



APPLICATION ACCEPTED: November 14, 2006  
PLANNING COMMISSION: February 22, 2007  
BOARD OF SUPERVISORS: February 26, 2007  
@ 4:00 pm

# County of Fairfax, Virginia

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**February 6, 2007**

## **STAFF REPORT**

**APPLICATION SE 2006-MA-027**  
(Concurrent with RPA Exception #6843-WRPA-005-1)

### **MASON DISTRICT**

**APPLICANT:** Joanne Krause

**ZONING:** R-2

**PARCEL(S):** 59-4 ((2)) 45

**ACREAGE:** 23,825 square feet

**PLAN MAP:** Residential; 1-2 du/ac

**SE CATEGORY:** Category 6, Use 2: Uses in a Floodplain

**PROPOSAL:** Special Exception for uses in a floodplain to allow reconstruction of a condemned house

Exception Request #6843-WRPA-005-1 under Section 118-6-9 of the Chesapeake Bay Preservation Ordinance to permit the construction of a single family house within the seaward 50 feet of a Resource Protection Area.

### **STAFF RECOMMENDATIONS:**

Staff recommends approval of SE 2006-MA-027, subject to development conditions consistent with those found in Appendix 1 of this report.

Staff recommends approval of RPA Exception #6843-WRPA-005-1, subject to the conditions found in Attachment A of Appendix 6 of this report.

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#### **Department of Planning and Zoning**

Zoning Evaluation Division  
12055 Government Center Parkway, Suite 801  
Fairfax, Virginia 22035-5509  
Phone 703 324-1290  
FAX 703 324-3924  
[www.fairfaxcounty.gov/dpz/](http://www.fairfaxcounty.gov/dpz/)

It should be noted that it is not the intent of staff to recommend that the Board, in adopting any conditions, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

It should be further noted that the content of this report reflects the analysis and recommendations of staff; it does not reflect the position of the Board of Supervisors.

For information, contact the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, Virginia 22035-5505, (703) 324-1290 TTY 711 (Virginia Relay Center)



Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 7 days advance notice.  
For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

**A GLOSSARY OF TERMS FREQUENTLY  
USED IN STAFF REPORTS WILL BE  
FOUND AT THE BACK OF THIS REPORT**

**DESCRIPTION OF THE APPLICATION**

**Proposal:** Approval of a Special Exception Uses in a Floodplain, and approval of a Water Quality Exception Request reconstruction and expansion of a single family detached dwelling unit within a Resource Protection Area

**LOCATION AND CHARACTER**

**Site Description:**

The 23,825 square foot application site is a single family lot located on the north side of Accotink Drive, in the Mason District. The northwestern boundary of the lot is Accotink Creek. The site is a typical residential lot that was created in the 1950s, with a mixture of grassed lawn area and mature landscaping and trees.

The entire property is within the one-hundred (100) year floodplain, Environmental Quality Corridor (EQC) and Resource Protection Area (RPA) associated with Accotink Creek.

The existing house, a one-story structure with a walk-out basement, constructed in 1954, has a gross floor area of 3,060 square feet, including the basement. The house does not have a garage. A 100 square foot concrete pad located near the creek, held a shed for lawn equipment and other storage prior to the flooding this past summer.

**Surrounding Area Description:**

The site is surrounded on all sides by properties zoned to the R-2 District and developed with single family detached properties. Directly abutting the property on the northwest is the Accotink Creek Stream Valley Park.

**BACKGROUND**

As noted, the home on the lot was constructed in 1954. The house was damaged by flooding backwash from Accotink Creek in June 2006, and has been condemned since that time. The same flooding wiped out the shed on the concrete pad at the rear of the lot, adjacent to the creek. Because the property is entirely contained within the floodplain and RPA, approval of both a special exception and an RPA exception are necessary prior to any reconstruction on the site.

**COMPREHENSIVE PLAN PROVISIONS** (See Appendix 4)

<b>Plan Area:</b>	Area I
<b>Planning District:</b>	Annadale Planning District
<b>Planning Sector:</b>	Pine Ridge Community Planning Sector (A8)
<b>Plan Map:</b>	Residential @ 1-2 du/ac
<b>Plan Text:</b>	There is no specific Plan text for the subject property; see Appendix 4 for further text

**ANALYSIS**

<b>Special Exception (SE) Plat</b>	(Copy at front of staff report)
<b>Title of SE Plat:</b>	Lot 45 Section 1A Mill Creek Park
<b>Prepared By:</b>	RC Fields Jr., and Associates
<b>Original and Revision Dates:</b>	November 13, 2006 as revised through January 11, 2007

**Description of Plat**

The SE Plat consists of one sheet, and shows the following:

*Floodplain, Environmental Quality Corridor (EQC) and Resource Protection Area (RPA):* As noted, the 100-year floodplain, EQC and RPA cover the entire lot. The limits of the floodplain and EQC are co-terminus; the limits extend into the road. The elevation of the 100 year floodplain is 249.0 feet. The RPA is slightly larger, and extends across the road and onto the properties across the street. The seaward 50 feet line of the RPA (a line that is drawn 50 feet in from the edge of the RPA; "seaward" refers to "towards the water") is also shown, and crosses the property through the location of the house (existing and proposed).

*House:* The SE Plat shows the existing, condemned, house to be replaced by a two-story dwelling, built on a slab (no basement or crawl space) with a first floor elevation of 251.0 feet. A side-load garage has been added to the proposed structure, with a floor elevation of 250.5 feet. The footprint of the proposed house, including the garage, is 2,694 square feet; the gross floor area is 4,698 square feet. The house also has a covered porch on the front (78 square feet) and an open deck on the rear (370 square feet). The existing concrete shed pad, located adjacent to the creek, will be removed.

The house is located as far forward on the lot as allowed in the R-2 District, with a front yard setback of 35 feet.

*Water quality mitigation plan:* To mitigate the impact of the additional impervious surface (as discussed later in this report), the applicant has proposed a 20 foot wide

forested buffer along the bank of Accotink Creek at the back of the lot, a total buffer area of 2,625 square feet that is currently maintained as lawn area. As noted, the 100 foot concrete pad that previously held a storage shed will be removed, and the applicant has included area within the new garage to store items such as a lawnmower and lawn chemicals that were previously held within the shed. The SE Plat shows rain barrels located at both rear corners of the house, and the entire driveway area is proposed to be constructed of pervious pavers.

Additionally, although the house plans include a three-car garage, the SE Plat shows the driveway fronting only two of the doors, and staff has proposed a condition requiring a garage door that will accommodate no more than two cars. This will ensure that additional pervious area will not be converted to pavement to allow access to the third garage space. This extra garage area will, however, eliminate the need for additional storage structures on the lot.

Landscaping and buffer: As noted, the SE Plat shows a 20 foot wide forested buffer along the banks of Accotink Creek. Additionally, the Plat shows the addition of three red maples (or equivalent) along the western boundary, to replace existing trees which will be lost to grading. Finally, the notes on the plat indicate that existing hollies and azaleas along the front of the lot will be preserved and/or transplanted on site if possible.

### **Environmental Analysis (Appendix 6)**

The existing house on the lot, which was constructed legally prior to the designation of the 100-year floodplain, the RPA, or the EQC. The house has now been condemned due to flooding, and any reconstruction is contingent upon the approval of this special exception and the concurrent RPA Exception under the Chesapeake Bay Act (see Appendix 6).

As noted in the description of the plat, the applicant is proposing to increase the amount of impervious surface on the lot, but has proposed the following mitigation measures:

- Pervious pavers for the driveway
- Reduction in depth of deck (closest point of new structure will be further from the creek)
- Removal of concrete pad adjacent to the creek
- Rain barrels to collect water from the roof
- Vegetated filter strip in the drainage swale on the east side of the house
- 20 foot wide forested buffer (replacing maintained law area)

The following chart compares the impervious surface existing on the lot with the impervious surface proposed under the SE.

	Existing	Proposed	<i>difference in impervious surface</i>
footprint	1,530 sq ft	2,004 sq ft (house) <u>690 sq ft (garage)</u> 2,694 sq ft	+ 1,164
GFA	3,060 sq ft	4,008 sq ft (house) <u>690 sq ft (garage)</u> 4,698 sq ft	--
basement	yes	no	--
deck*	382 sq ft	370 sq ft	--
porch	100 sq ft	78 sq ft	- 22
stoop	30 sq ft	none	- 30
shed pad	100 sq ft	none	- 100
driveway	523 sq ft	1,065 sq ft	+ 542
impervious surface total	2,283 sq ft	3,837 sq ft	+ 1,554

\*not included as pervious surface by the PFM

As shown in the chart, the proposal would increase the impervious surface on the lot by 1,554 square feet, although 69% of that (1,065 square feet) is the driveway, which is to be constructed of pervious pavers. (Pervious pavers are not currently considered "pervious" by the Public Facilities Manual, therefore the driveway surface is included as impervious in this analysis.) The SE Plat includes a forested buffer area along the creek that is more than twice as large as the total increase in impervious surface.

Staff was concerned that the new impervious surface in the RPA (and EQC and floodplain) be the least amount possible. Toward that extent, the applicant has chosen a floor plan that puts living space above the garage, resulting in a more compact footprint while allowing the construction of a house close to the size of other new homes in the area. Additionally, staff has proposed development conditions relating to the garage to ensure that, although a three-car garage is proposed on the house, the external driveway will not be extended beyond that area needed to support a two-car garage.

DPWES staff has recommended approval of the RPA Exception with certain conditions, which have been included as conditions for the Special Exception application as well.

With the proposed mitigation measures included on the Plat, as well as the conditions proposed with the RPA Exception and the SE, staff believes that the proposed additional pervious surface will be adequately mitigated. It is worth noting that the majority of the area proposed to be disturbed to allow the new construction is currently disturbed, and would need to be further disturbed to accommodate the removal of the existing, condemned, structure.

**Land Use Analysis**

The site is being redeveloped with a single family detached dwelling, in conformance with the current zoning and Comprehensive Plan for the site. There are no land use issues raised by the application.

**Transportation Analysis (Appendix 7)**

There are no transportation issues raised by the application.

**ZONING ORDINANCE PROVISIONS (Appendix 8)**

**Bulk Regulations: R-2 District**

	<b>Required</b>	<b>Provided</b>
<b>Lot Width</b>	100 feet	134 feet
<b>Lot Area</b>	18,000 square feet	23,825 square feet
<b>Building Height</b>	Max. 35 ft.	Max. 35 feet
<b>Front Yard</b>	35 feet	35 feet
<b>Side Yard</b>	15 feet	34 feet (min)
<b>Rear Yard</b>	25 feet	82 feet (to deck)
<b>Parking Spaces</b>	2 spaces	2 garage spaces (+ driveway)
<b>Transitional Screening &amp; Barrier:</b> none required		

**OTHER ZONING ORDINANCE REQUIREMENTS**

**Sect. 9-006 General (Special Exception) Standards**

In addition to the specific standards set forth hereinafter with regard to particular special exception uses, all such uses shall satisfy the general standards, which require that the proposed use be in harmony with the comprehensive plan and the general purpose and intent of the applicable zoning district regulations, that the proposed use be harmonious with and will not adversely affect the use or development of neighboring properties, that pedestrian and vehicular traffic associated with the use not be hazardous or conflict with existing and anticipated traffic in the neighborhood, that the use meet the requirements for landscaping, screening and open space, that drainage, utilities, and parking be adequate, and that signage be regulated by Article 12.

The use proposed is a single family dwelling, as previously existed on the lot and as are developed on other lots in the area. Staff believes that the application, as shown on the SE Plat and as conditioned, will meet these standards and will not adversely affect neighboring properties.

**Sect. 9-606 Standards for all Uses in a Floodplain**

Sect. 9-606 requires that all uses in a floodplain be approved only in accordance with the provisions of Part 9 of Article 2. The applicable provisions of that section are as follows:

Par. 1 requires that new construction or other development, including fill, not increase the water surface elevation above the 100-year flood level upstream and downstream, calculated in accordance with the provisions of the Public Facilities Manual. Staff has proposed a development condition to this effect.

Par. 4 requires that all structures have adequate flood proofing as defined in the Public Facilities Manual. Staff has proposed a development condition to this effect, which is also certified on the SE Plat.

Par. 5 requires that, to the extent possible, stable vegetation be protected and maintained in the floodplain. The applicant is proposing to maintain much of the existing vegetation on the lot, and is not proposing to remove any trees near the creek. In addition, the applicant is proposing to install a 20 foot wide forested buffer along the bank of the creek.

Par. 6 prohibits the storage of herbicides, pesticides, or toxic or hazardous substances in a floodplain. While a certain amount of household chemicals which might be considered to be hazardous would be expected to be stored in a typical house, the applicant has proposed a garage that will contain sufficient space to store such materials inside. Previously, on this lot, a small shed located adjacent to the creek was used for such storage; this shed was destroyed by the flooding that damaged the main house. There is no storage area on the site which would allow the storage of such items below the level of the floodplain.

Par. 7 requires that the applicant demonstrate that (A) there are no other feasible options available to achieve the proposed use; (B) the proposal is the least disruptive option to the floodplain; and (C) the proposal meets the environmental goals and objectives of the adopted comprehensive plan for the subject property. As noted, there is no portion of this lot which is located outside of the RPA, EQC and floodplain, and the lot has been developed with a single family house since the mid 1950s. While the applicant is proposing an increase in impervious surface (approximately 20% plus the pervious paver driveway), the applicant has chosen a house with a relatively compact footprint. The larger garage area eliminates the need for a separate storage structure and allows for additional floor area on the second floor (rather than extending further out on the ground level, expanding the footprint). With the approval of the RPA exception, which includes reforestation areas and other mitigation techniques, staff believes this standard is addressed.

Par. 12 requires that, when as-built floor elevations are required by federal regulations or the Virginia Uniform Statewide Building Code for any structure, such elevations shall be submitted to the County on a standard Federal Emergency Management Agency (FEMA) Elevation Certificate prior to approval of the final inspection. If a non-

residential building is being floodproofed, then a FEMA Floodproofing Certificate shall be completed in addition to the Elevation Certificate. In the case of special exception uses, the Elevation Certificate shall show compliance with the approved special exception elevations. Staff has proposed a development condition to this effect.

### **Summary of Zoning Ordinance Provisions**

Staff believes that, with the approval of the RPA Exception and the imposition of the proposed development conditions, all applicable standards have been satisfied.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Staff Conclusions**

Staff concludes that the subject application, with the imposition of the development conditions and the implementation of the RPA Exception, is in harmony with the Comprehensive Plan, and in conformance with the applicable Zoning Ordinance provisions. The mitigation techniques, including increased forested buffers, pervious pavers on the driveway, vegetated drainage swales, and rain barrels to collect roof runoff, will adequately off-set the additional disturbance in the floodplain/RPA/EQC.

### **Staff Recommendations**

Staff recommends approval of SE 2006-MA-027, subject to development conditions consistent with those found in Appendix 1 of this report.

Staff recommends approval of RPA Exception #6843-WRPA-005-1, subject to the conditions found in Attachment A of Appendix 6 of this report.

It should be noted that it is not the intent of staff to recommend that the Board, in adopting any conditions, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

It should be further noted that the content of this report reflects the analysis and recommendations of staff; it does not reflect the position of the Planning Commission.

## **APPENDICES**

1. Proposed Development Conditions
2. Affidavit
3. Statement of Justification
4. Plan Citations
5. Environmental Analysis
6. RPA Exception #6843-WRPA-005-1 and Proposed Exception Conditions
7. Transportation Analysis
8. Applicable Zoning Ordinance Provisions Checklist
9. Glossary of Terms

**DEVELOPMENT CONDITIONS****SE 2006-MA-027****February 6, 2007**

If it is the intent of the Board of Supervisors to approve SE 2006-MA-027 located at 8106 Accotink Drive, Tax Map 59-4 ((2)) 45, for uses in a floodplain, pursuant to Sect. 2-904 of the Fairfax County Zoning Ordinance, staff recommends that the Board condition the approval by requiring conformance with the following development conditions:

1. Disclosure of potential flood hazards due to the location of the site within the 100-year floodplain and of the restrictions included in these conditions shall be recorded in the Land Records of Fairfax County for this lot prior to the issuance of a building permit. A certified copy of the recordation shall be provided to the Zoning Permit Review Branch, Department of Planning and Zoning.
2. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.
3. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the special exception plat approved with the application, as qualified by these development conditions.
4. Any plan submitted pursuant to this special exception shall be in substantial conformance with the approved Special Exception Plat entitled "Lot 45 Section 1A Mill Creek Park" prepared by RC Fields Jr., and Associates, and dated November 13, 2006 as revised through January 11, 2007, and these conditions. Minor modifications to the approved special exception may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.
5. This Special Exception shall not be valid unless and until the pending Resource Protection Area Waiver (#6843-WRPA-005-1) is approved and the Exception Conditions are incorporated into this Special Exception by reference. (See Attachment A),
6. The limits of clearing and grading shown on the SE Plat shall be strictly honored during the construction of the single family dwelling, with the exception of the installation of the buffer and removal of the concrete pad as shown on the SE Plat and as conditioned herein. Super-silt fence shall be provided along the limits of clearing and grading shown on the SE Plat for the duration of the land disturbing activity and until the disturbed area is completely stabilized as determined by DPWES.
7. There shall be no additional encroachment into or disturbance of floodplain and/or the combined RPA/EQC beyond that shown on the SE Plat as conditioned. This prohibition shall include grading and additional structures including fences.

8. A reforestation plan for the forested buffer shown on the SE Plat shall be submitted for review and approval by Urban Forest Management (UFM) prior to approval of the grading plan, and shall be implemented as approved. The reforestation plan shall propose an appropriate selection of species based on existing and proposed site conditions. The reforestation plan shall include, but not be limited to, the following:
  - plant list detailing numbers, species, sizes and stock type of trees and other vegetation to be planted, consistent with or the equivalent of that shown on the SE Plat, with native plants utilized to the degree practicable;
  - planting of groundcover and/or wetland seed mix in combination with the other plantings as determined by UFM and where site conditions warrant;
  - soil treatments or amendments if necessary as determined by UFM;
  - mulching specifications;
  - methods of installation, with the limitation that mechanical equipment, except for hand-operated equipment such as chainsaws, shall be prohibited and vegetation shall be installed using wheelbarrows, rakes and shovels; and
  - maintenance and monitoring.
9. The forested buffer area shall be planted prior to the issuance of a Residential Use Permit. There shall be no removal of vegetation shown to be retained or installed in this buffer area or on the north side of Accotink Creek, except for dead or dying or invasive vegetation as determined by Urban Forest Management.
10. Stormwater drainage shall be directed to Accotink Creek through the use of pipes, swales, or other methods, as determine by DPWES. All fill areas shall be stabilized, graded, or have drains installed such that normal rainfall will not flow over the filled area onto adjacent properties, as determined by DPWES.
11. All construction shall be in conformance with the Flood-Resistant Construction Standards of the Virginia Uniform Statewide Building Code (VUSBC 2000). A statement certifying all flood-proofing proposed, and indicating its compliance with all County, State and Federal requirements, shall be provided with the Building Permit application. This certification shall be signed and sealed, and shall indicate the address of the certifying professional, and shall cover all structural, electrical, mechanical, plumbing, water and sanitary facilities connected with the use.
12. As-built floor elevations shall be submitted to DPWES in accordance with the VUSBC 2000 on a standard Federal Emergency Management Agency (FEMA) Elevation Certificate prior to approval of the framing inspection; the Elevation Certificate shall show compliance with the approved special exception.

13. A grading plan in accordance with Chapter 104, the Erosion and Sediment Control Ordinance, shall be submitted for approval by DPWES. Plans shall be implemented as required by DPWES.
14. The elevation of the ground surrounding the dwelling shall be between 249.1 feet and 251 feet for a distance of 15 feet from the structure.
15. The proposed development, including fill, shall not increase the water surface elevation above the 100-year flood level upstream and downstream, as calculated in accordance with the provisions of the Public Facilities Manual, and as approved by DPWES.
16. If required by DPWES, the US Army Corps of Engineers shall be consulted in writing at the time of submission of the grading plan to determine whether or not any action is required to ensure compliance with §404 of the Clean Water Act. Any required actions shall be completed prior to grading the site.
17. Prior to approval of a grading plan, a Hold Harmless agreement in a form satisfactory to the County Attorney shall be executed with the County for all adverse effect which may arise as a result of the location of the site within a floodplain area.
18. The proposed garage shall have a door (or doors) that is not larger than a two-car garage door for vehicles, which shall not preclude the installation of a standard access door.
19. LID and better site design planning techniques shall be implemented on the site to reduce the possible hydrologic impact. These techniques shall include but are not limited to the following:
  - Porous pavers, such as UNI Eco-Stone or an approve equivalent as determined by DPWES, shall be utilized for the proposed driveway, except for that portion within the VDOT right-of-way;
  - Grass swales and vegetated buffer strips as shown on the SE Plat; and
  - Installation of rain barrels as shown on the SE Plat.

The above proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be himself responsible for obtaining the required Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Pursuant to Sect. 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, thirty (30) months after the date of approval unless a new building permit has been obtained. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the special exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.