Avenue) reaches the back of the vehicle queue waiting at the Forest Street signal. Because of the way the model measures the queue, it is shown as 'exceeding' the available queue storage area. This is incorrect as it is a 'designed' queue spillback.

Furthermore, under the existing conditions, there are 10 movements whose maximum queue exceeds the available storage length. Of note is that the SimTraffic model does not take into account the lane utilization factor as it is a microscopic model of traffic flow. The inherent imbalance between inbound traffic flow along Forest Avenue approaching Allen Avenue (as discussed in prior submissions) is not considered in the SimTraffic results. It is entirely logical to assume that while both of the southbound through lanes shows maximum queue lengths relatively equal to each other that, in fact, one lane is significantly longer and one significantly shorter that the results shown.

Under the Build with Mitigation conditions, there are 4 movements whose average queue exceeds the available storage length. As noted under the existing conditions, 2 of these movements are "designed" queue spillbacks which do not actually create gridlock at the downstream signal. In the case of the other two locations, these average queues exceed the available storage by only a fraction of

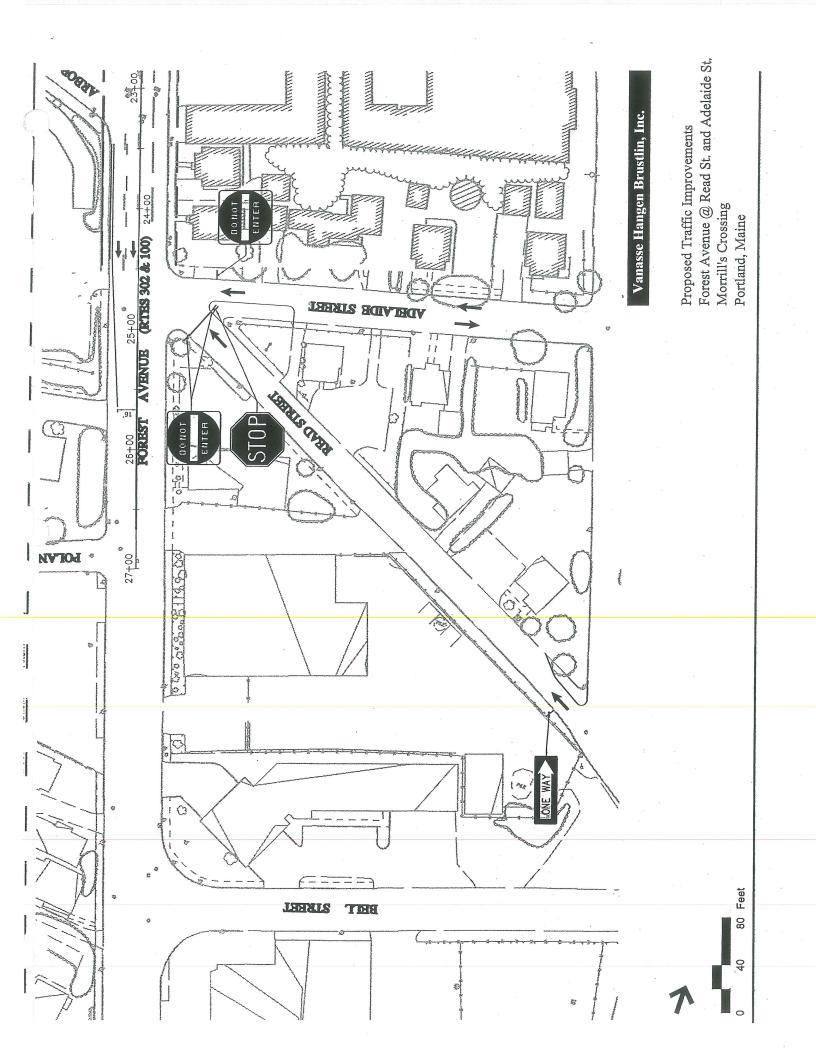


Evening Peak Hour Queue Results – Existing vs. Build Comparison

			04 Existing Condi			2007 Build Condition with Mitigation			
_ocation	Movement	Storage ^a	Average	Maximum	Storage	Average	Maximun		
Forest Avenue at	EB L/T		276	512	- ,	224	497		
Varren Avenue	EB R	200	137	230	200	181	229		
	WB L/T/R	-	11	58		11-	51		
	NB L	325	167	349	200	143	226		
	NB T	675	197	436	675	84	368		
					t				
	NB T/R	675	206	410	675	54	248		
	SB L/T	-	468	777	-	433	781		
	SB T/R	-	406	745	-	400	779		
orest Avenue at	EB L	- '	17	47	-	5	28		
llen Avenue	EBT	-	26	70	-	12	59		
	EB R	-	16	45	-	22	65		
	WBL	535	410	553	535	332	552		
	WB L/T	535	442	583	535	373	554		
	WBR	160	94	102	160	168	205		
	NB L	75	9	95	75	7	70		
	NB T	340	347	192 82 468	340	355	13 170		
			04 <i>£</i>	400			552 554 205 79 476 566 124 483		
	NB T	340	379	512	340	372	566		
	NB R	80	70	108	85	104	124		
	SBL	325	282	351	450	426	483		
	SBT	675	483	747	675	496	746		
	SB T/R	675	394	726	675	452	746 736		
orest Avenue at	EB L/R	-	612	1,018	-	265	472		
evens Avenue /	NBT	-	330	374	-	323	357		
shop Street	NBT	-	322	368	_	310	357		
onep out ou	SBT	340	298	420	340	234	460		
	SBR	340	146	420 426	0.10	n/a	.00		
	SB T/R	040	n/a	7/20	340	265	393		
	NEB L		349	382	340	332	358		
	NEB L/R	_	286	378		262	358		
		-			-				
len Avenue at	EB L/T/R	-	24	56	-	16	44		
ymouth Street/	WB L/T/R		21	68	-	10	27		
orthfield Green Drive	NB L/T/R	-	77	404	, .	186	446		
	SB L/T/R	-	215	429	-	170	467		
en Avenue at	EB L	250	93	207	250	99	177		
ashington	EBL	250	119	254	250	146	285		
enue	EB T/R	-	194	555	-	261	601		
	WBL	100	75	129	100	91	138		
	WB T/R	-	301	544	-	304	619		
	NBL	340	163	330	340	179	352		
	NBT	- [473	907	-	199	457		
	NB T/R		468	903	_	195	453		
	SBL	250	53	165	250	58	149		
		200	144	269	230				
	CDT I			209	· - 1	138	278		
	SBT	- !			Ŧ	400			
	SBT	-	181	281	-	136	291		
	SBT SBR	250			250	83	232		
	SB T SB R EB L/T/R	250	181	281	- 250 50	83	232		
	SB T SB R EB L/T/R WB L/T	250	181	281	50	83 2 244	232 29 478		
	SB T SB R EB L/T/R	250	181	281	I	83	232 29 478		
	SB T SB R EB L/T/R WB L/T WB R	250	181 103	281	50 - 200	83 2 244 85	232 29 478 226		
	SB T SB R EB L/T/R WB L/T WB R NB L/T	250	181	281	50 - 200 535	83 2 244 85 280	232 29 478 226 447		
en Avenue at oposed site drive	SB T SB R EB L/T/R WB L/T WB R	250	181 103	281	50 - 200	83 2 244 85	232 29 478 226		

not applicable; movement does not exist under current condition n/a

a lane or lane group storage capacity length, measured in feet EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; NEB = Northeastbound; L = Left; T = Through; R = Right



Transportation Land Development Environmental Services



imagination innovation energy Creating results for our clients and benefits for our communities

February 27, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 07334.00

Mr. Randy Dutton, PE Southern Region Traffic Engineer Maine Department of Transportation 51 Pleasant Hill Street Scarborough, ME 04070

Re:

Morrill's Crossing Development

Portland, Maine

Dear Randy:

Thank you for taking the time to meet with Mike Servetas and me last Friday February 17, 2006. As we discussed, I am forwarding you the following information and would request that you provide some written feedback to us on these outstanding issues to assist us in the permitting process and to better guide us in the development of the off-site roadway plans that your office will ultimately review and approve.

Forest Avenue Cross-Section

The basic cross-section being proposed for the Forest Avenue corridor is shown on the enclosed attachment. The available right-of-way is 62 feet along the majority of Forest Avenue. With building fronts located on the right-of-way, it is impossible to widen beyond the 62-foot layout without taking building structures. With this in mind, the proposed roadway cross-section calls for four (4) 11-foot travel lanes, a 3 foot outside shoulder on each side of the corridor, and 6-foot sidewalks for a total of 62 feet.

The City has asked that we consider the possibility of reducing the lane widths from 11 feet to either 10 or 10.5 feet to better accommodate bicycle traffic within the shoulder (any reduction in lane width would be added to the shoulder bicycle lane). Based on our conversations, it appears that 11-foot travel lanes is the minimum that MDOT would accept on an arterial roadway such as Forest Avenue. Can you please confirm this design assumption, as it is critical in how we advance this process.

Allen Avenue Apartment Driveway

During the meeting, it was also noted that the driveway location for the Morril's Crossing project was in close proximity to the driveway for the Allen Avenue Apartments. The applicant has been working closely with the owner of the Allen Avenue Apartments and has suggested the attached modification to their driveway. The driveway will be limited to right-turn in / out only and will provide an internal connection to the main development driveway which will provide access for left-turns exiting the site and entering the site.

Ms. Randy Dutton, Maine DOT Project No.: 07334.00 February 27, 2006 Page 2

Site Driveway Turning Radius

In addition to the proximity to the Allen Avenue Apartment driveway, you also noted that it would be helpful to see the truck turning radii entering and exiting the site driveway. The attached plans show the truck turning radii entering and exiting the driveways for a range of vehicles including; a Bus and WB-50, WB-62, and WB-67 trucks. While the graphics show that the turns can occur in a reasonable fashion, we recognize that there is some lane encroachment associated with the larger truck sizes. With this in mind, it is our expectation that the larger WB-67 trucks will be limited in their delivery times as part of the site plan approval process.

All your other suggestions were considered and incorporated into the concept plan being presented to the City. I look forward to working with you on the design of these improvements when the project is approved by the City.

Should you have any questions related to these responses, please feel free to contact me directly.

Regards,

VANASSE HANGEN BRUSTLIN, INC.

Robert L. Nagi, PE

Principal

Copies: Sarah Hopkins, City of Portland

Tom Errico, Wilbur Smith Associates

Tom Gorrill, Gorrill-Palmer Consulting Engineers, Inc.

Mike Servetas, Vanasse Hangen Brustlin, Inc.

Attachments

- ➤ Forest Avenue Recommended Cross-Section
- ➤ Allen Avenue Apartment Driveway Placement
- ➤ Truck Turning Summary at Site Driveway

Forest Avenue Recommended Cross-Section

2/27/06

Feet 9

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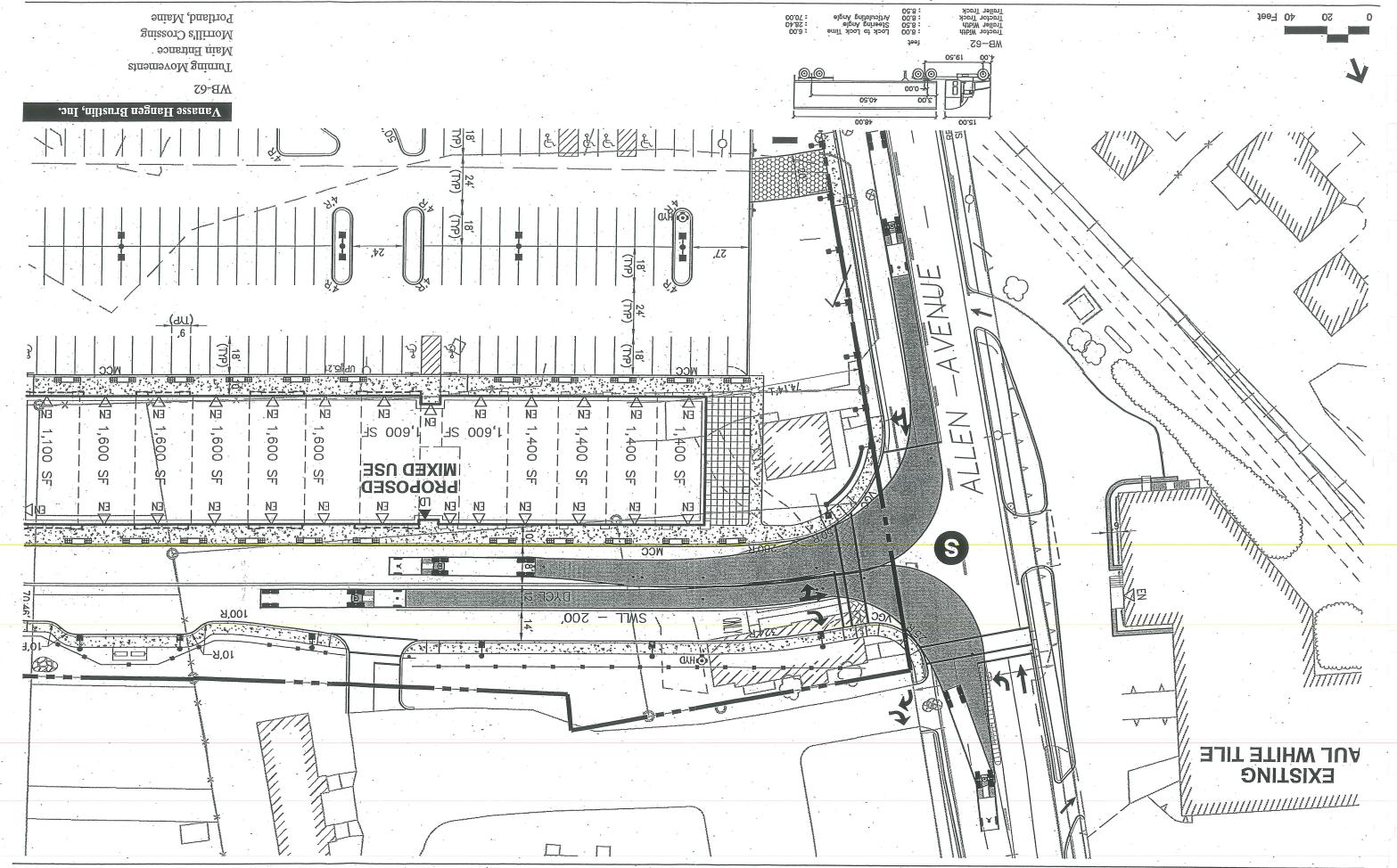
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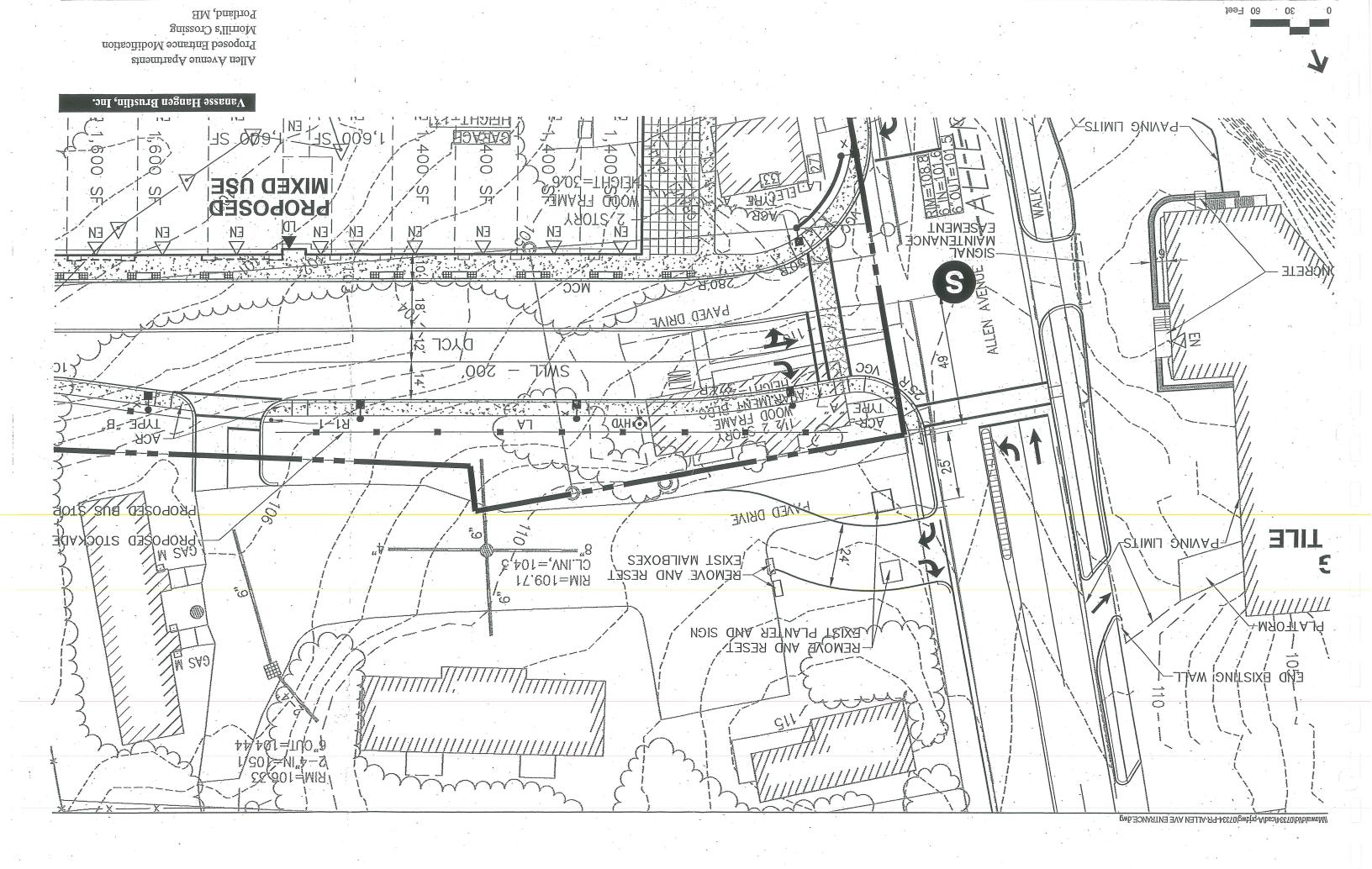
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Allen Avenue Apartments Driveway Placement





SCARBOROUGH, MAINE P.O. BOX 358 SOUTHERN REGION DEPARTMENT OF TRANSPORTATION STATE OF MAINE

8550-07040

JOHN ELIAS BALDACCI

COVERNOR

March 2, 2006

Watertown, MA 02471-9151 PO Box 9151 101 Walnut Street Mr. Robert Nagi, PE

Portland, Maine KE: Morrill's Crossing Development

Dear Robert:

request in the letter, I am providing this response to several questions raised in your letter. Thank you for your letter to me dated February 27, 2006 regarding the above referenced project. Per the

Forest Avenue Cross-Section

understanding from the letter is that the additional shoulder width would better accommodate bicycles. something narrower so that additional width could be given to the proposed 3 foot shoulder. My if the travel lanes on Forest Avenue or the project in general could be reduced in width from 11 feet to corridor, the availability to widen beyond the 62 foot right of way is not feasible. The question was asked My understanding from the letter is that because of the proximity of buildings/structures along the

of the corridor and therefore will not be permitted. service centers. As such, travel lanes less than 11 feet would significantly affect both mobility and safety primary purpose of the principal arterial is to provide vehicular mobility within and between major arterials and considered by the Federal Government as being on the National Highway System. The Both Forest Avenue and Allen Avenue in the area of the proposed project are designated as principal

additional width to the shoulders. from the City, may want to reduce the 6 foot wide sidewalks by 6 inches to 1 foot each side and give the each side. Since 5 foot sidewalks are common and meet all typical standards, the applicant, with approval In reviewing the proposed cross-section, it appears the sidewalks are proposed to be 6 feet in width on

Allen Avenue Apartment Driveway

ង្គ ល្យក់ក្នុងទិនក្នុងដែ physical barrier and that reliance on signage only has been found to be ineffective. The Department only. It has been found that the only way to truly enforce the right-in / right-out only restriction is by a Department. The relocated entrance is proposed to be restricted to right-in / right-out turning movements location is not ideal, but is considerably better than the previous location and acceptable to the reviewing the sketch provided, it appears the apartment entrance has been shifted further north. The new signalized entrance and the adjacent unsignalized Allen Avenue Apartment Complex entrance. In As noted in your letter, the Department had significant concerns over the proximity of the proposed



COMMISSIONER

DAVID A. COLE

recommends either a raised center median be constructed on Allen Avenue past the apartment entrance or a channelized island be constructed on the apartment entrance.

Site Driveway Turning Radius

As discussed at our meeting, the applicant has presented that they will incorporate Traffic Demand Management (TDM) techniques to help reduce vehicular traffic on the adjacent roadway network. One TDM suggested by the applicant that would be incorporated into the site would be an internal Bus Stop. Therefore, a City Bus should be able to comfortably maneuver in and out of the proposed site without encroachment into opposing lanes. Based on a review of the sketches provided, it does appear that the proposed entrance can accommodate a bus without encroachment into opposing lanes. The Department concurs with the statements in the letter that larger vehicles be restricted to specific low volume times of day. Based on reviewing the sketches we recommend any vehicles larger than a WB-50 would require this restriction is slightly smaller than the WB-67 restriction stated in the letter. We avoid any future misunderstandings or miscommunication. In addition to the time of day restriction for avoid any future misunderstandings or miscommunication. In addition to the time of day restriction for avoid any future misunderstandings or miscommunication. In addition to the time of day restriction for avoid any future misunderstandings or miscommunication. In addition to the time of day restriction for avoid any future misunderstandings are any and all TDM techniques be identified \ documented and incorporated into any permits \ approvals given by the City.

As stated in the letter, there were other items raised at our meeting that have not been reviewed herein and the Department looks forward to offering input on any future designs.

If you have any questions or wish to discuss this in more detail please do not hesitate to contact me at

.0007-288

Sincerely,

Steve Landry, Assistant State Traffic Engineer (with copy of letter) Bruce Munger, Southern Region Traffic Engineer Tom Errico, Wilbur Smith Associates

MDOT Southern Region Sr. Traffic Engineer

Kandall Dunton, PE, PTOE

:D