



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Prince George's County Planning Department
Countywide Planning Division, Transportation Planning Section

(301) 952-3680
www.mncppc.org

January 7, 2013

MEMORANDUM

TO: Quynn Nguyen, Subdivision Section, Development Review Division

FROM: Faramarz Mokhtari, Transportation Planning Section, Countywide Planning Division

VIA: Eric Foster, Transportation Planning Section, Countywide Planning Division

SUBJECT: 4-12004, Cafritz @ Riverdale Park, Transportation Findings and Recommended Conditions for Preliminary Plan

The Transportation Planning Section has reviewed the subdivision application referenced above. The subject property consists of approximately 37.55 acres of land, of which about 35.72 acres are in the M-U-T-C zone (Mixed-Use Town Center) and the remaining 1.63 acres are in the R-55 zone. The M-U-T-C zone for the subject property was approved by the District Council through approval of the zoning map amendment application (A-10018) on July 12, 2012. The property is located along the east side of Baltimore Avenue (US1), approximately 1,400 feet north of the intersection of US1 and East-West Highway (MD410) intersection, south of US1 and Albion Road, and west of the CSX railroad tracks.

The applicant proposes to re-subdivide the existing Parcel of land (Parcel 81) also known as Calvert Tract, LLC into 139 lots (1- 139) and 11 parcels (A-O, not including Parcel B). Lots 136, 137, and 138 are proposed as open space lots and all three lots are fronting US1.

Growth Policy - Service Level Standards

The subject property is located within the Developed Tier, and the US1 corridor as defined and designated in the *Prince George's County Approved General Plan*. As such, the subject property is evaluated according to the following standards:

Links and signalized intersections: Level-of-service (LOS) E, with signalized intersections operating at a critical lane volume (CLV) of 1,600 or better. Mitigation, as defined by Section 24-124(a)(6) of the Subdivision Ordinance, is permitted at signalized intersections within any tier subject to meeting the geographical criteria in the Guidelines.

Unsignalized intersections: The *Highway Capacity Manual* (Transportation Research Board) procedure for unsignalized intersections is not a true test of adequacy but rather an indicator that further operational studies need to be conducted. Vehicle delays in all movement not exceeding 50.0 seconds are deemed to yield to an acceptable operating condition at unsignalized intersections.

Transit-Oriented Development (TOD): TOD is defined in the Guidelines as development that is pedestrian-oriented, and includes compact neighborhoods with moderate- to high density land uses. Any TOD development within centers and corridors, as designated in the General Plan or any successor document and as amended by other master or sector plans, would be eligible for trip reduction allowance of six percent for "Acceptable/ Marginal TOD" to as much as 30 percent reduction allowance for "Excellent TOD" of the total calculated number of site generated trips.

Proposed Development and Projected Traffic Impacts

The application is a preliminary plan of subdivision for a phased mixed-use development, with an anticipated total build-out of six years. The proposed development as evaluated by the submitted traffic impact study, consists of approximately 982 residential multi-family units (606 multi-story non-aged multifamily units, 219 attached senior housing units, 30 faculty housing units, and 126 attached townhouse units), 22,000 gross square feet office space, a 120-room hotel and no more than 168,000 gross square feet of commercial retail. While the proposed development levels shown in the latest submitted plans might vary slightly from these figures, the adequacy determination incorporated herewith in this memo is based on the trips that would be generated by development levels stated above. The existing site at the present time does not contain any development.

While the required adequacy findings for transportation facilities for this preliminary plan of subdivision will be based on the projected number of AM and PM weekday, midday, or weekend (Saturday) peak hour vehicle trips calculated for the subject site in accordance with the procedures outlined in the *2012 edition of the approved Transportation Review Guidelines, Part one (Guidelines)* and the revised scoping agreement prepared as noted by Condition 14(c.) of the approved Zoning Ordinance No. 11-2012 (Case No. A-10018), the maximum allowable site generated new trips at any phase or at build-out must not exceed the levels stated in condition 22 of the approved Zoning Ordinance No. 11-2012.

With the anticipated build-out in six years, the proposed phasing as shown in the revised plans is not applicable for determination of adequacy for transportation. Per Subtitle 24 of the County Code (the Subdivision Regulations) and when the projected build-out is in six years, all impacted transportation facilities including the existing, permitted for and/or is under construction with 100 percent of construction funds allocated within either the adopted County Capital Improvement Program (CIP), or the current State Consolidated Transportation Program (CTP), incorporated in a specific public facilities financing and implementation program as defined in Section 27-107.01(186.1) or otherwise fully bonded by the applicant and permitted for construction must be adequate to accommodate the total projected traffic. The total traffic in addition to including an appropriate annual growth rate of existing and observed trips must also include the traffic that will be generated by the proposed development, and any approved but not yet built development.

Using trip generation rates in the Guidelines and use-specific as well as the mid-day and Saturday peak generation rates contained in the latest edition of the *Trip Generation Manual* (Institute of Transportation Engineers), the net build-out peak hour vehicle trips for each required analysis period is presented in the table below:

Proposed Use	Peak Hour			
	Weekday		Mid-day	Saturday
	AM	PM		
Residential				
219 units senior housing	28	35	38	66
Less internal Capture(ITE)	-2	-7	-7	-8
Less -30% TDM, Transit, TOD (Guidelines)	-8	-8	-10	-17
New Trips	18	20	21	41
Other housing types				

30 units faculty housing	21	24	12	51
606 units multifamily housing	316	363	196	315
126 units of Townhouses	89	101	50	79
Less internal Capture(ITE)	-16	-89	-44	-53
Less- 30% TDM, Transit, TOD (Guidelines)	-123	-120	-64	-117
New Trips	287	279	150	275
<i>Residential New Trips</i>	305	299	171	316
Office				
22,000 sq. ft. general office	44	41	29	9
Less internal Capture(ITE)	-4	-11	-8	-3
Less -30% TDM, Transit, TOD (Guidelines)	-12	-9	-6	-2
<i>Office New Trips</i>	28	21	15	4
Hotel				
120-Room facility	78	96	60	86
Less internal Capture(ITE)	-4	-18	-11	-10
Less -30% TDM, Transit, TOD (Guidelines)	-24	-23	-15	-23
<i>Hotel New Trips</i>	50	55	34	53
Retail				
168,200 sq. ft. retail (shopping center)	214	1,076	1,024	1,202
Less internal Capture(ITE)	-25	-123	-69	-74
Less – 15% TDM, Transit, TOD (Guidelines)	-29	-143	-143	-169
Less Pass-by trips-50% (Guidelines)	18	20	21	41
<i>Retail New Trips</i>	80	404	536	633
Total Net New Trips	463	779	756	1,006
Notes: The submitted traffic impact study includes a total peak hour reduction of 30% percent for the residential, office and hotel uses, and 15% for retail for existing bus and transit service, the proposed shuttle service, and the required TDM program. The approved Transportation Review Guidelines-Part 1- 2012, allows for a 30% reduction for all uses contained in a development application if the proposed development meets certain TOD stated standards and combine TOD ranking score of 92 or more, as demonstrated by the attached work-sheets.				

The proposed development is projected to generate 463 AM and 779 PM new weekday peak hour vehicle trips, respectively. While the generated AM and PM peak hour vehicle trips are less than the 548 AM, and 902 PM new peak hour vehicle trip caps stated by Condition 22 of the approved Zoning Ordinance No. 11-2012, nonetheless the stated levels are more than the required threshold (50) for submission of a traffic impact study as specified by the Guidelines. As a result, staff required submission of a traffic study detailing AM and PM weekday, midday and weekend peak hours analyses, as well as provision and full description and proposed financing of the required TDM program elements.

The applicant submitted for review two separate traffic impact studies. The first traffic impact study report, dated July 10, 2012 and conducted by Wells and Associates, was for the total build-out of the site as stated above, with a proposed build-out in 5 years, or by 2017. The second traffic impact study report, dated September 5, 2012 also conducted by Wells and Associates, and at the request by staff was for

analysis of the called, at that time, “the phase one” consisting of 120 townhouse units, and 100,000 sq. ft. of retail space. This phase of development was planned to proceed and be completed in less than two years, or in 2014 and well in advance of the required construction of the roadway with the CSX crossing and connection to Rivertech Road.

Following the preliminary review for sufficiency, both reports were found to be acceptable by the Transportation Section, and were referred for review and comments to the SHA, DPW&T, the City of College Park, The town of Riverdale Park, and the Town of University Park SHA. Staff sufficiency determination was made because both reports incorporated appropriate trip generation rates and procedures outlined and recommended by the Guidelines as well as including methodology and approach as well as all critical intersections and roadway segments required by Condition 14 (c) (1–8) of the approved Zoning Ordinance No. 11-2012.

Both of these reports included a transportation facilities mitigation plan by proffering to replace the existing single left turn lane along northbound US1 at this location with the provision of double- left turn lanes. Section 24-124 (a) (6) of the County Code authorizes the Planning Board to consider traffic mitigation procedures identified in a prepared Transportation Facilities Mitigation Plan (TFMP) in certain areas of the county experiencing unacceptable transportation service levels. Since mitigation represents a departure from the standard procedure, the use of mitigation is limited to certain areas and special circumstances outlined by the County Council Resolution (CR-29-1994) and the Guidelines. One of these special circumstances is that the proffered improvement included in the TFMP is not already fully funded in either the adopted County Capital Improvement Program (CIP), or the current State Consolidated Transportation Program (CTP), and must be funded in whole or in part (if in part, other commitments must be made) by the applicants, applicant’s heirs, successors, and/or assignees. The Guidelines also requires approval of any proffered mitigation plan by the appropriate agency prior to consideration by the Planning Board.

This improvement, the provision of double left-turn lane along northbound US1 at its intersection with MD410 was included with full funding and construction schedule for the year 2013 in the previous CTP (FY 2012-2018). With the current limited funding at the State level for transportation projects, there was a possibility that this improvement may have less than 100% construction funds in the new CTP. But due to the important nature of this improvement, the current CTP (FY 2013-2019) re-appropriated full 100% funding and construction to begin in spring 2013. As result of this action, the applicant’s traffic consultant was asked to revise the required analysis by including this improvement as part of the background condition. Since there are no other feasible improvements that can be constructed at this location, the consultant proposed to re-route some of the background traffic to the planned but not yet funded roadway connection that includes the proposed CSX crossing overpass to River Road.

The revised analysis and the prepared point –by-point response to each of the transportation related conditions contained in the approved Zoning Ordinance No. 11-2012 was submitted for review on December 10, 2012. Supplementing this revised analysis, another report, detailing the needed justification for the assumed vehicle trip generation reductions for the proposed development to account for proffered and required transit, Transportation Management Program (TMP) components, TOD, as well as the rerouting of a portion of the projected background, and future traffic from US1 to the new proposed CSX crossing and to Kenilworth by the way of River Road, was provided for review on December 13, 2012. For a development to be deemed as TOD, there are specific standards, identified in the Guidelines, which must be included for the staff review in the subsequent detailed site plans. Both of these supplemental documents were referred to SHA, DPW&T and the three municipalities of College Park, Riverdale Park, and University Park for their review and comments.

The findings and recommendations outlined below are based upon a review of submitted reports and written comments provided by the reviewing agencies and municipalities, and additional analyses conducted by staff, consistent with the Guidelines and the approved plans.

Traffic Study Review and Findings

Existing Conditions

Pursuant to the scoping agreement, the traffic impact study identified the following intersections as the critical intersections, with existing traffic conditions for each analysis period is summarized within the table below:

EXISTING TRAFFIC CONDITIONS		
Intersection	LOS/CLV (delay)*	
	AM	PM
US1 & Paint Branch Parkway / Campus Drive	B/1036	C/1213
US1 & Rossborough Lane	A/692	A/767
US1 & College Avenue/ Regents Drive	A/754	A/857
US1 & Knox Road	A/775	A/993
US1 & Calvert Road	A/572	A/768
US1 & Guilford Road	A/712	A/754
US1 & Amherst Road/ Pine Way/ Queen’s Chapel Road	A/659	A/619
US1 & future Northern Access Road		
US1 & Van Buren Street*/ Future Main Access Road	(12.8) Seconds	(13.3) Seconds
US1 & Future Southern Access Road		
US1 & MD 410	E/1555	E/1590
US1 & Queensbury Road	A/934	A/941
Paint Branch Parkway & River Road	A/622	A/634
MD201 & River Road	A/999	A/962
Rivertech Court and River Road*	(27.6) Seconds	(22.7) Seconds
Rhode Island Avenue & Queensbury Road *	(10.7) Seconds	(11.2) Seconds
Lafayette Avenue & Queensbury Road *	(8.6) Seconds	(12.9) Seconds
Natoli Place & Queensbury Road *	(8.8) Seconds	(9.5) Seconds

* In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines. If the reported delay does not exceed 50 seconds, the intersection is deemed to operate acceptably.

EXISTING TRAFFIC CONDITIONS		
Intersection	LOS/CLV (delay)*	
	Mid-Day	SAT
US1 & Paint Branch Parkway / Campus Drive	N/S**	C/1158
US1 & Rossborough Lane	N/S	A/893
US1 & College Avenue/ Regents Drive	A/684	A/759
US1 & Knox Road	N/S**	A/952
US1 & Calvert Road	N/S**	A/639
US1 & Guilford Road	N/S**	A/735
US1 & Amherst Road/ Pine Way/ Queen’s Chapel Road	A/446	A/604
US1 & future Northern Access Road		

US1 & Van Buren Street*/ Future Main Access Road	(11.9) Seconds	(15.5) Seconds
US1 & Future Southern Access Road		
US1 & MD 410	C/1164	E/1496
US1 & Queensbury Road	A/722	A/989
Paint Branch Parkway & River Road	N/S**	A/270
MD201 & River Road	N/S**	A/606
Rivertech Court and River Road*	N/S**	(9.8) Seconds
Rhode Island Avenue & Queensbury Road *	(8.4) Seconds	(9.1) Seconds
Lafayette Avenue & Queensbury Road *	(9.0) Seconds	(9.3) Seconds
Natoli Place & Queensbury Road *	(9.1) Seconds	(9.2) Seconds
* In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines. If the reported delay does not exceed 50 seconds, the intersection is deemed to operate acceptably. ** N/S: Not required by the signed traffic study Scope.		

Background Conditions

As required, the background condition evaluates the anticipated background traffic with existing and programmed transportation infrastructure and improvements that are 100% funded, or bonded and permitted for construction.

The background traffic combines growth in existing traffic volumes attributable to development outside the study area with traffic that would be generated by approved and unbuilt development s within the study area. A review of the historical SHA traffic volume maps indicates that US1 in the immediate vicinity of the site has experienced less than 0.1 percent growth per year over the last seven years. Therefore, staff concurs that the use of 0.5 % per year growth rate for US1 through 2017, the proposed build-out year, used in the analysis is appropriate. In addition, there are nine approved but not yet build development plans, including M square/ Riverside, Maryland Book Exchange, in the study area which would collectively contribute a total of 2,997 AM new weekday peak hour trips, 3,084 PM new weekday peak hour trips, 2,097 new mid-weekday peak hour trips, and 1,753 Saturday new peak hour trips to the area road network.

In addition to including the provision of a double left-turn lane along northbound US1 at its intersection with MD410, which is fully funded with construction scheduled for the year 2013 in the current CTP, the traffic study includes the following improvements, which are not built but are among the approval conditions of the M square and Riverside development plans, as part of the transportation system for the background condition:

1. Additional right turn lane on east bound approach of MD201 @ River Road
2. Additional left turn lane on north bound approach of MD201@ River Road
3. Signalization of the intersection of Rivertech Court with River Road.

The results of background analyses are shown within the following table:

BACKGROUND TRAFFIC CONDITIONS¹		
Intersection	LOS/CLV (delay)*	
	AM	PM
US1 & Paint Branch Parkway / Campus Drive	C/1211	E/1511
US1 & Rossborough Lane	A/756	A/852

US1 & College Avenue/ Regents Drive	A/841	A/1049
US1 & Knox Road	A/841	A/1086
US1 & Calvert Road	A/638	A/844
US1 & Guilford Road	A/783	A/864
US1 & Amherst Road/ Pine Way/ Queen's Chapel Road	A/717	A/685
US1 & future Northern Access Road		
US1 & Van Buren Street*/ Future Main Access Road	(13.5) Seconds	(14.7) Seconds
US1 & Future Southern Access Road		
US1 & MD 410 W/ SHA funded improvement	E/1515	E/1596
US1 & Queensbury Road	A/992	A/91019
Paint Branch Parkway & River Road	A/691	A/801
MD201 & River Road w/ planned improvements	D/1336	C/1177
Rivertech Court and River Road w/ planned traffic signal	A/926	B/1019
Rhode Island Avenue & Queensbury Road *	(10.7) Seconds	(11.2) Seconds
Lafayette Avenue & Queensbury Road *	(8.6) Seconds	(12.9) Seconds
Natoli Place & Queensbury Road *	(8.8) Seconds	(9.5) Seconds
* In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines. If the reported delay does not exceed 50 seconds, the intersection is deemed to operate acceptably.		

BACKGROUND TRAFFIC CONDITIONS		
Intersection	LOS/CLV (delay)*	
	Mid-Day	SAT
US1 & Paint Branch Parkway / Campus Drive	N/S**	D/1409
US1 & Rosborough Lane	N/S	A/983
US1 & College Avenue/ Regents Drive	A/843	A/974
US1 & Knox Road	N/S**	A/1017
US1 & Calvert Road	N/S**	A/705
US1 & Guilford Road	N/S**	A/816
US1 & Amherst Road/ Pine Way/ Queen's Chapel Road	A/501	A/664
US1 & future Northern Access Road		
US1 & Van Buren Street*/ Future Main Access Road	(12.6) Seconds	(16.9) Seconds
US1 & Future Southern Access Road		
US1 & MD 410 w/ SHA funded improvement	C/1119	E/1464
US1 & Queensbury Road	A/780	B/1052
Paint Branch Parkway & River Road	N/S**	A/327
MD201 & River Road w/ planned improvements	N/S**	A/655
Rivertech Court and River Road w/ planned traffic signal	N/S**	A/210
Rhode Island Avenue & Queensbury Road *	(8.4) Seconds	(9.1) Seconds
Lafayette Avenue & Queensbury Road *	(9.0) Seconds	(9.3) Seconds
Natoli Place & Queensbury Road *	(9.1) Seconds	(9.2) Seconds
* In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines. If the reported delay does not exceed 50 seconds, the intersection is deemed to operate acceptably.		
** N/S: Not required by the signed traffic study Scope.		

Future (Total) Conditions:

An analysis of the traffic data under “Total” conditions for the build-out of the proposed development represents a combination of background traffic and site-generated traffic, as presented above. The total traffic analysis conditions reported in the following tables are based the following additional concepts, assumptions, and proposed roadway improvements:

1. The total traffic conditions represent the full build-out of the project in six years, without additional analysis or findings for development phasing as included in the submitted plans.
2. Provides for vehicle reduction through the use of the proffered TMP components including the utilization of existing bus and rail service, on-site bike sharing and car sharing programs, utilization of the proposed shuttle and circular bus service required by the approved zoning Ordinance No. 11-2012. While the submitted TMP lacks the needed mode shift goals, the required financial committals and specifics as well as the necessary monitoring and implementation tools, the sum of all proposed reductions used in the prepared traffic impact study is almost equal to the level of reduction credits currently allowed by the Guidelines for an “Excellent TOD” designated development. The applicant has justified the proposed development as Excellent TOD, by completing the required checklist included in the Guidelines, with some of the stated specific standards need to be verified at the time of detailed site plan review.
3. Rerouting a portion of the existing background development generated traffic, such as M Square and Riverside, as well as the traffic along southbound lanes of US1 south of Van Buren Street and going through or making left turn at MD 410 via the e proposed CSX crossing and River Road to MD201, as well as rerouting a similar amount of northbound oriented traffic along US1 south of MD 410 to US1 north of the site via MD 201, river road and the proposed CSX crossing.
4. Conversion of outside through lane along NB US1 to thru/right lane at the proposed south and north access roadways.
5. Install traffic signal along with associated geometric improvements, as specified by the approved Zoning Ordinance No. 11-2012 including physical barriers to eliminate through movement between the existing Van Buren Street and mid access roadway.

TOTAL TRAFFIC CONDITIONS¹		
Intersection	LOS/CLV (delay)*	
	AM	PM
US1 & Paint Branch Parkway / Campus Drive	C/1192	E/1489
US1 & Rossborough Lane	A/770	A/864
US1 & College Avenue/ Regents Drive	A/863	B/1074
US1 & Knox Road	A/860	B/1104
US1 & Calvert Road	A/652	A/871
US1 & Guilford Road	A/831	A/946
US1 & Amherst Road/ Pine Way/ Queen’s Chapel Road	A/769	A/756
US1 & Site’s north Access*	(10.6) Seconds	(13.9) Seconds
US1 & Van Buren Street/ Site’s Main Access W/ Signal	A/720	B/1132
US1 & Site’s South Access*	(10.9) Seconds	(14.3) Seconds
US1 & MD 410 W/ SHA funded improvement	E/1516	E/1596
US1 & Queensbury Road	A/992	A/91019

Paint Branch Parkway & River Road	A/691	A/801
MD201 & River Road w/ planned improvements	D/1336	C/1177
Rivertech Court and River Road w/ planned traffic signal	A/926	B/1019
Rhode Island Avenue & Queensbury Road *	(10.7) Seconds	(11.2) Seconds
Lafayette Avenue & Queensbury Road *	(8.6) Seconds	(12.9) Seconds
Natoli Place & Queensbury Road *	(8.8) Seconds	(9.5) Seconds
* In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines. If the reported delay does not exceed 50 seconds, the intersection is deemed to operate acceptably.		

TOTAL TRAFFIC CONDITIONS		
Intersection	LOS/CLV (delay)*	
	Mid-Day	SAT
US1 & Paint Branch Parkway / Campus Drive	N/S**	D/1444
US1 & Rossborough Lane	N/S	B/1021
US1 & College Avenue/ Regents Drive	A/835	B/1029
US1 & Knox Road	N/S**	B/1079
US1 & Calvert Road	N/S**	A/767
US1 & Guilford Road	N/S**	A/918
US1 & Amherst Road/ Pine Way/ Queen's Chapel Road	A/501	A/769
US1 & future Northern Access Road	(11.5) Seconds	(12.7) Seconds
US1 & Van Buren Street/ Main Access w/ planned signal	A/585	B/1009
US1 & Future Southern Access Road	(11.9) Seconds	(13.0) Seconds
US1 & MD 410 w/ SHA funded improvement	C/1121	E/1462
US1 & Queensbury Road	A/826	B/1089
Paint Branch Parkway & River Road	N/S**	A/319
MD201 & River Road w/ planned improvements	N/S**	A/708
Rivertech Court and River Road w/ planned traffic signal	N/S**	A/663
Rhode Island Avenue & Queensbury Road *	(8.6) Seconds	(9.3) Seconds
Lafayette Avenue & Queensbury Road *	(9.1) Seconds	(9.4) Seconds
Natoli Place & Queensbury Road *	(9.3) Seconds	(9.3) Seconds
* In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines. If the reported delay does not exceed 50 seconds, the intersection is deemed to operate acceptably.		
** N/S: Not required by the signed traffic study Scope.		

The results shown in the tables above indicate that all studied intersections would operate acceptably under total traffic provided the noted improvements are either constructed or fully boned and permitted for construction. It is equally important to note that the resulting CLV findings noted above are based upon the projected peak hour vehicle trips resulting from the full build-out of the proposed plan for each studied period and the inclusion of CSX crossing and its connections from US1 to River Road as part of the background network. This in accordance with the Guidelines would mean the proposed CSX crossing and its connections to US1 and River Road must be constructed or deemed funded and permitted for construction in accordance with Section 24-124 (a) (6) of the County Code.

In addition to the above intersection levels of service analysis, and at staff request, a queuing analysis was done for the US1 SB left turns at the proposed signalized intersection of Van Buren Street and the Main access driveway using the total projected traffic. This queuing analysis indicates a maximum queue

length of 400 feet plus the required taper, per SHA standards, would be needed. Since this required length is significantly less than the existing 1200 feet from this location to the next signalized intersection to the north along US1, staff concurs with report findings that a single left turn lane at this location would be sufficient to accommodate the total build-out left turn traffic from US1.

Conformance to the approved Master Plans

The subject property is covered by the *2009 Approved Countywide Master Plan of Transportation* (MPOT), and the *Approved Town of Riverdale Park Mixed-Use Town Center Zone Development Plan*. The submitted plan indicates that the existing Rights-of-Way (ROW) for US1 in the vicinity of subject site is 60 feet wide. The existing roadway consists of only two travel lanes on each side with a center left turning lane. While there are no sidewalks along the property frontage or along the WMATA property, there are sidewalks along US1 to the north and south of the site.

Both approved master plans envision and recommend US1 as a four lane divided Major Collector facility roadway with a 90 to 110 foot ROW along the subject property. Provision of at least 45 feet of ROW from existing centerline along US1 and along the proposed property frontage will allow for the needed landscaped median that will include a left turn lane, two travel lanes and on road bike lane on each side, landscaped strip and wide side walk along and adjacent to roadway. This minimum amount of needed ROW, does not however, provide for the exclusive right turn along NB US1 and at the proposed main access driveway, required by the SHA as part of their latest email referral received on January 3, 2012.

On-Site Circulation and Access Review and Findings

The subject property is adjacent to US1. As proposed, the subject site will be served by three access driveways from US1, two of which are proposed to be stop-controlled and limited to right turns, a CSX railroad crossing that will extend to River Road, and a southern access driveway connection to Maryland Avenue. The main access driveway along US1 will be opposite of the existing Van Buren Street and is proposed as four lane divided gateway with extra wide median to be used as public gathering places and plazas, on road bike lanes, bus stops, potential bike share and car sharing stations, wide sidewalks transitioning to two lane divided roadway as it crosses the planned Rhode Island Avenue Regional Trail and intersect with other planned roadways that will extend to existing Maryland Avenue, or the planned CSX crossing. Considering the level activities and projected multi function of this roadway, staff concurs with the suggested changes proposed by Urban Design to eliminate the western most access driveway to the proposed surface parking lot and shift the road alignment slightly to the north to better accommodate the existing historical feature as well as the reconfiguration of the proposed ellipse by shift it further east, would eliminate several conflict points and would result for better, and safer pedestrian, vehicular, and bus circulation and movement along and across this roadway.

Review of Transportation Related Requirements of Prior Development Plans

As indicated in prior sections, there is an approved zoning Ordinance No. 11-2012 for the subject site (A-10018) with several transportation related conditions and considerations. Several of these require review at, or prior to, approval of any preliminary plans. The status of these related transportation conditions and considerations are summarized below:

4. Prior to acceptance of any application for a Preliminary Plan of Subdivision, the following information shall be provided:

e. one east-west bicycle route through the site either along Van Buren Street or Woodbury Street, in order to accommodate east-west bicycle movement through the site, to the trolley trail, to the planned bicycle facilities along Baltimore Avenue (US 1), and across the CSX crossing.

This is done. The plan proposes on road bike lanes from US1 (the planned bike lane along US1) thru the site and along both Van Buren Street and Woodbury Street. The proposed redesign of Van Buren Street as proposed by Urban Design Section would create much better environment for all users including bikers.

f. The proposed cross sections, roadbeds, streetscape dimensions, and the use of medians shall be fully incorporated into the application of the preliminary plan so that the width and configuration of the streets can be reduced, yet adequate in design to address the traffic patterns within the development and vehicular and emergency access. The use of public streets in accordance with the standards of the Department of Public Works and Transportation (DPW&T) shall also be considered to serve certain uses and to determine future maintenance of the transportation facilities, including a bridge over the CSX railroad.

While the spirit of this condition is enforceable at the time of detailed site plan and building permit review, the preliminary plan needs to be revised to show all internal roadways except for the proposed alleyways that are or will be dedicated to public use.

14-c A Revised Traffic scoping agreement and Impact Study that:

- (1) Accurately reflects the development proposal and anticipated phasing;
- (2) Eliminates corridor averaging for all intersections included in the Study;
- (3) Analyzes midday and Saturday (10:00 a.m. – 6:00 p.m.) traffic impacts;
- (4) Analyzes all proposed connections, including the proposed CSX Crossing and Maryland Avenue;
- (5) Analyzes the impact of the development on the intersections as specified in the scoping agreement and those in the July 27, 2011 study, as well as the evaluation of the existing prevailing conditions and traffic impact of the development on Queensbury Road, existing Maryland Avenue, Rhode Island Avenue south of Town Center, Lafayette Avenue, Natoli Place, River Road, and other roads as appropriate;
- (6) Provides for vehicle trip reduction through measures including but not limited to rideshare, Zipcar (or similar) programs, bike share, enhanced transit service such as a shuttle and/or circulator bus, and the CSX crossing;
- (7) Considers all future development and its effects on the corridor and intersections as identified in (c)(5) above for any projects that have an approved detailed site plan or preliminary plan of subdivision within the study area to include at a minimum the eastern portion of the 2004 approved M-U-TC Zone area; and
- (8) Does not take a discount by redirecting existing traffic on East-West Highway that would not otherwise travel up Baltimore Avenue to the Cafritz Property.

This condition identifies specific analysis procedures that all its elements have been fully incorporated in the prepared traffic studies and here within the staff review memo.

15. After completion of construction and final inspection of on-site public roads, and upon request of the Town of Riverdale Park, such roads shall be dedicated and turned over to the Town, in such manner and subject to such reasonable terms and conditions as the Town may require, for public use. The determination as to which on-site roads will be public roads subject to dedication and turnover to the Town shall be determined at the time of Preliminary Plan of Subdivision.

While the spirit of this condition is enforceable at the time of building permit review, the preliminary plan needs to be revised to show all internal roadways except for the proposed alleyways that are or will be dedicated to public use.

17. At the time of Preliminary Plan of Subdivision submission, the applicant shall submit a Transportation Management Plan ("TMP") for the entire development. The TMP shall include provisions to provide for the full funding of the TMP by the owners of the property. The TMP and funding obligations shall run with the land until such time as a Transportation Demand Management District ("TDMD") is established and includes the property. The TMP shall identify and establish a series of measures to achieve a maximally-efficient use of the adjacent transportation facilities. As the project is developed and occupied, modifications and additions to the TMP shall establish vehicle trip reduction goals with reporting and monitoring provisions subject to independent verification by DPW&T. Specifics of the TMP shall include the following elements referenced in the applicant's letter to Susan Lareuse dated November 15, 2011, pages 9-10, and car and bike share and residential and employee subsidies. The TMP shall also provide for a private shuttle to be provided as the applicant and the applicant's heirs, successors, and/or assignees' expense.

The applicant has submitted a prepared TMP for the entire development, identifying program actions that when and if funded and implemented would provide for some reduction and diversion of projected site's vehicle trips to other modes. The plan however, lacks the required funding obligations and staff is unable to find any specific trip reduction goals associated with the proffered TMP as well as any reporting or monitoring provisions. With the noted omissions, staff recommends the full review and conformity to this condition to be carried forward to the detailed site plan review.

18. Prior to approval of a Preliminary Plan of Subdivision, the applicant shall provide a commitment to organize and achieve a private shuttle vehicle to and from the Prince George's Plaza Metro station and the College Park Metro station as necessary to achieve a 15-minute headway between 6:30 a.m. to 9:00 a.m. and 4:30 p.m. to 7:00 p.m., Monday through Friday. This requirement may be provided as part of the TMP and may be satisfied privately or by participating in one or a combination of existing or future adjacent public transportation services. Specifications and assurances for any shuttle service shall be provided prior to issuance of any use and occupancy permit. Service is to continue until there is a preferred alternative approved by the municipalities and the applicant may substitute an equivalent to the private shuttle service.

The TMP while identifying reductions in generated vehicle trips as a result of the existing and proposed circular and shuttle bus service, it lacks the required funding obligations and staff is unaware of any other means of satisfying and ensuring that will happen as required prior to issuance of any use and occupancy permit. Therefore, staff recommends the full review and conformity to this condition to be carried forward to the detailed site plan and building permit review.

19. Prior to approval of the Preliminary Plan, the applicant shall provide details of its commitment to participate in a circulator bus program, whether as part of a TDMD or other effort, and shall contribute funds for this purpose.

The applicant has not submitted any document with any transit operating agency in the area and/or DPW&T for staff review that will demonstrate the applicant's commitment and funding obligations to provide the required circulator bus service. Therefore, staff recommends the full review and conformity to this condition to be carried forward to the detailed site plan and building permit review.

22. Establish a trip cap of 548 AM new peak hour trips and 902 PM new peak hour trips for full build-out of the development that may be amended, but not increased at the time of Preliminary Plan. The trip cap will not include purely internal trips.

The proposed development with appropriate trip reductions noted in the study conforms to the required peak hour caps.

24. Prior to the approval of the Preliminary Plan of Subdivision, the applicant shall do the following, subject to the opportunity for review and comment by the Town of Riverdale Park and the Town of University Park:

- a. The Preliminary Plan shall show a roadway connection from the first phase of the development on the property to existing Maryland Avenue at the southern boundary of the property (the "Van Buren Extension").
- b. Applicant shall make provisions at Preliminary Plan of Subdivision to construct, to at least a similar standard as the existing Maryland Avenue roadway to the immediate south of the property, an extension of Maryland Avenue from the southern boundary of the property to where the existing roadway ends north of Tuckerman Street (the "Maryland Avenue Extension"). Provided that right-of-way exists, construction of the Maryland Avenue Extension must be completed before Prince George's County issues the first use and occupancy permit for any retail, office or hotel use on the Property. No portion of any building on the Property may be used or occupied until construction of the Maryland Avenue Extension has been completed and opened for travel by public safety vehicles.

The proposed plan includes the required connections, however, the Urban Design section has proposed modifications to the site's internal circulation, which greatly improve the access, safety and circulation for all users with the subject site. Due to its nature, staff recommends the full review and conformity to this condition to also be carried forward to the detailed site plan and building permit review.

25. Prior to the approval of a Preliminary Plan of Subdivision (the "Preliminary Plan"), the applicant shall do the following, subject to the opportunity for review and comment by Prince George's County, the Town of Riverdale Park, and the Town of University Park:

- a. The Preliminary Plan shall show a crossing over the adjacent CSX railroad tracks (the "CSX Crossing"). The "CSX Crossing" shall mean a bridge, raised roadway, underpass or any other type of way, including on-site and off-site approaches, for vehicles, bicycles and pedestrians to pass across the railroad right-of-way to travel between the subject property and lands to the east of the property with a connection to a public road.
- b. Establish a funding mechanism using a combination of public and private funds, subject to any required governmental approval, which must be obtained prior to the first detailed

site plan; establish a system of financial assurances, performance bonds or other security to ensure completion of construction and establish a timetable for construction, of the CSX Crossing in accordance with the Preliminary Plan.

- c. Provide letters from the CSX and University of Maryland (or the affected land owner), that recommend approval of the CSX Crossing as shown on the Preliminary Plan and identify the land or right-of-way acquisition cost, if any, necessary for the construction of the CSX Crossing on land owned by the University (or the affected land owner).
- d. Provide cost estimates for the design, permitting and construction of the CSX Crossing, including off-site land or right-of-way acquisition costs, if any.

Further, the applicant shall participate in the design, provision and acquisition of rights-of-way, permitting, funding and construction of the CSX Crossing, equal to half the complete costs, but not to exceed Five Million Dollars (\$5,000,000). The applicant, its successors and assigns, shall make all reasonable efforts to obtain public funding (federal, state, county, municipal) as necessary in addition to its CSX contribution to construct the CSX Crossing. Public funding may include all or a portion supported by tax increment financing as may be authorized in accordance with state and local laws. If the manner of public funding is tax increment financing, or any other funding mechanism that requires the approval of the County Council or other government body or entity, the approval of the County Council and all other government bodies or entities must be obtained prior to the approval of any detailed site plan for the subject property.

The submitted plan shows the required CSX crossing, the alignment, cross section and how it is connected from the Van Buren Street to River Road via Rivertech Road. The applicant has also submitted to staff a general location crossing approval signed by CSX. However, to this date, the applicant has not been able to furnish staff with an approval letter from the American Center for Physics (the affected property owner) where the eastern half of the access connection must be built. The plan also lacks any cost estimates calculation for design, ROW, and the construction. It also lacks any secure funding or financial assurance that ensures the crossing and its connection to River Road in a timely required manner. Due to its nature, staff recommends the full review and conformity to this condition to also be carried forward to the detailed site plan and building permit review.

27. The applicant, the Town of Riverdale Park, and the Town of University Park will work together to petition the District Council to initiate and establish a Transportation Demand Management District (“TDMD”) program under the Prince George’s County Transportation Demand Management District Ordinance Subtitle 20A. Consideration should be given to establishing the boundaries of the TDMD to extend from Paint Branch Parkway to Queensbury Road. Once a TDMD is established, the applicant will provide financial support and the “TMP” will become part of the District and will be monitored by the Transportation Management Authority (“TMA”). The TDMD should provide for traffic reduction goals and periodic independent verification of monitoring whether the goals have been met, including restricting the maximum allowable density to a level that will generate average net additional daily vehicle trips on Baltimore Avenue that are not more than 20% above current levels, and net additional peak hour trips that are no more than 20% above current peak-hour vehicle trips at AM (06:00-09:00), mid-day (11:00-14:00), PM (16:00-19:00), and Saturday (10:00-18:00). These counts will be performed at a fixed location specified in the TDMD between East-West Highway and the southern entrance, and between Queens Chapel Road and the northern entrance, to the project and will be based upon traffic estimates that have been reviewed and determined to be reasonably accurate by the Transportation Planning Section of M-NCPPC. If the goals of the TDMD are not met, additional

vehicle trip reduction measures to resolve the problem will be required pursuant to the requirements of Subtitle 20A.

As of this writing, staff is not aware that any such petition to initiate and establish a TDMD has been prepared or submitted for approval by the District Council. Due to its nature, staff recommends the full review and conformity to this condition to be carried forward to the building permit review.

CONSIDERATIONS:

1. Extending the Rhode Island Avenue Trolley Trail across the Washington Metropolitan Area Transit Authority (WMATA) property, connecting to the terminus of the existing trail at Albion Street and south to Tuckerman Avenue.
2. Establishing a parking district to promote shared parking within the Town of Riverdale Park town center and with the adjacent Armory with the cooperation of the United States.

The submitted plan shows for the provision of the Rhode Island Avenue Trolley Trail across the WMATA property, and connecting to the terminus of existing trail at Albion Street and south to Tuckerman Avenue. Staff recommend plan be revised to fully incorporate the Urban Design Sections proposed modifications to the proposed alignment of this trail within the subject site that greatly improve the access, safety and use of this trail within and thru the subject site. Due to its nature, staff recommends the full review and conformity to this condition to also be carried forward to the detailed site plan and building permit review.

Transportation Staff conclusions

In accordance with the above findings, the transportation planning staff has determined that adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-124 of the Prince George's County Code with the provision of several conditions as noted below. While this adequacy determination focus on the findings required by the code, it is important to note that there are several unsatisfied transportation related zoning approval conditions that have not fully been satisfied, or adequately addressed by the application, as stated above, despite the requirement that they must be addressed at or prior to approval of the any preliminary plan of subdivision.

Transportation Staff Recommendations:

The transportation staff recommends the following conditions to be included as part of any approval of the submitted preliminary plan of subdivision for the subject property:

1. The development subject site shall be limited to the mix of allowed uses and the intensity that will generate no more than 463 AM weekday, 779 PM weekday, 756 midday and 1,006 Saturday peak hour vehicle trips during any stage of development. Any development that is deemed to generate more peak hour vehicle trips than the levels stated above shall require an additional preliminary plan of subdivision with a new determination of adequacy for transportation facilities.
2. At the time of detailed site plan the applicant shall incorporate specific standards and as identified by the Guideline that when implemented the development is deemed as meeting the Guidelines designation as "excellent Transit Oriented development".
3. At the time of final plat approval:

- a. The applicant shall dedicate a minimum right-of-way along US1 of 45 feet measured from the center line of existing pavement, unless at detailed site plan review, SHA referral requires additional dedication as part of any of their review and approval of access permits, which should be in addition to the required 45 feet of right-of-way dedication.
 - b. The applicant shall dedicate all internal roadways except alleyways to public use and fully incorporate the recommended Urban Design Section's reconfiguration and realignment of the proposed Van Buren Street extension, including the elimination of the proposed right-in access to the proposed surface parking lot south of this street, within the subject property which improves access, safety and circulation for all users.
4. Prior to the issuance of any building permit on the subject property, the applicant shall obtain approval and have permitted for construction:
- a. The provision of two right-in/right- out access driveways, and the provision of divided main access driveway opposite of the existing Van Buren Street along with associated improvements that prohibits thru movements across US1 to and from both sides of Van Buren Street, as well as any other improvements deemed needed by SHA at these locations and along US1.
 - b. The extension and construction of continuous sidewalk that extends from the existing sidewalk terminus north and south of the subject site including the entire site's frontage with US1 and along the existing WMATA property, located just to the north of the subject site.
5. Prior to the issuance of the first building permit for the development, the following road improvements shall (a) have been constructed, (b) fully funded and scheduled for construction in the adopted CIP or current CTP, (c) fully bonded and permitted for construction with agreed-upon time table for construction by the applicant, his heirs, successors, assignees and/or others, or otherwise is incorporated in a specific public facilities financing and implementation program as defined in Section 27-107.01(186.1) and in accordance with Section 24-124 (a) (6) of the County Code:
- a. The proposed CSX crossing including its connections to River Road via Rivertech Court and associated improvements for the intersections of access road with Rivertech Court and Rivertech with River Road, consisting of at least two travel lanes, on road bike lanes and sidewalks and per DPW&T standards and specifications.
 - b. Provision of an additional right turn lane on east bound approach of MD201 @ River Road, and an additional left turn lane on north bound approach of MD201 @ River Road, Per SHA standards and specification and when deemed needed by SHA. SHA may modify or require additional improvements for this intersection as part of the ongoing planning studies for the purple line.
 - c. Signalization of the intersection of Rivertech Court with River Road per DPW&T standards and specification.
 - d. Signalization of the intersection of US1 with Van Buren Street as well any associated improvements and coordination of signals along US1 between MD 410 and Amherst Road, per the SHA specifications and standards.