



**County of Albemarle**  
**Department of Community Development**

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**Memorandum**

**To:** Claudette Grant, Senior Planner  
**From:** Glenn Brooks, County Engineer  
**Date:** 18 Jan 2011  
Revision 1: 10 Mar 2011  
Rev.2: 10 June 2011  
Rev.3: 3 Apr 2012  
Rev.4: 22 Jan 2014  
Rev.5: 25 Mar 2014  
Rev.6: 14 May 2014  
**Subject:** Crozet Square (ZMA201000018)

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*revision 6;*

The revised application plan has been reviewed. The following comments are offered for planning use;

1. The traffic study provided with this revision raises some essential questions regarding signals and improvements on Crozet Avenue (SR810). There appears to be a conflict in that more signals are recommended, but VDOT will not allow them due to spacing requirements on the roadway. The off-set between Library Avenue (SR867) and Jarman's Gap Road (SR691) is too short to allow significant improvement. The Square is also too close to Three Notched Road (SR240) and Library Ave. It would appear that the county and VDOT need to eliminate or consolidate one or more of these intersections for impacts to be addressed.
2. A stream assessment has not been performed, as noted in revisions 2 and 1. Without this, the buffer must continue further west, as noted in revision 1 comment 10.
3. A stormwater concept plan has been provided with this revision. This plan provides fairly standard stormwater management for individual blocks on the west, and a basin in the buffer area for blocks on the east. This appears to comply in concept with the WPO. The buffer area impact may be a problem per comment 2. It should be noted that the approval of buffer impacts are part of the rezoning approval.

*revision 5;*

The revised application plan has been reviewed. The following comments are offered for planning use;

1. The traffic issues are still unresolved, as noted in previous revisions. Without these issues resolved, and the accompanying off-site impacts and mitigation, no road layout can be recommended for approval.
2. A stream assessment has not been performed, as noted in revisions 2 and 1. Without this, the buffer must continue further west, as noted in revision 1 comment 10. The layout in the southeast corner of the site cannot be recommended for approval.
3. It does not appear that adequate planning for stormwater management has been done. More room may be needed even to meet current regulations. See revision 1 comment 3.
4. It is not recommended that the county approve dimensions on road sections with a rezoning. Plans are too preliminary to agree on widths. It is not clear what is meant by a shared travel lane.
5. Proposed proffer 1 references sections and details which were not found. Each of the phases needs to build on the other if they are to proceed in order. Library Avenue, the central connecting road, should

be built completely regardless of phases, if it is the intention that phases can be built in any order. This would apply to any other necessary improvements such as off-site transportation improvements, or stormwater management.

*revision 4;*

The revised application plan has been reviewed. The following comments are offered for planning use;

1. The traffic issues are still unresolved, as noted in previous revisions. Without these issues resolved, and the accompanying off-site impacts and mitigation, no road layout can be recommended for approval.
2. A stream assessment has not been performed, as noted in revisions 2 and 1. Without this, the buffer must continue further west, as noted in revision 1 comment 10. The layout in the southeast corner of the site cannot be recommended for approval.
3. It does not appear that adequate planning for stormwater management has been done. More room may be needed even to meet current regulations. See revision 1 comment 3.
4. The plan needs to specify which roads are public.
5. The hard right turns for the roads serving the southern blocks, and The Square, do not meet geometric road requirements. These will not be acceptable.
6. T-turnarounds are not recommended. They end up as parking spaces for nearby units.
7. The 5-road intersection roundabout will require splitter islands and tighter dimensions on the southern side to maintain flow and lane widths.
8. It is not clear how the road sections apply when no median is shown on the layout.

*revision 3;*

This revision consisted only of a letter proposing changes to the rezoning and traffic study. The original traffic study reviewed by VDOT has not incorporated prior comments from VDOT. It is not considered an acceptable study until the VDOT comments are satisfactorily addressed. When those comments are resolved, this proposed letter amending the study and rezoning should address the following points;

- a. The study should be amended and the full study and results provided for VDOT and County review. This letter only included a brief table of results. It is not clear what road connections or other assumptions were used for the partially built phases.
- b. The phases referenced to be developed need to be defined in terms of development areas and blocks on the application plan.
- c. The phases referenced to be developed need to be defined in relation to street and intersection improvements.
- d. The phasing and plans need to be proffered in some manner that is easily enforceable. Using traffic trip data and future studies is not practical. The phases need to be defined in terms of square footage, certificates of occupancy, and areas on the plan.
- e. Physical improvements need to be in place to mitigate impacts from the development before it occurs. The letter proposes a scheme whereby improvements are built only after development and studies prove the impacts are already there.

*revision 2;*

The revised conceptual plan has been reviewed. As I understand it, only the conceptual plan counts. The sheet titled "application plan" is not actually an application plan, but only an exhibit provided for informational purposes, and irrelevant to zoning enforcement. As such, it has not been reviewed.

The conceptual plan itself appears acceptable, with a few minor concerns;

1. It is not clear the right-of-way would be acceptable with the corner of the railroad property as shown.
2. The islands in the right-in-right-out entrances are not recommended. Only a median really works to limit these movements.
3. Roadway parking on the inside of the curve may be a problem.

We await further information before finalizing review. Specifically, the traffic study and possible mitigating improvements are pending. Also, I have requested a professional assessment of the intermittent stream on the south side of the property to ascertain the extent of the Water Protection Ordinance stream buffer.

*revision 1;*

The new concept plan for Crozet Square has been reviewed. This plan is much more detailed than the last concept plan, but I am concerned that we have not yet seen a proffered plan. The substantial time and effort spent on possible concepts may be time wasted, if none of it is proffered, whenever we finally receive the real application. Furthermore, it may be misleading to the public and to elected officials, if the plans they are shown are not to be implemented. So, as with the last submittal, a complete review is not possible until an actual application plan (not just a concept) is provided with the application.

1. The geometry of Main Street is much improved with this revision, but the number of entrances may be a difficulty with the VDOT standards, as was indicated by VDOT in preliminary meetings.
2. The road connecting Main Street to The Square should be a public road, as it will connect two public roads.
3. Rather than the complex notes on sheet 3, it would be more clear to provide a proffer to address stormwater management. It appears the intent is to provide stormwater quality treatment above the ordinance requirements, specifically to a 35-50% removal rate on-site. The re-use of water on-site, green roofs, and pervious pavers are also measures beyond ordinance requirements that could be proffered, but some quantitative commitment is needed. I think the applicant will find these measures over-ambitious during final construction plans, so specifying areas or having a proffered plan is essential. Stormwater detention and the pro-rated fee to Lickinghole Basin are required by ordinance, and should not be confused with commitments with the rezoning.
4. This concept revision incorporates the railroad property in the development. It would appear that an interim plan is needed, should the railroad property not be acquired. It is not clear how the circulation will function without this property, and they are not on the application as I understand it.
5. The circulation loop between buildings 13 to 15 utilizes the public road at one end. This needs to be revised. Plans should not include public roads in site parking circulation.
6. The drop-offs on the roadways should maintain minimum radii (12.5') so exiting and entering vehicles can stay within their lane.

7. It is noted that although the typical street sections show planting strips and street trees, most of the plan does not allow for them, instead placing sidewalks flush with the parking lane, or removing sidewalks to run closer to the property lines. Typical sections should be typical.
8. Should the property be subdivided in the future for buildings, or building and parking parcels, it will be difficult to establish which travelways are private streets for purposes of the subdivision ordinance, and how standards apply. It would be helpful to plan for any subdivisions or phasing with the rezoning.
9. The plan should clarify what parts of main-street have already been constructed, and where the applicant's improvements begin. This is also true to The Square.
10. Upon field inspection, it is evident that the stream and buffer actually continue further west. While stormwater management is allowed within the buffer according to the conditions of 17-320B, this plan appears to replace the stream and buffer with a developed landscape. The intent of the ordinance is that these facilities can enhance or help in the preservation of the stream, typically being placed at the edges of the buffer. In the words of the ordinance, "The facilities are designed and constructed so as to minimize impacts to the functional value of the stream buffer and to protect water quality." This also holds true for the walking paths and footbridges. The buildings and parking within the stream buffer which extends further west will need to be moved, or an exception granted according to Water Protection Ordinance section 17-308.
11. The traffic study is still outstanding. Impacts to the surrounding road network and possible mitigation improvements are critical. Issues that have been raised in preliminary meetings are the proximity of signals at The Square and Meeting Street not meeting VDOT standards, and the amount of traffic to assume from future connections to the east.
12. There is currently an unpermitted stockpile on the site without any erosion control measures. From the topography, this appears to have happened in the past also. This current stockpile needs to be removed, or stabilized and permanently seeded.

*Original comments of 18 Jan 2011;*

The concept plan for Crozet Square has been reviewed. This is the only document received with the rezoning, so a complete review must wait until more comprehensive documentation is provided with the application. For purposes of discussion, I have provided below a layout of the plan on county mapping (*omitted with revision 1*).

1. The Main Street extension should avoid the hard left and rotation around the green space before continuing through to Hilltop Street. It is recommended that a design more closely adhering to the Crozet Master Plan be used, which calls for bike lanes, pedestrian crossings and sidewalks, street trees, a possible median, fewer access points to parking areas, etc.
2. The documents should clarify which roads are to be public roads.
3. The documents should provide preliminary sizing for stormwater management, and/or indicate what other measures will be used within the development.
4. A traffic study meeting the VDOT 527 guidelines appears to be required. A scoping meeting should be scheduled.